

Direct Testimony and Schedules
Christopher A. Arend

Before the Minnesota Public Utilities Commission
State of Minnesota

In the Matter of the Application of Northern States Power Company
for Authority to Increase Rates for Electric Service in Minnesota

Docket No. E002/GR-20-723
Exhibit___(CAA-1)

Property Taxes

November 2, 2020

Table of Contents

I.	Introduction	1
II.	Property Tax Expense Forecasts	8
A.	Forecast Methodology	8
B.	Data Inputs	15
1.	Plant	15
2.	Net Operating Income	16
3.	DOR Capitalization Rates	16
4.	DOR Weighting of Cost and Income Indicators of Value	17
5.	Local Tax Rates	17
III.	Forecast Analysis	18
IV.	Conclusion	22

Schedules

Statement of Qualifications	Schedule 1
2019 NSPM Property Taxes	Schedule 2
2020 NSPM Property Taxes	Schedule 3
2021 NSPM Property Taxes	Schedule 4
2022 NSPM Property Taxes	Schedule 5
2023 NSPM Property Taxes	Schedule 6
Property Taxes from 2011-2023	Schedule 7
2019 MN Property Taxes by County and Tax Rate Calculation	Schedule 8
2019 and 2020 NSPM Property Tax Comparison	Schedule 9
2020 and 2021 NSPM Property Tax Comparison	Schedule 10
2021 and 2022 NSPM Property Tax Comparison	Schedule 11
2022 and 2023 NSPM Property Tax Comparison	Schedule 12

1 **I. INTRODUCTION**

2
3 Q. PLEASE STATE YOUR NAME AND OCCUPATION.

4 A. My name is Christopher A. Arend. I am the Senior Director of Tax Services
5 for Xcel Energy Services Inc. (XES), the service company affiliate of Northern
6 States Power Company – Minnesota (NSPM or the Company) and an operating
7 company of Xcel Energy Inc. (Xcel Energy).

8
9 Q. PLEASE SUMMARIZE YOUR QUALIFICATIONS AND EXPERIENCE.

10 A. I have over 25 years of corporate tax experience, including serving as Senior
11 Director of Tax Services for XES. In my current position, I oversee and manage
12 tax planning and defense responsibilities associated with XES’s income,
13 property and sales taxes. A summary of my qualifications and experience is
14 provided as Exhibit___(CAA-1), Schedule 1.

15
16 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

17 A. I provide the Company’s annual property tax expense forecast for 2021, 2022,
18 and 2023 (the proposed multi-year rate plan period). Specifically, I discuss our
19 overall forecast methodology and the inputs we used to develop the forecasts
20 in each year. I also provide a discussion of how property taxes were treated in
21 our 2016 Multi-Year Rate Plan (MYRP), Docket No. E002/GR-15-826, how
22 they should be treated in this case, and historical information related to our
23 property taxes.

24
25 Q. BEFORE TURNING TO FORECAST DETAILS, PLEASE DISCUSS WHAT YOU BELIEVE
26 THE GOAL IS IN DETERMINING THE APPROPRIATE LEVEL OF PROPERTY TAXES
27 TO INCLUDE IN RATES.

1 A. Property taxes are a necessary cost of providing service to our customers. While
2 property taxes may fluctuate due to changes dictated by the Minnesota
3 Department of Revenue (DOR) and changes in tax rates at the local level,
4 increases in our property taxes are largely due to investments in our system. As
5 such, we believe rates should be set to allow the Company to recover this cost
6 of service and at the same time to ensure customers pay only actual property
7 taxes incurred.

8
9 Q. HOW DO YOU PROPOSE TO ENSURE THAT CUSTOMERS ONLY PAY PROPERTY
10 TAXES THAT ARE ACTUALLY INCURRED?

11 A. While we are requesting that the Commission approve these forecasted amounts
12 for inclusion in rates, we are also proposing a true-up mechanism that will
13 ensure customers pay only property taxes that are actually incurred. In our 2016
14 MYRP and our 2019 True-Up Mechanisms Petition,¹ we used the same
15 mechanism, and we were able to reflect the lower actual property tax amounts
16 through an interim rate refund and lower final rates. We believe this worked
17 well in the past, and we are proposing similar treatment of property taxes in this
18 case. I provide further detail about what occurred and how property taxes were
19 treated in our 2016 MYRP in Section III of my testimony.

20
21 Q. WHAT ARE THE COMPANY'S FORECASTED PROPERTY TAX EXPENSE AMOUNTS
22 FOR THE MULTI-YEAR RATE PLAN PERIOD?

23 A. Our 2021-2023 NSPM (Total Company)² property tax forecasts, by state taxing
24 jurisdiction, are shown in Table 1 below. For comparison purposes, Table 1

¹ See *In the Matter of the Petition of Northern States Power Company d/b/a Xcel Energy for Approval of True-Up Mechanisms*, Docket No. E002/M-19-688.

² NSPM (Total Company) refers to Northern States Power Company-Minnesota that provides service to electric and gas customers in Minnesota, North Dakota, and South Dakota.

1 also shows our actual 2019 property taxes and our current 2020 forecast. Table
 2 1 also provides this information at the Minnesota electric jurisdictional level.
 3 Company witness Mr. Benjamin C. Halama provides support for the State of
 4 Minnesota Electric Jurisdiction property tax expense amounts, including how
 5 the NSPM (Total Company) property tax expense is appropriately allocated to
 6 the relevant regulatory jurisdictions. Detailed calculations of the NSPM (Total
 7 Company) property tax expense for 2019-2023 are provided in
 8 Exhibit____(CAA-1), Schedules 2-6.

9
 10 **Table 1**
 11 **Forecasted Property Tax Expense**
 12 **(\$ Millions)**

Component	2019 Actual	2020 Forecast	2021 Forecast	2022 Forecast	2023 Forecast
Minnesota Taxing Jurisdiction	\$199.7	\$211.3	\$226.7	\$239.0	\$252.8
North Dakota Taxing Jurisdiction	\$6.9	\$6.9	\$7.1	\$7.6	\$8.1
South Dakota Taxing Jurisdiction	\$4.3	\$4.7	\$4.9	\$5.7	\$6.3
Iowa Taxing Jurisdiction	\$0	\$0	\$0	\$0.2	\$0.4
NSPM (Total Company)	\$210.9	\$222.9	\$238.7	\$252.5	\$267.6
State of Minnesota Electric Jurisdiction	\$152.7	\$159.7	\$170.6	\$180.7	\$192.3

21
 22 Since the State of Minnesota taxes for the electric and gas utilities account for
 23 over 94 percent of the NSPM (Total Company) property taxes, the discussion
 24 in my testimony focuses on the Minnesota taxing jurisdiction. However,
 25 consistent with prior rate cases, the Company is seeking recovery of its total
 26 property tax expense for NSPM (i.e., taxes paid to Minnesota, North Dakota,
 27 and South Dakota). In addition, unless noted otherwise, the numbers I provide

1 are for both our electric and gas utilities, consistent with how we estimate
2 property taxes for financial statement purposes.

3
4 Q. WERE THESE FORECAST AMOUNTS DEVELOPED USING THE SAME APPROACH
5 THAT THE COMPANY USED IN THE 2016 MYRP AND IN THE 2019 RATE CASE
6 FILING?

7 A. Yes, our overall forecasting approach is the same, and we are using similar data
8 inputs for the variables in our property tax forecast calculation. Specifically, our
9 forecasts in this case reflect the most recent actual Minnesota DOR valuation
10 inputs, which were finalized in August 2020.

11
12 Q. PLEASE DESCRIBE HOW APPLICATION OF THE MOST RECENT ACTUAL
13 MINNESOTA DOR VALUATION INPUTS IMPACTED THE COMPANY'S
14 FORECASTED PROPERTY TAX EXPENSE IN THIS CASE.

15 A. While the DOR's final valuation is not guaranteed from year to year, the
16 valuation process is understood, and the valuation inputs appear to be stable.
17 As a result, these inputs are reasonably predictable, and we believe that
18 forecasting property taxes using the actual DOR valuation inputs received in
19 2020 is appropriate.

20
21 I discuss the DOR valuation inputs further in Section II.B. of my testimony. In
22 addition, I provide analysis of our property tax forecasts and a historical analysis
23 of our property taxes in Section III.

24
25 Q. WHAT WAS THE COMMISSION'S DECISION RELATED TO PROPERTY TAXES IN THE
26 COMPANY'S 2016 MYRP?

1 A. In the Company’s 2016 MYRP, Docket No. E002/GR-15-826, the
 2 Commission approved \$163.1 million in property taxes for 2016-2019, of which
 3 \$151.6 was included in base rates and the remaining \$11.5 was included in
 4 various riders. The Commission also approved a true-up mechanism for the
 5 portion included in base rates that required an annual compliance filing to show
 6 actual property taxes and a refund or payment to customers based on the
 7 difference between the projected property tax and the actual property tax for
 8 the respective year. Property taxes related to riders are trueed up through
 9 separate rider proceedings.

10
 11 Q. HOW DO THE 2021-2023 FORECASTED PROPERTY TAX AMOUNTS COMPARE
 12 WITH THE LEVEL OF PROPERTY TAXES APPROVED BY THE COMMISSION AND
 13 INCLUDED IN RATES?

14 A. Tables 2 and 3 below make two comparisons. First, Table 2 shows the property
 15 tax expense currently included in rates for 2019 and 2020 (subject to true-up)
 16 compared to the State of Minnesota Electric Jurisdiction 2021-2023 forecasted
 17 amounts. In Section III of my testimony, I discuss the true-up amounts for
 18 2016 to 2019 and the reasons for such true-ups.

19
 20 **Table 2**
 21 **State of Minnesota Electric Jurisdiction Property Tax Expense**
 22 **(\$ Millions)**

	2019 In Rates	2020 In Rates	2021 Forecast	2022 Forecast	2023 Forecast
Property Tax Expense	\$163.1	\$163.1	\$170.6	\$180.7	\$192.3
Increase over Previous Year		\$0	\$7.5	\$10.1	\$11.6

1 Second, Table 3 shows our 2021-2023 forecasts compared to 2019 actuals and
2 our current 2020 forecasted amount. Compared to our current 2020 forecast,
3 the increase in forecasted property tax expense in 2021 is \$10.9 million on a
4 State of Minnesota Electric Jurisdiction basis. As shown in Exhibit___(CAA-
5 1), Schedule 7, the Minnesota taxing jurisdiction accounts for virtually all of the
6 year-to-year increases in property taxes.

7
8 **Table 3**
9 **State of Minnesota Electric Jurisdiction Property Tax Expense**
10 **(\$ Millions)**

	2019 Actual	2020 Forecast	2021 Forecast	2022 Forecast	2023 Forecast
Property Tax Expense	\$152.7	\$159.7	\$170.6	\$180.7	\$192.3
Increase over Previous Year		\$7.0	\$10.9	\$10.1	\$11.6

11
12
13
14
15 Q. IS THE COMPANY SEEKING TO RECOVER PROPERTY TAXES AS PART OF ITS
16 MULTI-YEAR RATE PLAN PROPOSAL?

17 A. Yes. Mr. Halama has incorporated the 2021 forecasted amount into the 2021
18 revenue requirements, and he has incorporated the 2022 and 2023 forecasted
19 amounts into the multi-year rate plan revenue requirements. As I mentioned
20 earlier, we also propose an annual compliance filing and true-up that would
21 allow rates to reflect actual property taxes for each year.

22
23 Q. PLEASE DESCRIBE THE COMPANY'S PROPOSED TRUE-UP MECHANISM.

24 A. Given the expected procedural schedule for this case, our 2021, 2022, and 2023
25 rates would include forecasted property tax amounts, since these final bills are
26 not anticipated to be received during the case. For instance, our 2021 final bill
27 will be received in March-April 2022. As a result, we propose to continue
28 submitting annual compliance filings that show actual property taxes for 2021,

1 2022, and 2023 once they are finalized. Any over-recovery could be refunded,
2 or any under-recovery could be charged, through an appropriate mechanism at
3 that time. I discuss our proposal for an annual compliance filing and true-up
4 more specifically in Section II below, where I present the property tax
5 information timeline in more detail.

6
7 Q. IF SUCH A SYMMETRICAL TRUE-UP IS NOT ADOPTED, WHAT DO YOU
8 RECOMMEND?

9 A. For the reasons discussed in detail in my testimony, I believe a symmetrical true-
10 up is reasonable and fair to both customers and the Company. However, if the
11 Commission does not agree with that approach, I believe the forecasted
12 property tax levels I have presented should be used for the purpose of setting
13 rates. These forecasts represent the most accurate information available at this
14 time regarding the Company's future property tax expense.

15
16 Q. HOW IS THE REMAINDER OF YOUR DIRECT TESTIMONY ORGANIZED?

17 A. I present the remainder of my testimony in the following sections:

- 18 • *Section II*: Property Tax Expense Forecasts;
- 19 • *Section III*: Forecast Analysis; and
- 20 • *Section IV*: Conclusion.

1 **II. PROPERTY TAX EXPENSE FORECASTS**

2

3 **A. Forecast Methodology**

4 Q. PLEASE DESCRIBE HOW THE COMPANY’S PROPERTY IS ASSESSED A VALUE AND
5 HOW THE ASSESSED VALUE IS USED TO DETERMINE PROPERTY TAXES.

6 A. The first step in the property tax process is determining the value of the
7 Company’s property. In Minnesota, different types of utility property are valued
8 differently. Utility operating property is valued by the DOR using the formulas
9 described in Minnesota Rules part 8100.0300. Non-operating property (e.g.
10 offices, garages, warehouses, land, etc.) is valued by local assessors using
11 traditional valuation techniques. The DOR also determines how much of the
12 Company’s total system value is attributable to Minnesota. The Minnesota
13 value is then apportioned to each county. Counties add the portion apportioned
14 to them with the property they assess themselves to arrive at our tax base within
15 the jurisdiction. Finally, each jurisdiction applies its own individual property tax
16 rate to our tax base to determine our property tax liability. Additional detail on
17 Minnesota’s property tax system is available in Chapter 8100 of the Minnesota
18 Rules.

19

20 Q. PLEASE DESCRIBE THE DOR’S PROCESS FOR VALUING THE COMPANY’S
21 OPERATING PROPERTY.

22 A. The DOR begins by determining the system unit value, which is an estimated
23 valuation of the Company’s entire electric or gas system, in all states in which
24 the Company operates, based on two different appraisal methods. One appraisal
25 method is referred to as the cost indicator of value, and it is calculated based on
26 the Company’s net book value plus construction work in progress (CWIP).

1 A second appraisal method used by the DOR is referred to as the income
2 indicator of value. The basic calculation divides the Company's net operating
3 income by a weighted average cost of capital.

