Direct Testimony and Schedules Martha E. Hoschmiller

Before the North Dakota Public Service Commission State of North Dakota

In the Matter of the Application of Northern States Power Company For Authority to Increase Rates for Natural Gas Service in North Dakota

> Case No. PU-23-____ Exhibit___(MEH-1)

> > Rate Design

December 29, 2023

Table of Contents

I.	Introduction		
II.	Rate Design Goals		
III.	Reven	nue Apportionment	3
	А.	Test Year Revenues	3
	В.	NSP's Natural Gas Services	3
	C.	Revenue Requirement Apportionment	5
	D.	Overall Class Impacts	8
IV.	Rate Design		9
	А.	Revenue Recovery	10
	В.	Detailed Rate Design and Rate Impacts	12
		1. Residential Service	12
		2. C&I Firm Service	16
		3. Interruptible