4
5 Next, the DOR applies weightings to the cost and income indicators of value.
6 For example, in 2020 the DOR applied a zero percent weight to the cost method
7 and 100 percent to the income method in determining the value of NSPM's
8 electric system. The result of this calculation is the total system unit value.

9
10 Allocators, based on plant and revenue, are then applied to the total system unit
11 value to determine the Minnesota portion of the total system unit value, which
12 is referred to as the Minnesota allocated value.

13
14 Next, the Minnesota allocated value is reduced by deductions and exclusions to
15 value, such as pollution control and wind production property, to determine the
16 apportionable market value. This is the value that is apportioned to the various
17 Minnesota taxing jurisdictions that NSPM operates in. An example of this
18 calculation is provided in Exhibit__(CAA-1), Schedules 2-6 which show
19 detailed calculations of the NSPM (Total Company) property tax expense for
20 2019-2023.

21
22 Q. PLEASE DESCRIBE HOW WIND ENERGY PROPERTY IS TAXED IN MINNESOTA.

23 A. Minnesota Statute § 272.029 explains how wind energy conversion property is
24 taxed in the state. The wind energy conversion system is exempt from the
25 valuation of a company's utility operating property and is instead taxed based
26 on production using a rate of 0.12 cents per kilowatt-hour of electricity
27 produced by the system. This tax is included in our NSPM property tax
28 forecasts as seen in Exhibit__(CAA-1), Schedules 2-6.

1 Q. PLEASE DESCRIBE HOW UTILITY PROPERTY IS VALUED IN NORTH DAKOTA AND
2 SOUTH DAKOTA.

3 A. Both of these states use a method similar to the method used by Minnesota to
4 value utility property. North Dakota Century Code § 57-06-14 explains how
5 utility property is valued in that state. Additional information related to the
6 North Dakota property tax system can be found in Chapter 57-06 of the North
7 Dakota Century Code.

8

9 South Dakota Codified Laws § 10-35-10.1 explains how utility property is
10 valued in that state. Additional information related to the South Dakota
11 property tax system can be found in Chapter 10-35 of the South Dakota
12 Codified Laws.

13

14 Q. DOES THE COMPANY HAVE ANY PLANT OR PORTION OF PLANT THAT IS NON-
15 REGULATED? IF YES, HOW IS THE NON-REGULATED PLANT HANDLED FOR
16 PROPERTY TAXES?

17 A. Yes, the Company owns a steam line that connects the Sherco generation plant
18 to an adjacent Liberty Paper facility. This steam line is non-regulated property.
19 There are no property taxes corresponding to this non-regulated steam line
20 because it is not treated as taxable property by either the DOR or local taxing
21 jurisdictions. The steam line falls outside the definition of “operating property”
22 and is therefore not subject to valuation by the DOR for property tax purposes.
23 The steam line is also not included in the calculation of local property taxes,
24 because it is personal property, not real estate. Thus, there are no property taxes
25 corresponding to this non-regulated steam line.

- 1 Q. PLEASE DESCRIBE THE DOR'S ASSESSMENT AND APPEAL PROCESS.
- 2 A. The DOR typically presents an initial assessment to the Company by early July,
3 and we have 30 days from the date the initial assessment is received to request
4 an administrative appeal with the DOR. While a settlement for less than the
5 initially assessed value is not guaranteed, the Company pursues an appeal if it is
6 in the best interest of its customers.
- 7
- 8 Q. GIVEN THIS PROCESS, HOW DOES THE COMPANY FORECAST ITS PROPERTY
9 TAXES?
- 10 A. We forecast property taxes based on the same key variables used in prior rate
11 cases, such as investments, DOR valuation inputs, and effective tax rate. We
12 also propose to update our property tax forecasts to incorporate actual
13 information on an annual basis via the true-up mechanism. As I noted earlier,
14 we propose to continue the annual compliance filing showing actual property
15 taxes once finalized. Consistent with the current process approved in the
16 Company's last rate case, this would be submitted by July 1 of each year showing
17 the actual property taxes paid for the prior year based on receipt of the final bill.
- 18
- 19 Q. HAS THE COMPANY EVER RECEIVED A REFUND OF ANY PROPERTY TAX
20 PAYMENTS AFTER RECEIPT OF A FINAL BILL?
- 21 A. The Company has not received a refund to my knowledge. This is because the
22 valuation is normally finalized prior to the receipt of the final bill.
- 23
- 24 Q. WHAT INPUTS DID THE COMPANY USE TO DEVELOP ITS 2021 PROPERTY TAX
25 FORECAST?
- 26 A. Our current 2021 property tax forecast is based on the data shown in Table 4
27 below.

1 **Table 4**

2 **Inputs to 2021 Property Tax Forecast**

3

Category	Variable	Data Inputs
Investments	Plant	Projected December 31, 2020 Plant Balances
	Net Operating Income	Actual 2018 & 2019 and Projected 2020 Net Operating Income
DOR Valuation Inputs	DOR Capitalization Rates	Actual 2020 DOR Capitalization Rates (Received April 2020)
	DOR Weighting of Indicators of Value	Actual 2020 DOR Weighting (Received August 2020)
Effective Tax Rate	Local Tax Rates	2019 Effective Rate (Received March and April 2020)

4
5
6
7
8
9
10

11
12 Q. DID THE COMPANY USE THE SAME VARIABLES LISTED IN TABLE 4 IN ITS 2016
13 MYRP AND 2019 RATE CASE APPLICATIONS?

14 A. Yes. We used the same variables in our 2016 MYRP and 2019 rate case
15 applications.

16
17 Q. ARE THE DATA INPUTS IN TABLE 4 THE MOST APPROPRIATE TO USE IN
18 FORECASTING THE 2021 PROPERTY TAX EXPENSE?

19 A. Yes. The information in Table 4 represents the most current information
20 available at this time and results in a reasonable and sound forecast of the 2021
21 property tax expense.

22
23 Q. IN THIS CASE YOU PROVIDE PROPERTY TAX FORECASTS FOR 2022 AND 2023 AS
24 WELL. WHICH OF THE DATA INPUTS CHANGE IN THE FORECAST CALCULATION
25 FOR THOSE YEARS?

26 A. The only data inputs that change in forecasting property taxes for 2022 and
27 2023 are the investment forecast components. We update these inputs because

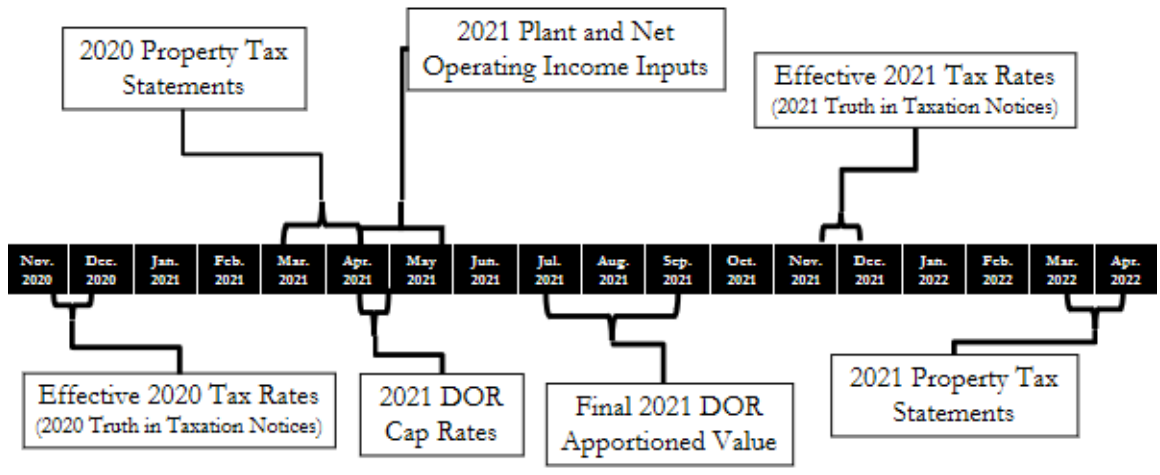
1 we have projected plant balances and net operating income projections for 2022
2 and 2023, and it is reasonable to update our forecast to include that information.

3
4 The 2022 and 2023 forecasts, however, use the same DOR valuation inputs and
5 effective tax rate shown in Table 4. The DOR and local taxing authorities
6 control these variables and can make different decisions that affect these inputs
7 every year. As such, we do not forecast these inputs. We believe using the most
8 recent, actual information available at this time, as shown in Table 4, is
9 appropriate for our 2022 and 2023 forecasts.

10
11 Q. YOU MENTIONED EARLIER THAT THE COMPANY UPDATES ITS INTERNAL
12 PROPERTY TAX FORECASTS AS VARIOUS INFORMATION IS RECEIVED DURING THE
13 YEAR. WHEN DOES THE COMPANY TYPICALLY RECEIVE SUCH INFORMATION?

14 A. Figure 1 below shows when we expect to receive information regarding our
15 2021 property taxes in 2021 and 2022. This schedule is the same every year, so
16 can be applied to information we will receive related to 2022 and 2023 property
17 taxes, as well.

18
19 **Figure 1**
20 **2021 Property Tax Timeline**



1 Q. PLEASE EXPLAIN HOW THE COMPANY PROPOSES TO UPDATE ITS PROPERTY TAX
2 FORECASTS IN THIS CASE.

3 A. We propose to submit updated information in an annual filing once property
4 taxes for a given year are final. For example, our first update would be filed
5 after we receive 2021 property tax statements in the spring of 2022. That filing
6 would include final property tax amounts for 2021 because we would have the
7 updated actual 2021 DOR valuation inputs and actual effective tax rate at that
8 time. We would file our next update after we receive final 2022 property tax
9 information in the spring of 2023. A similar update schedule would be used for
10 subsequent years.

11

12 Q. GIVEN THE PROCEDURAL TIMELINE FOR THIS CASE, WHAT LEVEL OF PROPERTY
13 TAXES WOULD BE INCLUDED IN RATES FOR 2021, 2022 AND 2023?

14 A. The level of property taxes included in rates for 2021, 2022 and 2023 depends
15 on when the record closes in this case but would use the forecasted property
16 taxes based on the most recent data inputs available at that time. Those
17 forecasted amounts would be trued up after final property tax information is
18 received.

19

20 Q. PLEASE EXPLAIN HOW YOUR PROPOSAL FOR AN ANNUAL COMPLIANCE FILING
21 AND TRUE-UP MECHANISM WOULD WORK FOR 2021, 2022, AND 2023 PROPERTY
22 TAXES.

23 A. We propose to submit annual compliance filings that will show actual property
24 taxes for 2021, 2022, and 2023 after we receive final property tax statements in
25 the spring of the following years. Our compliance filings would show actual
26 property taxes compared to the amount included in rates for the respective year.
27 Any over-recovery could be refunded – or symmetrically, any under-recovery
28 could be charged – through an appropriate mechanism at that time.

1 Q. WHY DO YOU BELIEVE A TRUE-UP MECHANISM IS APPROPRIATE IN THIS CASE?

2 A. Given that this is a multi-year rate case, there is still uncertainty about the finality
3 of DOR valuations and the local tax rates each year, especially for the plan years
4 of 2022 and 2023. As a result, final property taxes could be higher or lower
5 than our forecasts. Thus, we believe a symmetrical true-up mechanism is
6 appropriate in this case. A true-up mechanism that reflects actual property taxes
7 in a given year – either higher or lower than what is approved for inclusion in
8 rates – allows the Company to recover this cost of providing service and at the
9 same time ensures customers only pay actual property tax amounts for a given
10 year.

11

12 **B. Data Inputs**

13 Q. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR DIRECT TESTIMONY?

14 A. In this section of my testimony, I discuss the different data inputs that were
15 used to determine the Company's 2021-2023 property tax forecasts.

16

17 *1. Plant*

18 Q. WHAT PLANT DATA DID THE COMPANY USE IN ITS 2021-2023 PROPERTY TAX
19 FORECASTS?

20 A. Our current 2021 property tax forecast is based upon our current projection of
21 December 31, 2020 plant balances. The Company's final 2021 property tax
22 expense will be based on the final December 31, 2020 plant balances. Similarly,
23 the 2022 and 2023 property tax forecasts are based upon our current projections
24 of December 31, 2021 and 2022 plant balances, respectively, and final property
25 taxes for those years will be based on the final plant balances as of December
26 31 each year.

1 2. *Net Operating Income*

2 Q. WHAT NET OPERATING INCOME DATA DID THE COMPANY USE IN ITS 2021- 2023
3 PROPERTY TAX FORECASTS?

4 A. Our current 2021 property tax forecast is based upon actual 2018 and 2019 net
5 operating income and our current projection of 2020 net operating income. The
6 Company’s final 2021 property tax expense will be based upon actual 2018,
7 2019, and 2020 net operating income. The calculation method for net operating
8 income is dictated by the DOR. The DOR used a three-year weighted average
9 method for 2020 property taxes, and we use this same three-year weighted
10 method in our 2021-2023 property tax forecasts.

11
12 Our 2022 net operating income is based on actual 2019 and projected 2020 and
13 2021 net operating income. Final 2022 net operating income will be based on
14 actual 2019, 2020, and 2021 net operating income.

15
16 Following the same process, 2023 net operating income is based on projected
17 2020, 2021, and 2022 net operating income. Final 2023 net operating income
18 will be based on actual 2020, 2021, and 2022 net operating income.

19
20 3. *DOR Capitalization Rates*

21 Q. WHAT DOR CAPITALIZATION RATES DID THE COMPANY USE IN ITS 2021-2023
22 PROPERTY TAX FORECASTS?

23 A. Our 2021-2023 property tax forecasts are based on the most recent actual
24 information available, which are the actual DOR capitalization rates we received
25 in 2020. Final property taxes will be based on the DOR’s final capitalization
26 rates for each year.

1 4. *DOR Weighting of Cost and Income Indicators of Value*

2 Q. WHAT WEIGHTING OF THE COST AND INCOME INDICATORS OF VALUE DID THE
3 COMPANY USE IN ITS 2021-2023 PROPERTY TAX FORECASTS?

4 A. Our 2021-2023 property tax forecasts are based on the most recent actual
5 information available, which are the actual DOR weightings of the cost and
6 income indicators of value we received in 2020. Final property taxes will be
7 based on the DOR's weightings for each specific year.

8
9 While the DOR reviews and may adjust these weightings every year, and prior
10 years' weightings do not dictate the DOR's decision in any year, we believe using
11 the most recent weightings provides a reasonable property tax forecast. We also
12 believe use of the 2020 actual weightings of the cost and income indicators of
13 value is appropriate because it is the most recent actual information available.

14
15 5. *Local Tax Rates*

16 Q. WHAT LOCAL TAX RATES DID THE COMPANY USE IN ITS 2021-2023 PROPERTY
17 TAX FORECAST?

18 A. Our current forecast of the 2021-2023 property tax expense is based upon 2019
19 local tax rates. The local tax rates are mathematically converted into an effective
20 tax rate as provided in Exhibit___(CAA-1), Schedule 8. This is the most
21 accurate recent tax rate data available at this time. Specifically, the resulting 3.02
22 percent effective tax rate used in our forecasts is based upon 2019 final tax
23 statements received in March and April 2020. This tax rate was used to calculate
24 the 2019 Minnesota property tax as well as the 2020 forecasted property tax as
25 shown in Exhibit___(CAA-1), Schedule 9. Final 2021-2023 property taxes will
26 be based on the final statements received in March or April of the following
27 year.

1 **III. FORECAST ANALYSIS**

2
3 Q. WHAT IS DRIVING THE INCREASE IN 2021 MINNESOTA PROPERTY TAXES FROM
4 THE 2020 LEVELS?

5
6 A. As described above, the Company's property tax expense is a function of three
7 primary variables: (1) investments; (2) DOR valuation inputs; and (3) local
8 property tax rates. The increase in our forecasted 2021 Minnesota taxing
9 jurisdiction property tax expense is driven primarily by the first variable, i.e., our
10 investments in system-wide assets. For example, our 2021 property tax forecast
11 includes over \$1.4 billion in additional taxable property and over \$46 million in
12 additional net operating income. Exhibit___(CAA-1), Schedule 10 compares
13 our 2021 forecast to 2020 property tax expense.

14
15 Q. WHAT IS DRIVING THE INCREASE IN 2022 AND 2023 MINNESOTA PROPERTY
16 TAXES?

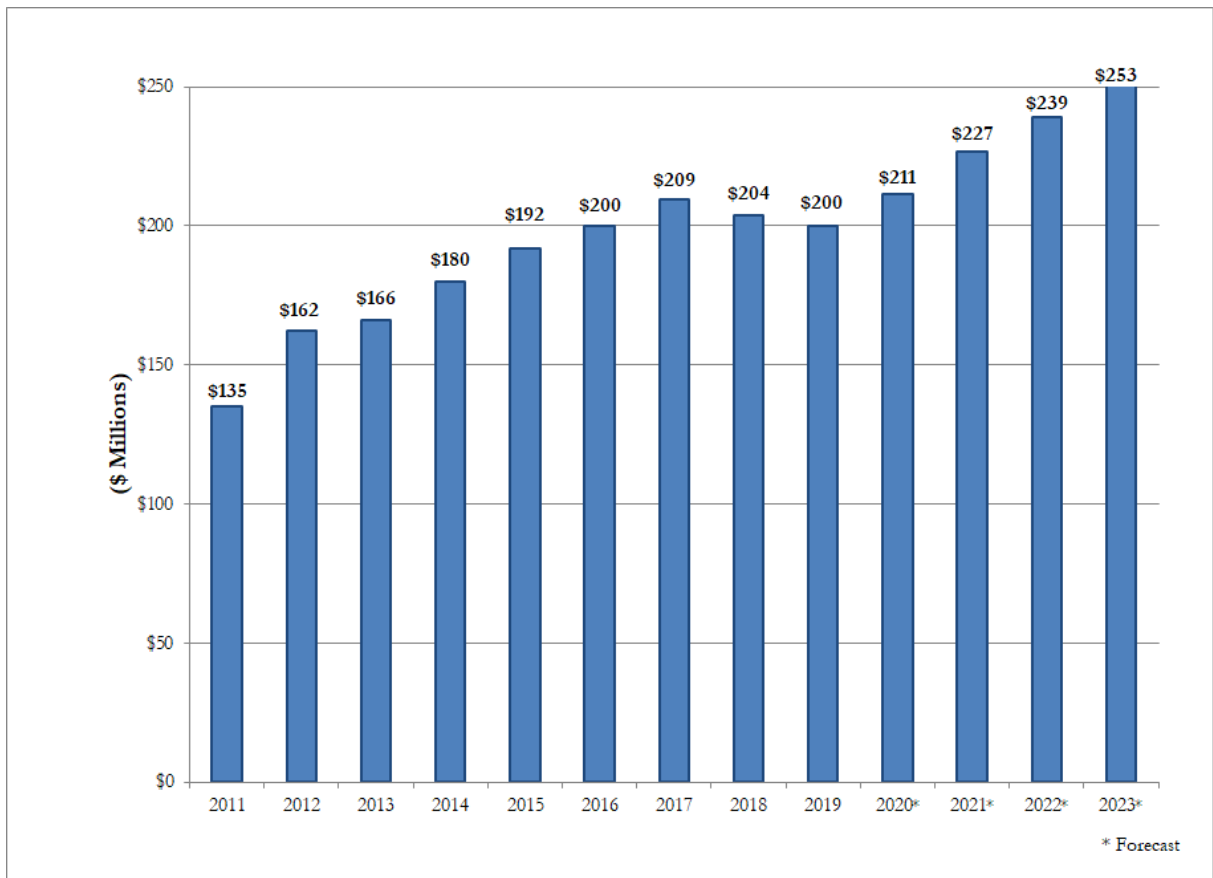
17 A. Like the change between 2020 and 2021, the increase in 2022 and 2023 property
18 taxes is driven by the Company's investments in system-wide assets.
19 Exhibit___(CAA-1), Schedules 11 and 12 show how our additional investments
20 impact the 2022-2023 forecasts.

21
22 Q. ARE THE FORECASTED INCREASES IN 2021-2023 MINNESOTA PROPERTY TAXES
23 CONSISTENT WITH PAST INCREASES IN MINNESOTA PROPERTY TAXES?

24 A. Yes. As Minnesota taxes account for over 94 percent of our NSPM Total
25 Company property taxes, Figure 2 below shows NSPM property taxes for the
26 Minnesota taxing jurisdiction for 2011 through 2023. As shown, property taxes
27 have increased each year since 2011, except for 2018 and 2019. The 2018
28 property tax is slightly lower than 2017 due to more favorable weightings by the

1 DOR for the cost and income indicators of value. The 2019 property tax is
2 slightly lower than 2018 due to a small decrease in the tax rate.

3
4 **Figure 2**
5 **NSPM Minnesota Taxing Jurisdiction Electric and Gas Property Taxes**



20
21 Exhibit___(CAA-1), Schedule 7 shows the Company's property taxes since
22 2011.

23
24 Q. WHAT IS DRIVING THE INCREASES IN THE NORTH DAKOTA AND SOUTH
25 DAKOTA PROPERTY TAXES INCLUDED IN THE COMPANY'S FORECASTS?

26 A. Similar to Minnesota, the property tax increases in North Dakota and South
27 Dakota are driven by the investment variable.

1 Q. WHAT DID THE COMMISSION APPROVE WITH RESPECT TO PROPERTY TAX IN THE
2 2016 MYRP?

3 A. The Commission approved \$163.1 million in property taxes for 2016-2019, of
4 which \$151.6 million was included in base rates and the remaining \$11.5 million
5 was included in various riders.³ The Commission also approved a true-up
6 mechanism if the amount on the final property tax statements for any of these
7 years was more or less than the amount included in base rates. In that case, we
8 would make annual adjustments for the difference (on a State of Minnesota
9 Electric Jurisdiction basis). This property tax true-up was extended through
10 2020 as part of the Commission's approval of the Company's 2019 True-Up
11 Mechanisms Petition.⁴ As previously stated, property taxes related to riders are
12 trued up through separate rider proceedings.

13

14 Q. WHAT WERE THE RESULTS OF THE BASE RATE TRUE-UP MECHANISM FOR EACH
15 YEAR?

16 A. Our 2016 property taxes were updated in Rebuttal Testimony and included in
17 the rate case settlement that was adopted by the Commission, eliminating the
18 need for a true-up filing.

19

20 Final 2017 property taxes shown on the Minnesota, North Dakota, and South
21 Dakota property tax statements received in February through April 2018 were
22 \$144.7 million on a State of Minnesota Electric Jurisdiction basis for base rates,

³ *In the Matter of the Application of Northern States Power Company for Authority to Increase Rates for Electric Service in the State of Minnesota*, Docket No. E002/GR-15-826, FINDINGS OF FACT, CONCLUSIONS, AND ORDER at 14, 34 (June 12, 2017); FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATIONS at 47-48 (March 1, 2017).

⁴ *In the Matter of the Petition of Northern States Power Company d/b/a Xcel Energy for Approval of True-Up Mechanisms*, ORDER APPROVING TRUE-UPS AND REQUIRING XCEL TO WITHDRAW ITS NOTICE OF CHANGE IN RATES AND INTERIM RATE PETITION, Docket No. E002/M-19-688 (March 13, 2020).

1 or \$6.9 million (or 4.5 percent) less than the \$151.6 million reflected in base
2 rates. The decrease from the forecast provided in the 2016 MYRP to the final
3 property tax statements was primarily due to a decrease in the tax rate.

4
5 Final 2018 property taxes shown on the Minnesota, North Dakota, and South
6 Dakota property tax statements received in February through April 2019 were
7 \$142.8 million on a State of Minnesota Electric Jurisdiction basis for base rates,
8 or \$8.8 million (or 5.8 percent) less than the \$151.6 million reflected in base
9 rates. The decrease from the forecast provided in the 2016 MYRP to the final
10 property tax statements was due to a favorable valuation settlement that led to
11 a reduced tax.

12
13 Final 2019 property taxes shown on the Minnesota, North Dakota, and South
14 Dakota property tax statements received in February through April 2020 were
15 \$138.6 million on a State of Minnesota Electric Jurisdiction basis for base rates,
16 or \$13 million (or 8.6 percent) less than the \$151.6 million reflected in base
17 rates. The decrease from the forecast provided in the last rate case to the final
18 property tax statements was due to a favorable valuation settlement and a lower
19 tax rate that led to a reduced tax.

20
21 Final 2020 property tax statements for Minnesota, North Dakota, and South
22 Dakota will not be available until February through April 2021.

- 23
24 Q. FINAL 2017, 2018, AND 2019 PROPERTY TAXES WERE LESS THAN THE AMOUNTS
25 IN RATES FOR THOSE YEARS. HOW DID THE COMPANY ADDRESS THIS?
26 A. The property tax reductions were refunded to customers through the annual
27 true-up process.

1 **IV. CONCLUSION**

2
3 Q. PLEASE SUMMARIZE YOUR TESTIMONY.

4 A. The forecasted 2021, 2022, and 2023 NSPM (Total Company) property tax
5 expense is \$238.7 million, \$252.5 million, and \$267.6 million, respectively, the
6 allocation of which to the appropriate regulatory jurisdictions will be discussed
7 by Mr. Halama. Forecasted property taxes for all operating jurisdictions are
8 increasing due to ongoing system investments and represent a continuation of
9 recent increases.

10
11 Our forecasts in this case reflect different data inputs for some variables, namely
12 the actual DOR valuation inputs and local tax rates received in 2020. We believe
13 using the actual 2020 DOR valuation inputs and local tax rates results in
14 accurate forecasts.

15
16 The Company is seeking recovery of property taxes as part of its multi-year rate
17 plan, with rates that include forecasted property tax amounts. The Company is
18 also proposing to continue the annual compliance filing and true-up mechanism
19 that reflects actual property taxes in a given year for all operating jurisdictions.
20 This approach would allow the Company to recover this cost of providing
21 service and at the same time ensure that customers only pay actual property tax
22 amounts for a given year.

23
24 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

25 A. Yes, it does.

Statement of Qualifications

Christopher A. Arend

Current Responsibilities

As Senior Director, Tax Services, I oversee and manage the tax planning, policy and defense responsibilities associated with Xcel Energy's income, property and sales/use taxes.

Experience

1991–Present	Xcel Energy Inc.	Senior Director, Tax Services
--------------	------------------	-------------------------------

Education

2000	Master of Business–Taxation	University of Minnesota
1991	Bachelor of Science–Accounting	Minnesota State University–Mankato

NSPM Total Company Property Taxes

	2019	
	Electric	Gas
System Unit Value Calculation		
Plant In Service, 12/31/18 Forecast	18,509,456,415	1,565,850,973
CWIP, 12/31/18 Forecast	922,590,762	17,189,149
Depreciation, 12/31/18 Forecast	(7,580,685,435)	(664,745,428)
Cost Indicator of Value	A <u><u>\$11,851,361,742</u></u>	<u><u>\$918,294,694</u></u>
Income Indicator		
2016 NOI x 25%	161,225,521	7,679,098
2017 NOI x 35%	222,009,901	14,514,825
2018 NOI x 40%	251,826,272	19,796,144
NOI to Capitalize	\$635,061,694	\$41,990,067
Capitalization Rate	7.20%	7.37%
Income Indicator of Value	B <u><u>\$8,820,301,306</u></u>	<u><u>\$569,743,107</u></u>
Apply Weightings		
	17.5% / 82.5%	17.5% / 82.5%
Cost Indicator	\$2,073,988,300	\$160,701,600
Income Indicator	\$7,276,748,600	\$470,038,100
Total System Unit Value	C <u><u>\$9,350,736,900</u></u>	<u><u>\$630,739,700</u></u>
Allocation of System Value		
MN Plant in Service	17,338,963,372	1,443,743,214
System Plant in Service	19,432,047,177	1,583,040,122
Plant Ratio x 90%-Elec / x 75%-Gas	80.31%	68.40%
MN Gross Revenue	3,972,407,981	515,183,890
System Gross Revenue	4,495,459,910	585,546,154
Revenue Ratio x 10%-Elec / x 25%-Gas	8.84%	22.00%
MN Allocated Value Percentage	89.15%	90.40%
MN Allocated Value	D <u><u>\$8,336,181,900</u></u>	<u><u>\$570,188,700</u></u>
Net Depreciable Excludables	2,485,708,281	79,483,774
Non-Depreciable Excludables	678,802,247	13,911,169
Subtotal	3,164,510,528	93,394,943
Ratio - System Unit Value / Cost Indicator	78.90%	68.69%
Deductions to MN Allocated Value	<u><u>\$2,496,798,800</u></u>	<u><u>\$64,153,000</u></u>
Sliding Scale Market Value Exclusion	198,328,370	0
Deduct/Excl to MN Allocated Value	E <u><u>\$2,695,127,170</u></u>	<u><u>\$64,153,000</u></u>
Apportionable Market Value	<u><u>\$5,641,054,730</u></u>	<u><u>\$506,035,700</u></u>
Effective Tax Rate	3.02%	3.02%
Forecasted Property Tax - Elec & Gas	\$170,359,853	\$15,282,278
Rounded	\$170,340,000	\$15,300,000
Locally Assessed	10,920,000	960,000
Wind Production	2,160,000	
Total Property Tax	<u><u>\$183,420,000</u></u>	<u><u>\$16,260,000</u></u>
Total MN Property Tax		199,680,000
North Dakota & South Dakota Property Tax		\$11,262,000
Total NSPM Forecasted Property Tax		\$210,942,000

Support for the Calculation of Minnesota Apportionable Market Value

- A** Minn. R. 8100.0300, subp. 3 describes in part the cost indicator of value as:
The cost factor to be considered in the utility valuation formula is the original cost less depreciation of the system plant, plus the cost of improvements to the system plant, plus the original cost of all types of construction work in progress that are installed by the assessment date, plus the cost of property held for future use, plus the cost of contributions in aid of construction.
- B** Minn. R. 8100.0300, subp. 4, explains the process for calculating the income indicator of value:
The income indicator of value is estimated by weighting the capitalized net operating earnings of the utility company for the most recent three years as follows: most recent year, 40 percent; previous year, 35 percent; and final year, 25 percent. Utilities may request the removal of nonrecurring items of income or expense. The commissioner must determine if removal of the item is appropriate. The net income is capitalized by applying a capitalization rate that is computed by using the band of investment method. This method considers:
- A. the capital structure of utilities;*
 - B. the cost of debt or interest rate;*
 - C. the yield on preferred stock of utilities;*
 - D. the yield on common stock of utilities; and*
 - E. the risk-free rate, relative risk, and risk premiums for public utility companies.*
- Capitalization rates are computed each year for electric companies, gas distribution companies, natural gas transmission systems, and fluid pipeline companies. The rates are recalculated each year using the method described in this subpart.*
- Minn. R. 8100.0100, subp. 9 defines net operating earnings as follows:
Net operating earnings" means earnings from the system plant of the utility after the deduction of operating expenses, depreciation, and taxes, but before any deduction for interest.
- Minn. R. 8100.0100, subp. 5, defines capitalization rate as:
"Capitalization rate" means the relationship of income to capital investment or value, expressed as a percentage.
- C** Minn. R. 8100.0300, subp. 5, explains the process for calculating the system unit value:
The unit value of the utility company is equal to the total of the weighted indicators of value. The total weighting must equal 100 percent. The default weightings of the indicators are: market indicator, 0 percent; cost indicator, 50 percent; income indicator, 50 percent.
- D** Minn. R. 8100.0400, subp. 2, explains the process for calculating the allocation of electric value attributable to Minnesota:
The original cost of the utility property located in Minnesota divided by the total original cost of the property in all states of operation is weighted at 90 percent. Gross revenue derived from operations in Minnesota divided by gross operations revenue from all states is weighted at ten percent.
- Minn. R. 8100.0400, subp. 3, explains the process for calculating the allocation of gas value attributable to Minnesota:
The allocation of value of gas distribution companies must be made considering the same factors as are used to determine the allocation of value of electric companies. The weight given to the original cost factor is 75 percent, and gross revenue is weighted 25 percent.
- E** Minn. R. 8100.0500, subp. 1, explains the process for adjusting the valuation performed under Rule 8100.0300:
After the Minnesota portion of the unit value of the utility company, except for electric cooperatives, is determined, any property which is non-formula-assessed or which is exempt from ad valorem tax, is deducted from the Minnesota portion of the unit value. Only that qualifying property located within the state of Minnesota may be excluded.
- Minn. R. 8100.0500, subp. 2, describes the types of property excluded from the valuation performed under Rule 8100.0300:
The following properties are valued by the local or county assessor and, therefore, the formula provided herein for the valuation of utility property is not applicable to such property:
- A. land;*
 - B. nonoperating property; and*
 - C. rights-of-way*
- Minn. R. 8100.0500, subp. 3, further explains the calculation of deduction to Minnesota value:
The Minnesota portion of the unit value is reduced by the value included in the unit value of the company for land, rights-of-way, nonoperating property, and exempt property. This amount is calculated by determining the ratio of the unit value computed in part 8100.0300, subpart 5, to the cost less depreciation allowed in part 8100.0300, subpart 3. This ratio is multiplied by the cost less depreciation of the property to be deducted.

NSPM Total Company Property Taxes

	2020 Forecast	
	Electric	Gas
System Unit Value Calculation		
Plant In Service, 12/31/19 Forecast	19,584,932,247	1,671,090,845
CWIP, 12/31/19 Forecast	922,590,762	17,189,149
Depreciation, 12/31/19 Forecast	(8,076,755,155)	(690,368,701)
Cost Indicator of Value	A <u>\$12,430,767,854</u>	<u>\$997,911,293</u>
Income Indicator		
2017 NOI x 25%	158,578,501	10,367,732
2018 NOI x 35%	220,347,988	17,321,626
2019 NOI x 40%	277,086,180	21,860,300
NOI to Capitalize	\$656,012,669	\$49,549,658
Capitalization Rate	6.40%	7.07%
Income Indicator of Value	B <u>\$10,250,197,953</u>	<u>\$700,843,819</u>
Apply Weightings		
Cost Indicator	0.0% / 100.0%	7.0% / 93.0%
Income Indicator	-	\$69,853,800
Total System Unit Value	C <u>\$10,250,198,000</u>	<u>\$651,784,800</u>
Allocation of System Value		
MN Plant in Service	18,193,498,972	1,540,344,028
System Plant in Service	20,507,523,009	1,688,279,994
Plant Ratio x 90%-Elec / x 75%-Gas	79.85%	68.43%
MN Gross Revenue	3,946,918,373	506,370,653
System Gross Revenue	4,495,412,265	577,083,424
Revenue Ratio x 10%-Elec / x 25%-Gas	8.78%	21.94%
MN Allocated Value Percentage	88.63%	90.37%
MN Allocated Value	D <u>\$9,084,750,500</u>	<u>\$652,144,800</u>
Net Depreciable Excludables	2,619,042,842	88,516,284
Non-Depreciable Excludables	989,825,685	10,641,017
Subtotal	3,608,868,527	99,157,301
Ratio - System Unit Value / Cost Indicator	82.46%	72.31%
Deductions to MN Allocated Value	<u>\$2,975,873,000</u>	<u>\$71,700,600</u>
Sliding Scale Market Value Exclusion	200,000,000	0
Deduct/Excl to MN Allocated Value	E <u>\$3,175,873,000</u>	<u>\$71,700,600</u>
Apportionable Market Value	<u>\$5,900,000,000</u>	<u>\$580,000,000</u>
Effective Tax Rate	3.02%	3.02%
Forecasted Property Tax - Elec & Gas	\$178,180,000	\$17,516,000
Rounded	\$178,200,000	\$17,520,000
Locally Assessed	10,860,000	1,080,000
Wind Production	3,600,000	
Total Property Tax	\$192,660,000	\$18,600,000
Total MN Property Tax		211,260,000
North Dakota & South Dakota Property Tax		\$11,598,000
Total NSPM Forecasted Property Tax		\$222,858,000

Support for the Calculation of Minnesota Apportionable Market Value

- A** Minn. R. 8100.0300, subp. 3 describes in part the cost indicator of value as:
The cost factor to be considered in the utility valuation formula is the original cost less depreciation of the system plant, plus the cost of improvements to the system plant, plus the original cost of all types of construction work in progress that are installed by the assessment date, plus the cost of property held for future use, plus the cost of contributions in aid of construction.
- B** Minn. R. 8100.0300, subp. 4, explains the process for calculating the income indicator of value:
The income indicator of value is estimated by weighting the capitalized net operating earnings of the utility company for the most recent three years as follows: most recent year, 40 percent; previous year, 35 percent; and final year, 25 percent. Utilities may request the removal of nonrecurring items of income or expense. The commissioner must determine if removal of the item is appropriate. The net income is capitalized by applying a capitalization rate that is computed by using the band of investment method. This method considers:
- A. the capital structure of utilities;*
 - B. the cost of debt or interest rate;*
 - C. the yield on preferred stock of utilities;*
 - D. the yield on common stock of utilities; and*
 - E. the risk-free rate, relative risk, and risk premiums for public utility companies.*
- Capitalization rates are computed each year for electric companies, gas distribution companies, natural gas transmission systems, and fluid pipeline companies. The rates are recalculated each year using the method described in this subpart.*
- Minn. R. 8100.0100, subp. 9 defines net operating earnings as follows:
Net operating earnings" means earnings from the system plant of the utility after the deduction of operating expenses, depreciation, and taxes, but before any deduction for interest.
- Minn. R. 8100.0100, subp. 5, defines capitalization rate as:
"Capitalization rate" means the relationship of income to capital investment or value, expressed as a percentage.
- C** Minn. R. 8100.0300, subp. 5, explains the process for calculating the system unit value:
The unit value of the utility company is equal to the total of the weighted indicators of value. The total weighting must equal 100 percent. The default weightings of the indicators are: market indicator, 0 percent; cost indicator, 50 percent; income indicator, 50 percent.
- D** Minn. R. 8100.0400, subp. 2, explains the process for calculating the allocation of electric value attributable to Minnesota:
The original cost of the utility property located in Minnesota divided by the total original cost of the property in all states of operation is weighted at 90 percent. Gross revenue derived from operations in Minnesota divided by gross operations revenue from all states is weighted at ten percent.
- Minn. R. 8100.0400, subp. 3, explains the process for calculating the allocation of gas value attributable to Minnesota:
The allocation of value of gas distribution companies must be made considering the same factors as are used to determine the allocation of value of electric companies. The weight given to the original cost factor is 75 percent, and gross revenue is weighted 25 percent.
- E** Minn. R. 8100.0500, subp. 1, explains the process for adjusting the valuation performed under Rule 8100.0300:
After the Minnesota portion of the unit value of the utility company, except for electric cooperatives, is determined, any property which is non-formula-assessed or which is exempt from ad valorem tax, is deducted from the Minnesota portion of the unit value. Only that qualifying property located within the state of Minnesota may be excluded.
- Minn. R. 8100.0500, subp. 2, describes the types of property excluded from the valuation performed under Rule 8100.0300:
The following properties are valued by the local or county assessor and, therefore, the formula provided herein for the valuation of utility property is not applicable to such property:
- A. land;*
 - B. nonoperating property; and*
 - C. rights-of-way*
- Minn. R. 8100.0500, subp. 3, further explains the calculation of deduction to Minnesota value:
The Minnesota portion of the unit value is reduced by the value included in the unit value of the company for land, rights-of-way, nonoperating property, and exempt property. This amount is calculated by determining the ratio of the unit value computed in part 8100.0300, subpart 5, to the cost less depreciation allowed in part 8100.0300, subpart 3. This ratio is multiplied by the cost less depreciation of the property to be deducted.

NSPM Total Company Property Taxes

	2021 Forecast	
	Electric	Gas
System Unit Value Calculation		
Plant In Service, 12/31/20 Forecast	21,507,810,737	1,779,076,734
CWIP, 12/31/20 Forecast	922,590,762	17,189,149
Depreciation, 12/31/20 Forecast	(8,675,802,328)	(723,427,083)
Cost Indicator of Value	A <u><u>\$13,754,599,171</u></u>	<u><u>\$1,072,838,800</u></u>
Income Indicator		
2018 NOI x 25%	157,391,420	12,372,590
2019 NOI x 35%	242,450,408	19,127,763
2020 Estimated NOI x 40%	296,867,200	23,378,000
NOI to Capitalize	\$696,709,028	\$54,878,353
Capitalization Rate	6.40%	7.07%
Income Indicator of Value	B <u><u>\$10,886,078,563</u></u>	<u><u>\$776,214,328</u></u>
Apply Weightings		
Cost Indicator	0.0% / 100.0%	7.0% / 93.0%
Income Indicator	-	\$75,098,700
Total System Unit Value	C <u><u>\$10,886,078,600</u></u>	<u><u>\$796,978,000</u></u>
Allocation of System Value		
MN Plant in Service	19,735,973,091	1,639,744,472
System Plant in Service	22,430,401,499	1,796,265,883
Plant Ratio x 90%-Elec / x 75%-Gas	79.19%	68.47%
MN Gross Revenue	3,946,918,373	506,370,653
System Gross Revenue	4,495,412,265	577,083,424
Revenue Ratio x 10%-Elec / x 25%-Gas	8.78%	21.94%
MN Allocated Value Percentage	87.97%	90.41%
MN Allocated Value	D <u><u>\$9,576,483,300</u></u>	<u><u>\$720,547,800</u></u>
Net Depreciable Excludables	3,227,360,540	90,160,369
Non-Depreciable Excludables	697,067,403	9,577,695
Subtotal	3,924,427,943	99,738,064
Ratio - System Unit Value / Cost Indicator	79.15%	74.29%
Deductions to MN Allocated Value	<u><u>\$3,106,184,700</u></u>	<u><u>\$74,095,400</u></u>
Sliding Scale Market Value Exclusion	200,000,000	0
Deduct/Excl to MN Allocated Value	E <u><u>\$3,306,184,700</u></u>	<u><u>\$74,095,400</u></u>
Apportionable Market Value	<u><u>\$6,270,298,600</u></u>	<u><u>\$646,452,400</u></u>
Effective Tax Rate	3.02%	3.02%
Forecasted Property Tax - Elec & Gas	\$189,363,018	\$19,522,862
Rounded	\$189,360,000	\$19,500,000
Locally Assessed	10,800,000	1,140,000
Wind Production	5,880,000	
Total Property Tax	<u><u>\$206,040,000</u></u>	<u><u>\$20,640,000</u></u>
Total MN Property Tax		226,680,000
North Dakota & South Dakota Property Tax		\$12,006,000
Total NSPM Forecasted Property Tax		\$238,686,000

Support for the Calculation of Minnesota Apportionable Market Value

- A** Minn. R. 8100.0300, subp. 3 describes in part the cost indicator of value as:
The cost factor to be considered in the utility valuation formula is the original cost less depreciation of the system plant, plus the cost of improvements to the system plant, plus the original cost of all types of construction work in progress that are installed by the assessment date, plus the cost of property held for future use, plus the cost of contributions in aid of construction.
- B** Minn. R. 8100.0300, subp. 4, explains the process for calculating the income indicator of value:
The income indicator of value is estimated by weighting the capitalized net operating earnings of the utility company for the most recent three years as follows: most recent year, 40 percent; previous year, 35 percent; and final year, 25 percent. Utilities may request the removal of nonrecurring items of income or expense. The commissioner must determine if removal of the item is appropriate. The net income is capitalized by applying a capitalization rate that is computed by using the band of investment method. This method considers:
- A. the capital structure of utilities;*
 - B. the cost of debt or interest rate;*
 - C. the yield on preferred stock of utilities;*
 - D. the yield on common stock of utilities; and*
 - E. the risk-free rate, relative risk, and risk premiums for public utility companies.*
- Capitalization rates are computed each year for electric companies, gas distribution companies, natural gas transmission systems, and fluid pipeline companies. The rates are recalculated each year using the method described in this subpart.*
- Minn. R. 8100.0100, subp. 9 defines net operating earnings as follows:
Net operating earnings" means earnings from the system plant of the utility after the deduction of operating expenses, depreciation, and taxes, but before any deduction for interest.
- Minn. R. 8100.0100, subp. 5, defines capitalization rate as:
"Capitalization rate" means the relationship of income to capital investment or value, expressed as a percentage.
- C** Minn. R. 8100.0300, subp. 5, explains the process for calculating the system unit value:
The unit value of the utility company is equal to the total of the weighted indicators of value. The total weighting must equal 100 percent. The default weightings of the indicators are: market indicator, 0 percent; cost indicator, 50 percent; income indicator, 50 percent.
- D** Minn. R. 8100.0400, subp. 2, explains the process for calculating the allocation of electric value attributable to Minnesota:
The original cost of the utility property located in Minnesota divided by the total original cost of the property in all states of operation is weighted at 90 percent. Gross revenue derived from operations in Minnesota divided by gross operations revenue from all states is weighted at ten percent.
- Minn. R. 8100.0400, subp. 3, explains the process for calculating the allocation of gas value attributable to Minnesota:
The allocation of value of gas distribution companies must be made considering the same factors as are used to determine the allocation of value of electric companies. The weight given to the original cost factor is 75 percent, and gross revenue is weighted 25 percent.
- E** Minn. R. 8100.0500, subp. 1, explains the process for adjusting the valuation performed under Rule 8100.0300:
After the Minnesota portion of the unit value of the utility company, except for electric cooperatives, is determined, any property which is non-formula-assessed or which is exempt from ad valorem tax, is deducted from the Minnesota portion of the unit value. Only that qualifying property located within the state of Minnesota may be excluded.
- Minn. R. 8100.0500, subp. 2, describes the types of property excluded from the valuation performed under Rule 8100.0300:
The following properties are valued by the local or county assessor and, therefore, the formula provided herein for the valuation of utility property is not applicable to such property:
- A. land;*
 - B. nonoperating property; and*
 - C. rights-of-way*
- Minn. R. 8100.0500, subp. 3, further explains the calculation of deduction to Minnesota value:
The Minnesota portion of the unit value is reduced by the value included in the unit value of the company for land, rights-of-way, nonoperating property, and exempt property. This amount is calculated by determining the ratio of the unit value computed in part 8100.0300, subpart 5, to the cost less depreciation allowed in part 8100.0300, subpart 3. This ratio is multiplied by the cost less depreciation of the property to be deducted.

NSPM Total Company Property Taxes

	2022 Forecast	
	Electric	Gas
System Unit Value Calculation		
Plant In Service, 12/31/21 Forecast	22,296,266,933	1,925,389,017
CWIP, 12/31/21 Forecast	1,361,712,780	56,119,431
Depreciation, 12/31/21 Forecast	(9,432,096,900)	(763,178,994)
Cost Indicator of Value	A <u>\$14,225,882,813</u>	<u>\$1,218,329,454</u>
Income Indicator		
2019 NOI x 25%	173,178,863	13,662,688
2020 Estimated NOI x 35%	259,758,800	20,455,750
2021 Estimated NOI x 40%	305,301,600	24,042,000
NOI to Capitalize	\$738,239,263	\$58,160,438
Capitalization Rate	6.40%	7.07%
Income Indicator of Value	B <u>\$11,534,988,484</u>	<u>\$822,637,030</u>
Apply Weightings		
Cost Indicator	0.0% / 100.0%	7.0% / 93.0%
Income Indicator	-	\$85,283,100
Total System Unit Value	C <u>\$11,534,988,500</u>	<u>\$765,052,400</u>
Allocation of System Value		
MN Plant in Service	20,623,689,579	1,797,661,264
System Plant in Service	23,657,979,713	1,981,508,448
Plant Ratio x 90%-Elec / x 75%-Gas	78.45%	68.04%
MN Gross Revenue	3,946,918,373	506,370,653
System Gross Revenue	4,495,412,265	577,083,424
Revenue Ratio x 10%-Elec / x 25%-Gas	8.78%	21.94%
MN Allocated Value Percentage	87.23%	89.98%
MN Allocated Value	D <u>\$10,061,970,500</u>	<u>\$765,131,900</u>
Net Depreciable Excludables	3,465,165,933	101,774,395
Non-Depreciable Excludables	507,018,063	14,860,047
Subtotal	3,972,183,996	116,634,442
Ratio - System Unit Value / Cost Indicator	81.08%	69.80%
Deductions to MN Allocated Value	<u>\$3,220,646,800</u>	<u>\$81,410,800</u>
Sliding Scale Market Value Exclusion	200,000,000	0
Deduct/Excl to MN Allocated Value	E <u>\$3,420,646,800</u>	<u>\$81,410,800</u>
Apportionable Market Value	<u>\$6,641,323,700</u>	<u>\$683,721,100</u>
Effective Tax Rate	3.02%	3.02%
Forecasted Property Tax - Elec & Gas	\$200,567,976	\$20,648,377
Rounded	\$200,580,000	\$20,640,000
Locally Assessed	10,800,000	1,140,000
Wind Production	5,880,000	
Total Property Tax	\$217,260,000	\$21,780,000
Total MN Property Tax		239,040,000
Iowa, North Dakota & South Dakota Property Tax		\$13,446,000
Total NSPM Forecasted Property Tax		\$252,486,000

Support for the Calculation of Minnesota Apportionable Market Value

- A** Minn. R. 8100.0300, subp. 3 describes in part the cost indicator of value as:
The cost factor to be considered in the utility valuation formula is the original cost less depreciation of the system plant, plus the cost of improvements to the system plant, plus the original cost of all types of construction work in progress that are installed by the assessment date, plus the cost of property held for future use, plus the cost of contributions in aid of construction.
- B** Minn. R. 8100.0300, subp. 4, explains the process for calculating the income indicator of value:
The income indicator of value is estimated by weighting the capitalized net operating earnings of the utility company for the most recent three years as follows: most recent year, 40 percent; previous year, 35 percent; and final year, 25 percent. Utilities may request the removal of nonrecurring items of income or expense. The commissioner must determine if removal of the item is appropriate. The net income is capitalized by applying a capitalization rate that is computed by using the band of investment method. This method considers:
- A. the capital structure of utilities;*
 - B. the cost of debt or interest rate;*
 - C. the yield on preferred stock of utilities;*
 - D. the yield on common stock of utilities; and*
 - E. the risk-free rate, relative risk, and risk premiums for public utility companies.*
- Capitalization rates are computed each year for electric companies, gas distribution companies, natural gas transmission systems, and fluid pipeline companies. The rates are recalculated each year using the method described in this subpart.*
- Minn. R. 8100.0100, subp. 9 defines net operating earnings as follows:
Net operating earnings" means earnings from the system plant of the utility after the deduction of operating expenses, depreciation, and taxes, but before any deduction for interest.
- Minn. R. 8100.0100, subp. 5, defines capitalization rate as:
"Capitalization rate" means the relationship of income to capital investment or value, expressed as a percentage.
- C** Minn. R. 8100.0300, subp. 5, explains the process for calculating the system unit value:
The unit value of the utility company is equal to the total of the weighted indicators of value. The total weighting must equal 100 percent. The default weightings of the indicators are: market indicator, 0 percent; cost indicator, 50 percent; income indicator, 50 percent.
- D** Minn. R. 8100.0400, subp. 2, explains the process for calculating the allocation of electric value attributable to Minnesota:
The original cost of the utility property located in Minnesota divided by the total original cost of the property in all states of operation is weighted at 90 percent. Gross revenue derived from operations in Minnesota divided by gross operations revenue from all states is weighted at ten percent.
- Minn. R. 8100.0400, subp. 3, explains the process for calculating the allocation of gas value attributable to Minnesota:
The allocation of value of gas distribution companies must be made considering the same factors as are used to determine the allocation of value of electric companies. The weight given to the original cost factor is 75 percent, and gross revenue is weighted 25 percent.
- E** Minn. R. 8100.0500, subp. 1, explains the process for adjusting the valuation performed under Rule 8100.0300:
After the Minnesota portion of the unit value of the utility company, except for electric cooperatives, is determined, any property which is non-formula-assessed or which is exempt from ad valorem tax, is deducted from the Minnesota portion of the unit value. Only that qualifying property located within the state of Minnesota may be excluded.
- Minn. R. 8100.0500, subp. 2, describes the types of property excluded from the valuation performed under Rule 8100.0300:
The following properties are valued by the local or county assessor and, therefore, the formula provided herein for the valuation of utility property is not applicable to such property:
- A. land;*
 - B. nonoperating property; and*
 - C. rights-of-way*
- Minn. R. 8100.0500, subp. 3, further explains the calculation of deduction to Minnesota value:
The Minnesota portion of the unit value is reduced by the value included in the unit value of the company for land, rights-of-way, nonoperating property, and exempt property. This amount is calculated by determining the ratio of the unit value computed in part 8100.0300, subpart 5, to the cost less depreciation allowed in part 8100.0300, subpart 3. This ratio is multiplied by the cost less depreciation of the property to be deducted.

NSPM Total Company Property Taxes

	2023 Forecast	
	Electric	Gas
System Unit Value Calculation		
Plant In Service, 12/31/22 Forecast	22,759,846,705	2,069,908,684
CWIP, 12/31/22 Forecast	1,927,478,756	74,485,241
Depreciation, 12/31/22 Forecast	(10,004,449,901)	(808,568,114)
Cost Indicator of Value	A <u>\$14,682,875,560</u>	<u>\$1,335,825,811</u>
Income Indicator		
2020 Estimated NOI x 25%	185,542,000	14,611,250
2021 Estimated NOI x 35%	267,138,900	21,036,750
2022 Estimated NOI x 40%	324,947,600	25,589,200
NOI to Capitalize	\$777,628,500	\$61,237,200
Capitalization Rate	6.40%	7.07%
Income Indicator of Value	B <u>\$12,150,445,313</u>	<u>\$866,155,587</u>
Apply Weightings		
Cost Indicator	0.0% / 100.0%	7.0% / 93.0%
Income Indicator	-	\$93,507,800
Total System Unit Value	C <u>\$12,150,445,300</u>	<u>\$805,524,700</u>
Allocation of System Value		
MN Plant in Service	21,529,804,132	1,928,927,985
System Plant in Service	24,687,325,461	2,144,393,925
Plant Ratio x 90%-Elec / x 75%-Gas	78.49%	67.46%
MN Gross Revenue	3,946,918,373	506,370,653
System Gross Revenue	4,495,412,265	577,083,424
Revenue Ratio x 10%-Elec / x 25%-Gas	8.78%	21.94%
MN Allocated Value Percentage	87.27%	89.40%
MN Allocated Value	D <u>\$10,603,693,600</u>	<u>\$803,735,100</u>
Net Depreciable Excludables	3,480,707,916	112,429,072
Non-Depreciable Excludables	556,690,636	10,138,854
Subtotal	4,037,398,552	122,567,926
Ratio - System Unit Value / Cost Indicator	82.75%	67.30%
Deductions to MN Allocated Value	<u>\$3,340,947,300</u>	<u>\$82,488,200</u>
Sliding Scale Market Value Exclusion	200,000,000	0
Deduct/Excl to MN Allocated Value	E <u>\$3,540,947,300</u>	<u>\$82,488,200</u>
Apportionable Market Value	<u>\$7,062,746,300</u>	<u>\$721,246,900</u>
Effective Tax Rate	3.02%	3.02%
Forecasted Property Tax - Elec & Gas	\$213,294,938	\$21,781,656
Rounded	\$213,300,000	\$21,780,000
Locally Assessed	10,800,000	1,080,000
Wind Production	5,880,000	
Total Property Tax	<u>\$229,980,000</u>	<u>\$22,860,000</u>
Total MN Property Tax		252,840,000
Iowa, North Dakota & South Dakota Property Tax		\$14,766,000
Total NSPM Forecasted Property Tax		\$267,606,000

Support for the Calculation of Minnesota Apportionable Market Value

A Minn. R. 8100.0300, subp. 3 describes in part the cost indicator of value as:
The cost factor to be considered in the utility valuation formula is the original cost less depreciation of the system plant, plus the cost of improvements to the system plant, plus the original cost of all types of construction work in progress that are installed by the assessment date, plus the cost of property held for future use, plus the cost of contributions in aid of construction.

B Minn. R. 8100.0300, subp. 4, explains the process for calculating the income indicator of value:
The income indicator of value is estimated by weighting the capitalized net operating earnings of the utility company for the most recent three years as follows: most recent year, 40 percent; previous year, 35 percent; and final year, 25 percent. Utilities may request the removal of nonrecurring items of income or expense. The commissioner must determine if removal of the item is appropriate. The net income is capitalized by applying a capitalization rate that is computed by using the band of investment method. This method considers:

- A. the capital structure of utilities;*
- B. the cost of debt or interest rate;*
- C. the yield on preferred stock of utilities;*
- D. the yield on common stock of utilities; and*
- E. the risk-free rate, relative risk, and risk premiums for public utility companies.*

Capitalization rates are computed each year for electric companies, gas distribution companies, natural gas transmission systems, and fluid pipeline companies. The rates are recalculated each year using the method described in this subpart.

Minn. R. 8100.0100, subp. 9 defines net operating earnings as follows:

Net operating earnings" means earnings from the system plant of the utility after the deduction of operating expenses, depreciation, and taxes, but before any deduction for interest.

Minn. R. 8100.0100, subp. 5, defines capitalization rate as:

"Capitalization rate" means the relationship of income to capital investment or value, expressed as a percentage.

C Minn. R. 8100.0300, subp. 5, explains the process for calculating the system unit value:
The unit value of the utility company is equal to the total of the weighted indicators of value. The total weighting must equal 100 percent. The default weightings of the indicators are: market indicator, 0 percent; cost indicator, 50 percent; income indicator, 50 percent.

D Minn. R. 8100.0400, subp. 2, explains the process for calculating the allocation of electric value attributable to Minnesota:
The original cost of the utility property located in Minnesota divided by the total original cost of the property in all states of operation is weighted at 90 percent. Gross revenue derived from operations in Minnesota divided by gross operations revenue from all states is weighted at ten percent.

Minn. R. 8100.0400, subp. 3, explains the process for calculating the allocation of gas value attributable to Minnesota:

The allocation of value of gas distribution companies must be made considering the same factors as are used to determine the allocation of value of electric companies. The weight given to the original cost factor is 75 percent, and gross revenue is weighted 25 percent.

E Minn. R. 8100.0500, subp. 1, explains the process for adjusting the valuation performed under Rule 8100.0300:
After the Minnesota portion of the unit value of the utility company, except for electric cooperatives, is determined, any property which is non-formula-assessed or which is exempt from ad valorem tax, is deducted from the Minnesota portion of the unit value. Only that qualifying property located within the state of Minnesota may be excluded.

Minn. R. 8100.0500, subp. 2, describes the types of property excluded from the valuation performed under Rule 8100.0300:

The following properties are valued by the local or county assessor and, therefore, the formula provided herein for the valuation of utility property is not applicable to such property:

- A. land;*
- B. nonoperating property; and*
- C. rights-of-way*

Minn. R. 8100.0500, subp. 3, further explains the calculation of deduction to Minnesota value:

The Minnesota portion of the unit value is reduced by the value included in the unit value of the company for land, rights-of-way, nonoperating property, and exempt property. This amount is calculated by determining the ratio of the unit value computed in part 8100.0300, subpart 5, to the cost less depreciation allowed in part 8100.0300, subpart 3. This ratio is multiplied by the cost less depreciation of the property to be deducted.

Property Taxes from 2011-2023**Property Tax Expense**

(\$ millions)

	A	B	C	A + B + C	D	E	F	G	E - F + G
Year	Minnesota	North Dakota	South Dakota	Total NSPM	NSPM Electric	Minnesota Electric Jurisdiction	Included in Base Rates	Recovered in Riders	True-up
2011	\$135	\$3	\$3	\$141	\$124	\$101	\$100	\$0	N/A
2012	\$162	\$3	\$3	\$168	\$152	\$125	\$101	\$1	N/A
2013	\$166	\$3	\$3	\$172	\$153	\$123	\$138	\$1	N/A
2014	\$180	\$3	\$3	\$186	\$167	\$134	\$133	\$1	N/A
2015	\$193	\$3	\$4	\$200	\$178	\$141	\$137	\$1	N/A
2016	\$200	\$5	\$4	\$209	\$194	\$153	\$137	\$11	N/A
2017	\$209	\$5	\$4	\$218	\$199	\$157	\$152	\$12	(\$7)
2018	\$204	\$6	\$4	\$214	\$198	\$156	\$152	\$13	(\$9)
2019	\$200	\$7	\$4	\$211	\$194	\$153	\$152	\$14	(\$13)
2020E Initial Filing	\$211	\$7	\$5	\$223	\$203	\$160	\$152	\$16	(\$8)
2021E Initial Filing	\$227	\$7	\$5	\$239	\$217	\$171	\$170	\$1	\$0
2022E Initial Filing	\$239	\$7	\$6	\$252	\$229	\$181	\$178	\$3	\$0
2023E Initial Filing	\$253	\$8	\$7	\$268	\$243	\$192	\$189	\$3	\$0

* Property tax true-up started with the prior rate case for 2017-2019. 2016 was included with the rate case settlement.

**Minnesota Property Taxes By County for 2019 and Tax Rate Calculation
(\$s)**

COUNTY	Truth-in-Taxation Notices			Property Tax Statements		
	Total Taxes	Total Value	Blended Rate	Total Taxes	Total Value	Blended Rate
Anoka	2,862,740	85,146,400	3.36%	2,815,145	84,081,700	3.35%
Becker	79,544	3,318,000	2.40%	78,794	3,318,000	2.37%
Beltrami	89,475	2,977,600	3.00%	88,724	2,977,600	2.98%
Benton	1,278,566	36,147,400	3.54%	1,295,424	36,147,400	3.58%
Blue Earth	2,639,676	93,792,500	2.81%	2,644,236	93,792,500	2.82%
Brown	216,210	8,133,700	2.66%	216,417	8,133,700	2.66%
Carver	2,463,451	77,672,300	3.17%	2,495,152	77,752,400	3.21%
Cass	236,798	10,045,600	2.36%	231,774	10,045,600	2.31%
Chippewa	1,245,170	33,783,700	3.69%	1,268,182	33,783,700	3.75%
Chisago	3,377,472	95,045,800	3.55%	3,351,950	95,045,800	3.53%
Clay	503,473	21,977,200	2.29%	510,188	21,977,200	2.32%
Crow Wing	487,086	19,178,200	2.54%	490,722	19,178,200	2.56%
Dakota	13,566,713	450,257,100	3.01%	13,711,747	450,674,900	3.04%
Dodge	431,928	12,052,100	3.58%	425,766	12,052,100	3.53%
Douglas	530,771	19,636,500	2.70%	527,686	19,636,500	2.69%
Faribault	21,343	795,800	2.68%	21,173	795,800	2.66%
Freeborn	34,005	1,002,700	3.39%	34,198	1,002,700	3.41%
Grant	28,449,305	925,472,400	3.07%	28,103,288	925,472,400	3.04%
Goodhue	92,336	3,985,900	2.32%	96,366	3,985,900	2.42%
Hennepin	36,171,092	1,037,373,900	3.49%	36,001,483	1,037,373,900	3.47%
Houston	159,912	3,981,000	4.02%	158,207	3,981,000	3.97%
Hubbard	53,878	2,028,200	2.66%	53,380	2,028,200	2.63%
Isanti	92,152	2,982,800	3.09%	91,694	2,982,800	3.07%
Itasca	262,711	7,916,300	3.32%	262,146	7,916,300	3.31%
Jackson	611,274	27,865,900	2.19%	629,638	27,865,900	2.26%
Kandiyohi	537,174	15,903,400	3.38%	544,150	15,903,400	3.42%
Koochiching	310,618	11,124,800	2.79%	311,322	11,124,800	2.80%
Lac qui Parle	625	55,600	1.12%	760	55,600	1.37%
Lake of the Woods	181,315	5,227,500	3.47%	173,592	5,227,500	3.32%
Le Sueur	560,144	18,613,200	3.01%	556,041	18,613,200	2.99%
Lincoln	1,080,177	46,578,100	2.32%	1,033,882	46,578,100	2.22%
Lyon	1,528,091	61,793,300	2.47%	1,529,846	61,793,300	2.48%
Martin	200,786	7,927,500	2.53%	199,549	7,927,500	2.52%
McLeod	385,264	11,815,200	3.26%	395,683	11,815,200	3.35%
Meekeer	203,453	5,926,100	3.43%	206,522	5,926,100	3.48%
Morrison	9,850	336,300	2.93%	9,724	336,300	2.89%
Mower	366,540	13,238,700	2.77%	368,846	13,238,700	2.79%
Murray	766,269	38,780,300	1.98%	767,084	38,780,300	1.98%
Nicollet	470,642	16,083,900	2.93%	480,282	16,083,900	2.99%
Nobles	1,286,319	58,991,800	2.18%	1,384,196	58,991,800	2.35%
Norman	11,710	575,200	2.04%	12,576	575,200	2.19%
Olmstead	770,481	25,760,000	2.99%	779,007	25,760,000	3.02%
Ottertail	331,661	13,157,500	2.52%	333,084	13,157,500	2.53%
Pine	206,984	6,705,200	3.09%	206,620	6,705,200	3.08%
Pipestone	480,031	15,879,600	3.02%	480,186	15,879,600	3.02%
Polk	68,104	3,943,600	1.73%	68,022	3,943,600	1.72%
Pope	310,683	10,083,700	3.08%	316,720	10,165,700	3.12%
Ramsey	23,917,093	638,631,600	3.75%	23,741,598	638,631,600	3.72%
Redwood	651,729	27,575,200	2.36%	655,776	27,575,200	2.38%
Renville	1,123,421	39,346,600	2.86%	1,127,990	39,346,600	2.87%
Rice	1,966,695	62,588,400	3.14%	1,960,184	62,588,400	3.13%
Rock	36,974	1,775,600	2.08%	36,546	1,775,600	2.06%
Roseau	590,517	18,386,700	3.21%	587,586	18,386,700	3.20%
St. Louis	972,885	31,045,900	3.13%	976,200	31,045,900	3.14%
Scott	3,835,597	120,534,900	3.18%	3,848,452	120,534,900	3.19%
Sherburne	12,914,209	502,029,000	2.57%	13,524,968	502,012,100	2.69%
Sibley	1,249,354	45,452,000	2.75%	1,254,522	45,452,000	2.76%
Stearns	4,949,279	151,722,100	3.26%	4,953,170	151,722,100	3.26%
Steele	53,897	1,667,300	3.23%	56,916	1,667,300	3.41%
Swift	1,050,450	24,512,600	4.29%	-	-	0.00%
Todd	165,468	5,301,400	3.12%	164,760	5,301,400	3.11%
Wabasha	817,632	27,607,600	2.96%	809,643	27,607,600	2.93%
Waseca	646,683	17,126,100	3.78%	642,657	17,126,100	3.75%
Washington	15,374,088	519,585,100	2.96%	15,441,666	519,585,100	2.97%
Watsonwan	293,662	10,523,300	2.79%	293,549	10,523,300	2.79%
Wilkin	118,817	4,501,400	2.64%	118,806	4,501,400	2.64%
Winona	1,034,562	34,177,000	3.03%	1,026,942	34,177,000	3.00%
Wright	20,079,572	863,102,400	2.33%	20,082,945	862,963,200	2.33%
Yellow Medicine	489,013	19,811,800	2.47%	496,804	19,850,900	2.50%
Subtotal	198,355,598	6,538,073,500	3.03%	197,562,854	6,512,959,100	3.03%
Wind Tax				2,118,632		
Total MN Tax				199,681,487		
North & South Dakota Property Tax				11,255,031		
Total NSPM Property Tax				210,936,518		

NSPM Total Company Property Taxes

	2019		2020 Forecast		2019 vs. 2020		
	Electric	Gas	Electric	Gas	Electric	Gas	
System Unit Value Calculation							
Plant In Service, 12/31	18,509,456,415	1,565,850,973	19,584,932,247	1,671,090,845	1,075,475,832	105,239,872	
CWIP, 12/31	922,590,762	17,189,149	922,590,762	17,189,149	0	0	
Depreciation, 12/31	(7,580,685,435)	(664,745,428)	(8,076,755,155)	(690,368,701)	(496,069,720)	(25,623,273)	
Cost Indicator of Value	A	\$11,851,361,742	\$918,294,694	\$12,430,767,854	\$997,911,293	\$579,406,112	\$79,616,599
Income Indicator							
Year 1 NOI x 25%	161,225,521	7,679,098	158,578,501	10,367,732	(2,647,020)	2,688,634	
Year 2 NOI x 35%	222,009,901	14,514,825	220,347,988	17,321,626	(1,661,913)	2,806,801	
Year 3 NOI x 40%	251,826,272	19,796,144	277,086,180	21,860,300	25,259,908	2,064,156	
NOI to Capitalize	\$635,061,694	\$41,990,067	\$656,012,669	\$49,549,658	\$20,950,975	\$7,559,591	
Capitalization Rate	7.20%	7.37%	6.40%	7.07%	-0.80%	-0.30%	
Income Indicator of Value	B	\$8,820,301,306	\$569,743,107	\$10,250,197,953	\$700,843,819	\$1,429,896,648	\$131,100,712
Apply Weightings							
Cost Indicator	17.5% / 82.5%	17.5% / 82.5%	0.0% / 100.0%	7.0% / 93.0%			
Income Indicator	\$2,073,988,300	\$160,701,600	\$0	\$69,853,800	-\$2,073,988,300	-\$90,847,800	
Total System Unit Value	C	\$9,350,736,900	\$630,739,700	\$10,250,198,000	\$721,638,600	\$899,461,100	\$90,898,900
Allocation of System Value							
MN Plant in Service	17,338,963,372	1,443,743,214	18,193,498,972	1,540,344,028	854,535,600	96,600,814	
System Plant in Service	19,432,047,177	1,583,040,122	20,507,523,009	1,688,279,994	1,075,475,832	105,239,872	
Plant Ratio x 90%-Elec / x 75%-Gas	80.31%	68.40%	79.85%	68.43%	-0.46%	0.03%	
MN Gross Revenue	3,972,407,981	515,183,890	3,946,918,373	506,370,653	(25,489,608)	(8,813,237)	
System Gross Revenue	4,495,459,910	585,546,154	4,495,412,265	577,083,424	(47,645)	(8,462,730)	
Revenue Ratio x 10%-Elec / x 25%-Gas	8.84%	22.00%	8.78%	21.94%	-0.06%	-0.06%	
MN Allocated Value Percentage	89.15%	90.40%	88.63%	90.37%	-0.52%	-0.03%	
MN Allocated Value	D	\$8,336,181,900	\$570,188,700	\$9,084,750,500	\$652,144,800	\$748,568,600	\$81,956,100
Net Depreciable Excludables	2,485,708,281	79,483,774	2,619,042,842	88,516,284	133,334,561	9,032,510	
Non-Depreciable Excludables	678,802,247	13,911,169	989,825,685	10,641,017	311,023,438	(3,270,152)	
Subtotal	3,164,510,528	93,394,943	3,608,868,527	99,157,301	444,357,999	5,762,358	
Ratio - System Unit Value / Cost Indicator	78.90%	68.69%	82.46%	72.31%	3.56%	3.62%	
Deductions to MN Allocated Value	E	\$2,496,798,800	\$64,153,000	\$2,975,873,000	\$71,700,600	\$479,074,200	\$7,547,600
Sliding Scale Market Value Exclusion	198,328,370	0	200,000,000	0	1,671,630	0	
Deduct/Excl to MN Allocated Value	\$2,695,127,170	\$64,153,000	\$3,175,873,000	\$71,700,600	\$480,745,830	\$7,547,600	
Apportionable Market Value	\$5,641,054,730	\$506,035,700	\$5,900,000,000	\$580,000,000	\$258,945,270	\$73,964,300	
Effective Tax Rate	3.02%	3.02%	3.02%	3.02%	0.00%	0.00%	
Forecasted Property Tax - Elec & Gas	\$170,359,853	\$15,282,278	\$178,180,000	\$17,516,000	\$7,820,147	\$2,233,722	
Rounded	\$170,340,000	\$15,300,000	\$178,200,000	\$17,520,000	\$7,860,000	\$2,220,000	
Locally Assessed	10,920,000	960,000	10,860,000	1,080,000	(60,000)	120,000	
Wind Production	2,160,000		3,600,000		1,440,000		
Total Property Tax	\$183,420,000	\$16,260,000	\$192,660,000	\$18,600,000	\$9,240,000	\$2,340,000	
Total MN Property Tax		199,680,000		211,260,000		11,580,000	
North Dakota & South Dakota Property Tax		\$11,262,000		\$11,598,000		\$336,000	
Total NSPM Forecasted Property Tax		\$210,942,000		\$222,858,000		\$11,916,000	

Support for the Calculation of Minnesota Apportionable Market Value

- A** Minn. R. 8100.0300, subp. 3 describes in part the cost indicator of value as:
The cost factor to be considered in the utility valuation formula is the original cost less depreciation of the system plant, plus the cost of improvements to the system plant, plus the original cost of all types of construction work in progress that are installed by the assessment date, plus the cost of property held for future use, plus the cost of contributions in aid of construction.
- B** Minn. R. 8100.0300, subp. 4, explains the process for calculating the income indicator of value:
The income indicator of value is estimated by weighting the capitalized net operating earnings of the utility company for the most recent three years as follows: most recent year, 40 percent; previous year, 35 percent; and final year, 25 percent. Utilities may request the removal of nonrecurring items of income or expense. The commissioner must determine if removal of the item is appropriate. The net income is capitalized by applying a capitalization rate that is computed by using the band of investment method. This method considers:
- A. the capital structure of utilities;*
 - B. the cost of debt or interest rate;*
 - C. the yield on preferred stock of utilities;*
 - D. the yield on common stock of utilities; and*
 - E. the risk-free rate, relative risk, and risk premiums for public utility companies.*
- Capitalization rates are computed each year for electric companies, gas distribution companies, natural gas transmission systems, and fluid pipeline companies. The rates are recalculated each year using the method described in this subpart.*
- Minn. R. 8100.0100, subp. 9 defines net operating earnings as follows:
Net operating earnings" means earnings from the system plant of the utility after the deduction of operating expenses, depreciation, and taxes, but before any deduction for interest.
- Minn. R. 8100.0100, subp. 5, defines capitalization rate as:
"Capitalization rate" means the relationship of income to capital investment or value, expressed as a percentage.
- C** Minn. R. 8100.0300, subp. 5, explains the process for calculating the system unit value:
The unit value of the utility company is equal to the total of the weighted indicators of value. The total weighting must equal 100 percent. The default weightings of the indicators are: market indicator, 0 percent; cost indicator, 50 percent; income indicator, 50 percent.
- D** Minn. R. 8100.0400, subp. 2, explains the process for calculating the allocation of electric value attributable to Minnesota:
The original cost of the utility property located in Minnesota divided by the total original cost of the property in all states of operation is weighted at 90 percent. Gross revenue derived from operations in Minnesota divided by gross operations revenue from all states is weighted at ten percent.
- Minn. R. 8100.0400, subp. 3, explains the process for calculating the allocation of gas value attributable to Minnesota:
The allocation of value of gas distribution companies must be made considering the same factors as are used to determine the allocation of value of electric companies. The weight given to the original cost factor is 75 percent, and gross revenue is weighted 25 percent.
- E** Minn. R. 8100.0500, subp. 1, explains the process for adjusting the valuation performed under Rule 8100.0300:
After the Minnesota portion of the unit value of the utility company, except for electric cooperatives, is determined, any property which is non-formula-assessed or which is exempt from ad valorem tax, is deducted from the Minnesota portion of the unit value. Only that qualifying property located within the state of Minnesota may be excluded.
- Minn. R. 8100.0500, subp. 2, describes the types of property excluded from the valuation performed under Rule 8100.0300:
The following properties are valued by the local or county assessor and, therefore, the formula provided herein for the valuation of utility property is not applicable to such property:
- A. land;*
 - B. nonoperating property; and*
 - C. rights-of-way*
- Minn. R. 8100.0500, subp. 3, further explains the calculation of deduction to Minnesota value:
The Minnesota portion of the unit value is reduced by the value included in the unit value of the company for land, rights-of-way, nonoperating property, and exempt property. This amount is calculated by determining the ratio of the unit value computed in part 8100.0300, subpart 5, to the cost less depreciation allowed in part 8100.0300, subpart 3. This ratio is multiplied by the cost less depreciation of the property to be deducted.

NSPM Total Company Property Taxes

	2020 Forecast		2021 Forecast		2020 vs. 2021		
	Electric	Gas	Electric	Gas	Electric	Gas	
System Unit Value Calculation							
Plant In Service, 12/31	19,584,932,247	1,671,090,845	21,507,810,737	1,779,076,734	1,922,878,490	107,985,889	
CWIP, 12/31	922,590,762	17,189,149	922,590,762	17,189,149	0	0	
Depreciation, 12/31	(8,076,755,155)	(690,368,701)	(8,675,802,328)	(723,427,083)	(599,047,173)	(33,058,382)	
Cost Indicator of Value	A	\$12,430,767,854	\$997,911,293	\$13,754,599,171	\$1,072,838,800	\$1,323,831,317	\$74,927,507
Income Indicator							
Year 1 NOI x 25%	158,578,501	10,367,732	157,391,420	12,372,590	(1,187,081)	2,004,858	
Year 2 NOI x 35%	220,347,988	17,321,626	242,450,408	19,127,763	22,102,420	1,806,137	
Year 3 NOI x 40%	277,086,180	21,860,300	296,867,200	23,378,000	19,781,020	1,517,700	
NOI to Capitalize	\$656,012,669	\$49,549,658	\$696,709,028	\$54,878,353	\$40,696,359	\$5,328,695	
Capitalization Rate	6.40%	7.07%	6.40%	7.07%	0.00%	0.00%	
Income Indicator of Value	B	\$10,250,197,953	\$700,843,819	\$10,886,078,563	\$776,214,328	\$635,880,609	\$75,370,509
Apply Weightings							
Cost Indicator	0.0% / 100.0%	7.0% / 93.0%	0.0% / 100.0%	7.0% / 93.0%	\$0	\$5,244,900	
Income Indicator	\$0	\$69,853,800	\$0	\$75,098,700	\$635,880,600	\$70,094,500	
Total System Unit Value	C	\$10,250,198,000	\$721,638,600	\$10,886,078,600	\$796,978,000	\$635,880,600	\$75,339,400
Allocation of System Value							
MN Plant in Service	18,193,498,972	1,540,344,028	19,735,973,091	1,639,744,472	1,542,474,119	99,400,444	
System Plant in Service	20,507,523,009	1,688,279,994	22,430,401,499	1,796,265,883	1,922,878,490	107,985,889	
Plant Ratio x 90%-Elec / x 75%-Gas	79.85%	68.43%	79.19%	68.47%	-0.66%	0.04%	
MN Gross Revenue	3,946,918,373	506,370,653	3,946,918,373	506,370,653	0	0	
System Gross Revenue	4,495,412,265	577,083,424	4,495,412,265	577,083,424	0	0	
Revenue Ratio x 10%-Elec / x 25%-Gas	8.78%	21.94%	8.78%	21.94%	0.00%	0.00%	
MN Allocated Value Percentage	88.63%	90.37%	87.97%	90.41%	-0.66%	0.04%	
MN Allocated Value	D	\$9,084,750,500	\$652,144,800	\$9,576,483,300	\$720,547,800	\$491,732,800	\$68,403,000
Net Depreciable Excludables	2,619,042,842	88,516,284	3,227,360,540	90,160,369	608,317,698	1,644,085	
Non-Depreciable Excludables	989,825,685	10,641,017	697,067,403	9,577,695	(292,758,282)	(1,063,322)	
Subtotal	3,608,868,527	99,157,301	3,924,427,943	99,738,064	315,559,416	580,763	
Ratio - System Unit Value / Cost Indicator	82.46%	72.31%	79.15%	74.29%	-3.31%	1.98%	
Deductions to MN Allocated Value	E	\$2,975,873,000	\$71,700,600	\$3,106,184,700	\$74,095,400	\$130,311,700	\$2,394,800
Sliding Scale Market Value Exclusion	200,000,000	0	200,000,000	0	0	0	
Deduct/Excl to MN Allocated Value	\$3,175,873,000	\$71,700,600	\$3,306,184,700	\$74,095,400	\$130,311,700	\$2,394,800	
Apportionable Market Value	\$5,900,000,000	\$580,000,000	\$6,270,298,600	\$646,452,400	\$370,298,600	\$66,452,400	
Effective Tax Rate	3.02%	3.02%	3.02%	3.02%	0.00%	0.00%	
Forecasted Property Tax - Elec & Gas	\$178,180,000	\$17,516,000	\$189,363,018	\$19,522,862	\$11,183,018	\$2,006,862	
Rounded	\$178,200,000	\$17,520,000	\$189,360,000	\$19,500,000	\$11,160,000	\$1,980,000	
Locally Assessed	10,860,000	1,080,000	10,800,000	1,140,000	(60,000)	60,000	
Wind Production	3,600,000		5,880,000		2,280,000		
Total Property Tax	\$192,660,000	\$18,600,000	\$206,040,000	\$20,640,000	\$13,380,000	\$2,040,000	
Total MN Property Tax		211,260,000		226,680,000		15,420,000	
North Dakota & South Dakota Property Tax		\$11,598,000		\$12,006,000		\$408,000	
Total NSPM Forecasted Property Tax		\$222,858,000		\$238,686,000		\$15,828,000	

Support for the Calculation of Minnesota Apportionable Market Value

- A** Minn. R. 8100.0300, subp. 3 describes in part the cost indicator of value as:
The cost factor to be considered in the utility valuation formula is the original cost less depreciation of the system plant, plus the cost of improvements to the system plant, plus the original cost of all types of construction work in progress that are installed by the assessment date, plus the cost of property held for future use, plus the cost of contributions in aid of construction.
- B** Minn. R. 8100.0300, subp. 4, explains the process for calculating the income indicator of value:
The income indicator of value is estimated by weighting the capitalized net operating earnings of the utility company for the most recent three years as follows: most recent year, 40 percent; previous year, 35 percent; and final year, 25 percent. Utilities may request the removal of nonrecurring items of income or expense. The commissioner must determine if removal of the item is appropriate. The net income is capitalized by applying a capitalization rate that is computed by using the band of investment method. This method considers:
- A. the capital structure of utilities;*
 - B. the cost of debt or interest rate;*
 - C. the yield on preferred stock of utilities;*
 - D. the yield on common stock of utilities; and*
 - E. the risk-free rate, relative risk, and risk premiums for public utility companies.*
- Capitalization rates are computed each year for electric companies, gas distribution companies, natural gas transmission systems, and fluid pipeline companies. The rates are recalculated each year using the method described in this subpart.*
- Minn. R. 8100.0100, subp. 9 defines net operating earnings as follows:
Net operating earnings" means earnings from the system plant of the utility after the deduction of operating expenses, depreciation, and taxes, but before any deduction for interest.
- Minn. R. 8100.0100, subp. 5, defines capitalization rate as:
"Capitalization rate" means the relationship of income to capital investment or value, expressed as a percentage.
- C** Minn. R. 8100.0300, subp. 5, explains the process for calculating the system unit value:
The unit value of the utility company is equal to the total of the weighted indicators of value. The total weighting must equal 100 percent. The default weightings of the indicators are: market indicator, 0 percent; cost indicator, 50 percent; income indicator, 50 percent.
- D** Minn. R. 8100.0400, subp. 2, explains the process for calculating the allocation of electric value attributable to Minnesota:
The original cost of the utility property located in Minnesota divided by the total original cost of the property in all states of operation is weighted at 90 percent. Gross revenue derived from operations in Minnesota divided by gross operations revenue from all states is weighted at ten percent.
- Minn. R. 8100.0400, subp. 3, explains the process for calculating the allocation of gas value attributable to Minnesota:
The allocation of value of gas distribution companies must be made considering the same factors as are used to determine the allocation of value of electric companies. The weight given to the original cost factor is 75 percent, and gross revenue is weighted 25 percent.
- E** Minn. R. 8100.0500, subp. 1, explains the process for adjusting the valuation performed under Rule 8100.0300:
After the Minnesota portion of the unit value of the utility company, except for electric cooperatives, is determined, any property which is non-formula-assessed or which is exempt from ad valorem tax, is deducted from the Minnesota portion of the unit value. Only that qualifying property located within the state of Minnesota may be excluded.
- Minn. R. 8100.0500, subp. 2, describes the types of property excluded from the valuation performed under Rule 8100.0300:
The following properties are valued by the local or county assessor and, therefore, the formula provided herein for the valuation of utility property is not applicable to such property:
- A. land;*
 - B. nonoperating property; and*
 - C. rights-of-way*
- Minn. R. 8100.0500, subp. 3, further explains the calculation of deduction to Minnesota value:
The Minnesota portion of the unit value is reduced by the value included in the unit value of the company for land, rights-of-way, nonoperating property, and exempt property. This amount is calculated by determining the ratio of the unit value computed in part 8100.0300, subpart 5, to the cost less depreciation allowed in part 8100.0300, subpart 3. This ratio is multiplied by the cost less depreciation of the property to be deducted.

NSPM Total Company Property Taxes

	2021 Forecast		2022 Forecast		2021 vs. 2022		
	Electric	Gas	Electric	Gas	Electric	Gas	
System Unit Value Calculation							
Plant In Service, 12/31	21,507,810,737	1,779,076,734	22,296,266,933	1,925,389,017	788,456,196	146,312,283	
CWIP, 12/31	922,590,762	17,189,149	1,361,712,780	56,119,431	439,122,018	38,930,282	
Depreciation, 12/31	(8,675,802,328)	(723,427,083)	(9,432,096,900)	(763,178,994)	(756,294,572)	(39,751,911)	
Cost Indicator of Value	A	\$13,754,599,171	\$1,072,838,800	\$14,225,882,813	\$1,218,329,454	\$471,283,642	\$145,490,654
Income Indicator							
Year 1 NOI x 25%	157,391,420	12,372,590	173,178,863	13,662,688	15,787,443	1,290,098	
Year 2 NOI x 35%	242,450,408	19,127,763	259,758,800	20,455,750	17,308,392	1,327,987	
Year 3 NOI x 40%	296,867,200	23,378,000	305,301,600	24,042,000	8,434,400	664,000	
NOI to Capitalize	\$696,709,028	\$54,878,353	\$738,239,263	\$58,160,438	\$41,530,235	\$3,282,085	
Capitalization Rate	6.40%	7.07%	6.40%	7.07%	0.00%	0.00%	
Income Indicator of Value	B	\$10,886,078,563	\$776,214,328	\$11,534,988,484	\$822,637,030	\$648,909,922	\$46,422,702
Apply Weightings							
Cost Indicator	0.0% / 100.0%	7.0% / 93.0%	0.0% / 100.0%	7.0% / 93.0%	\$0	\$10,184,400	
Income Indicator	\$0	\$75,098,700	\$0	\$85,283,100	\$648,909,900	\$43,173,100	
Total System Unit Value	C	\$10,886,078,600	\$796,978,000	\$11,534,988,500	\$850,335,500	\$648,909,900	\$53,357,500
Allocation of System Value							
MN Plant in Service	19,735,973,091	1,639,744,472	20,623,689,579	1,797,661,264	887,716,488	157,916,792	
System Plant in Service	22,430,401,499	1,796,265,883	23,657,979,713	1,981,508,448	1,227,578,214	185,242,565	
Plant Ratio x 90%-Elec / x 75%-Gas	79.19%	68.47%	78.45%	68.04%	-0.74%	-0.43%	
MN Gross Revenue	3,946,918,373	506,370,653	3,946,918,373	506,370,653	0	0	
System Gross Revenue	4,495,412,265	577,083,424	4,495,412,265	577,083,424	0	0	
Revenue Ratio x 10%-Elec / x 25%-Gas	8.78%	21.94%	8.78%	21.94%	0.00%	0.00%	
MN Allocated Value Percentage	87.97%	90.41%	87.23%	89.98%	-0.74%	-0.43%	
MN Allocated Value	D	\$9,576,483,300	\$720,547,800	\$10,061,970,500	\$765,131,900	\$485,487,200	\$44,584,100
Net Depreciable Excludables	3,227,360,540	90,160,369	3,465,165,933	101,774,395	237,805,393	11,614,026	
Non-Depreciable Excludables	697,067,403	9,577,695	507,018,063	14,860,047	(190,049,340)	5,282,352	
Subtotal	3,924,427,943	99,738,064	3,972,183,996	116,634,442	47,756,053	16,896,378	
Ratio - System Unit Value / Cost Indicator	79.15%	74.29%	81.08%	69.80%	1.93%	-4.49%	
Deductions to MN Allocated Value	E	\$3,106,184,700	\$74,095,400	\$3,220,646,800	\$81,410,800	\$114,462,100	\$7,315,400
Sliding Scale Market Value Exclusion	200,000,000	0	200,000,000	0	0	0	
Deduct/Excl to MN Allocated Value	\$3,306,184,700	\$74,095,400	\$3,420,646,800	\$81,410,800	\$114,462,100	\$7,315,400	
Apportionable Market Value	\$6,270,298,600	\$646,452,400	\$6,641,323,700	\$683,721,100	\$371,025,100	\$37,268,700	
Effective Tax Rate	3.02%	3.02%	3.02%	3.02%	0.00%	0.00%	
Forecasted Property Tax - Elec & Gas	\$189,363,018	\$19,522,862	\$200,567,976	\$20,648,377	\$11,204,958	\$1,125,515	
Rounded	\$189,360,000	\$19,500,000	\$200,580,000	\$20,640,000	\$11,220,000	\$1,140,000	
Locally Assessed	10,800,000	1,140,000	10,800,000	1,140,000	0	0	
Wind Production	5,880,000		5,880,000		0		
Total Property Tax	\$206,040,000	\$20,640,000	\$217,260,000	\$21,780,000	\$11,220,000	\$1,140,000	
Total MN Property Tax		226,680,000		239,040,000		12,360,000	
North Dakota & South Dakota Property Tax		\$12,006,000		\$13,446,000		\$1,440,000	
Total NSPM Forecasted Property Tax		\$238,686,000		\$252,486,000		\$13,800,000	

Support for the Calculation of Minnesota Apportionable Market Value

- A** Minn. R. 8100.0300, subp. 3 describes in part the cost indicator of value as:
The cost factor to be considered in the utility valuation formula is the original cost less depreciation of the system plant, plus the cost of improvements to the system plant, plus the original cost of all types of construction work in progress that are installed by the assessment date, plus the cost of property held for future use, plus the cost of contributions in aid of construction.
- B** Minn. R. 8100.0300, subp. 4, explains the process for calculating the income indicator of value:
The income indicator of value is estimated by weighting the capitalized net operating earnings of the utility company for the most recent three years as follows: most recent year, 40 percent; previous year, 35 percent; and final year, 25 percent. Utilities may request the removal of nonrecurring items of income or expense. The commissioner must determine if removal of the item is appropriate. The net income is capitalized by applying a capitalization rate that is computed by using the band of investment method. This method considers:
- A. the capital structure of utilities;*
 - B. the cost of debt or interest rate;*
 - C. the yield on preferred stock of utilities;*
 - D. the yield on common stock of utilities; and*
 - E. the risk-free rate, relative risk, and risk premiums for public utility companies.*
- Capitalization rates are computed each year for electric companies, gas distribution companies, natural gas transmission systems, and fluid pipeline companies. The rates are recalculated each year using the method described in this subpart.*
- Minn. R. 8100.0100, subp. 9 defines net operating earnings as follows:
Net operating earnings" means earnings from the system plant of the utility after the deduction of operating expenses, depreciation, and taxes, but before any deduction for interest.
- Minn. R. 8100.0100, subp. 5, defines capitalization rate as:
"Capitalization rate" means the relationship of income to capital investment or value, expressed as a percentage.
- C** Minn. R. 8100.0300, subp. 5, explains the process for calculating the system unit value:
The unit value of the utility company is equal to the total of the weighted indicators of value. The total weighting must equal 100 percent. The default weightings of the indicators are: market indicator, 0 percent; cost indicator, 50 percent; income indicator, 50 percent.
- D** Minn. R. 8100.0400, subp. 2, explains the process for calculating the allocation of electric value attributable to Minnesota:
The original cost of the utility property located in Minnesota divided by the total original cost of the property in all states of operation is weighted at 90 percent. Gross revenue derived from operations in Minnesota divided by gross operations revenue from all states is weighted at ten percent.
- Minn. R. 8100.0400, subp. 3, explains the process for calculating the allocation of gas value attributable to Minnesota:
The allocation of value of gas distribution companies must be made considering the same factors as are used to determine the allocation of value of electric companies. The weight given to the original cost factor is 75 percent, and gross revenue is weighted 25 percent.
- E** Minn. R. 8100.0500, subp. 1, explains the process for adjusting the valuation performed under Rule 8100.0300:
After the Minnesota portion of the unit value of the utility company, except for electric cooperatives, is determined, any property which is non-formula-assessed or which is exempt from ad valorem tax, is deducted from the Minnesota portion of the unit value. Only that qualifying property located within the state of Minnesota may be excluded.
- Minn. R. 8100.0500, subp. 2, describes the types of property excluded from the valuation performed under Rule 8100.0300:
The following properties are valued by the local or county assessor and, therefore, the formula provided herein for the valuation of utility property is not applicable to such property:
- A. land;*
 - B. nonoperating property; and*
 - C. rights-of-way*
- Minn. R. 8100.0500, subp. 3, further explains the calculation of deduction to Minnesota value:
The Minnesota portion of the unit value is reduced by the value included in the unit value of the company for land, rights-of-way, nonoperating property, and exempt property. This amount is calculated by determining the ratio of the unit value computed in part 8100.0300, subpart 5, to the cost less depreciation allowed in part 8100.0300, subpart 3. This ratio is multiplied by the cost less depreciation of the property to be deducted.

NSPM Total Company Property Taxes

	2022 Forecast		2023 Forecast		2022 vs. 2023		
	Electric	Gas	Electric	Gas	Electric	Gas	
System Unit Value Calculation							
Plant In Service, 12/31	22,296,266,933	1,925,389,017	22,759,846,705	2,069,908,684	463,579,772	144,519,667	
CWIP, 12/31	1,361,712,780	56,119,431	1,927,478,756	74,485,241	565,765,976	18,365,810	
Depreciation, 12/31	(9,432,096,900)	(763,178,994)	(10,004,449,901)	(808,568,114)	(572,353,001)	(45,389,120)	
Cost Indicator of Value	A	\$14,225,882,813	\$1,218,329,454	\$14,682,875,560	\$1,335,825,811	\$456,992,747	\$117,496,357
Income Indicator							
Year 1 NOI x 25%	173,178,863	13,662,688	185,542,000	14,611,250	12,363,137	948,562	
Year 2 NOI x 35%	259,758,800	20,455,750	267,138,900	21,036,750	7,380,100	581,000	
Year 3 NOI x 40%	305,301,600	24,042,000	324,947,600	25,589,200	19,646,000	1,547,200	
NOI to Capitalize	\$738,239,263	\$58,160,438	\$777,628,500	\$61,237,200	\$39,389,237	\$3,076,762	
Capitalization Rate	6.40%	7.07%	6.40%	7.07%	0.00%	0.00%	
Income Indicator of Value	B	\$11,534,988,484	\$822,637,030	\$12,150,445,313	\$866,155,587	\$615,456,828	\$43,518,557
Apply Weightings							
Cost Indicator	0.0% / 100.0%	7.0% / 93.0%	0.0% / 100.0%	7.0% / 93.0%	\$0	\$8,224,700	
Income Indicator	\$11,534,988,500	\$765,052,400	\$12,150,445,300	\$805,524,700	\$615,456,800	\$40,472,300	
Total System Unit Value	C	\$11,534,988,500	\$850,335,500	\$12,150,445,300	\$899,032,500	\$615,456,800	\$48,697,000
Allocation of System Value							
MN Plant in Service	20,623,689,579	1,797,661,264	21,529,804,132	1,928,927,985	906,114,553	131,266,721	
System Plant in Service	23,657,979,713	1,981,508,448	24,687,325,461	2,144,393,925	1,029,345,748	162,885,477	
Plant Ratio x 90%-Elec / x 75%-Gas	78.45%	68.04%	78.49%	67.46%	0.04%	-0.58%	
MN Gross Revenue	3,946,918,373	506,370,653	3,946,918,373	506,370,653	0	0	
System Gross Revenue	4,495,412,265	577,083,424	4,495,412,265	577,083,424	0	0	
Revenue Ratio x 10%-Elec / x 25%-Gas	8.78%	21.94%	8.78%	21.94%	0.00%	0.00%	
MN Allocated Value Percentage	87.23%	89.98%	87.27%	89.40%	0.04%	-0.58%	
MN Allocated Value	D	\$10,061,970,500	\$765,131,900	\$10,603,693,600	\$803,735,100	\$541,723,100	\$38,603,200
Net Depreciable Excludables	3,465,165,933	101,774,395	3,480,707,916	112,429,072	15,541,983	10,654,677	
Non-Depreciable Excludables	507,018,063	14,860,047	556,690,636	10,138,854	49,672,573	(4,721,193)	
Subtotal	3,972,183,996	116,634,442	4,037,398,552	122,567,926	65,214,556	5,933,484	
Ratio - System Unit Value / Cost Indicator	81.08%	69.80%	82.75%	67.30%	1.67%	-2.50%	
Deductions to MN Allocated Value	E	\$3,220,646,800	\$81,410,800	\$3,340,947,300	\$82,488,200	\$120,300,500	\$1,077,400
Sliding Scale Market Value Exclusion	200,000,000	0	200,000,000	0	0	0	
Deduct/Excl to MN Allocated Value	\$3,420,646,800	\$81,410,800	\$3,540,947,300	\$82,488,200	\$120,300,500	\$1,077,400	
Apportionable Market Value	\$6,641,323,700	\$683,721,100	\$7,062,746,300	\$721,246,900	\$421,422,600	\$37,525,800	
Effective Tax Rate	3.02%	3.02%	3.02%	3.02%	0.00%	0.00%	
Forecasted Property Tax - Elec & Gas	\$200,567,976	\$20,648,377	\$213,294,938	\$21,781,656	\$12,726,963	\$1,133,279	
Rounded	\$200,580,000	\$20,640,000	\$213,300,000	\$21,780,000	\$12,720,000	\$1,140,000	
Locally Assessed	10,800,000	1,140,000	10,800,000	1,080,000	0	(60,000)	
Wind Production	5,880,000		5,880,000		0		
Total Property Tax	\$217,260,000	\$21,780,000	\$229,980,000	\$22,860,000	\$12,720,000	\$1,080,000	
Total MN Property Tax		239,040,000		252,840,000		13,800,000	
North Dakota & South Dakota Property Tax		\$13,446,000		\$14,766,000		\$1,320,000	
Total NSPM Forecasted Property Tax		\$252,486,000		\$267,606,000		\$15,120,000	

Support for the Calculation of Minnesota Apportionable Market Value

- A** Minn. R. 8100.0300, subp. 3 describes in part the cost indicator of value as:
The cost factor to be considered in the utility valuation formula is the original cost less depreciation of the system plant, plus the cost of improvements to the system plant, plus the original cost of all types of construction work in progress that are installed by the assessment date, plus the cost of property held for future use, plus the cost of contributions in aid of construction.
- B** Minn. R. 8100.0300, subp. 4, explains the process for calculating the income indicator of value:
The income indicator of value is estimated by weighting the capitalized net operating earnings of the utility company for the most recent three years as follows: most recent year, 40 percent; previous year, 35 percent; and final year, 25 percent. Utilities may request the removal of nonrecurring items of income or expense. The commissioner must determine if removal of the item is appropriate. The net income is capitalized by applying a capitalization rate that is computed by using the band of investment method. This method considers:
- A. the capital structure of utilities;*
 - B. the cost of debt or interest rate;*
 - C. the yield on preferred stock of utilities;*
 - D. the yield on common stock of utilities; and*
 - E. the risk-free rate, relative risk, and risk premiums for public utility companies.*
- Capitalization rates are computed each year for electric companies, gas distribution companies, natural gas transmission systems, and fluid pipeline companies. The rates are recalculated each year using the method described in this subpart.*
- Minn. R. 8100.0100, subp. 9 defines net operating earnings as follows:
Net operating earnings" means earnings from the system plant of the utility after the deduction of operating expenses, depreciation, and taxes, but before any deduction for interest.
- Minn. R. 8100.0100, subp. 5, defines capitalization rate as:
"Capitalization rate" means the relationship of income to capital investment or value, expressed as a percentage.
- C** Minn. R. 8100.0300, subp. 5, explains the process for calculating the system unit value:
The unit value of the utility company is equal to the total of the weighted indicators of value. The total weighting must equal 100 percent. The default weightings of the indicators are: market indicator, 0 percent; cost indicator, 50 percent; income indicator, 50 percent.
- D** Minn. R. 8100.0400, subp. 2, explains the process for calculating the allocation of electric value attributable to Minnesota:
The original cost of the utility property located in Minnesota divided by the total original cost of the property in all states of operation is weighted at 90 percent. Gross revenue derived from operations in Minnesota divided by gross operations revenue from all states is weighted at ten percent.
- Minn. R. 8100.0400, subp. 3, explains the process for calculating the allocation of gas value attributable to Minnesota:
The allocation of value of gas distribution companies must be made considering the same factors as are used to determine the allocation of value of electric companies. The weight given to the original cost factor is 75 percent, and gross revenue is weighted 25 percent.
- E** Minn. R. 8100.0500, subp. 1, explains the process for adjusting the valuation performed under Rule 8100.0300:
After the Minnesota portion of the unit value of the utility company, except for electric cooperatives, is determined, any property which is non-formula-assessed or which is exempt from ad valorem tax, is deducted from the Minnesota portion of the unit value. Only that qualifying property located within the state of Minnesota may be excluded.
- Minn. R. 8100.0500, subp. 2, describes the types of property excluded from the valuation performed under Rule 8100.0300:
The following properties are valued by the local or county assessor and, therefore, the formula provided herein for the valuation of utility property is not applicable to such property:
- A. land;*
 - B. nonoperating property; and*
 - C. rights-of-way*
- Minn. R. 8100.0500, subp. 3, further explains the calculation of deduction to Minnesota value:
The Minnesota portion of the unit value is reduced by the value included in the unit value of the company for land, rights-of-way, nonoperating property, and exempt property. This amount is calculated by determining the ratio of the unit value computed in part 8100.0300, subpart 5, to the cost less depreciation allowed in part 8100.0300, subpart 3. This ratio is multiplied by the cost less depreciation of the property to be deducted.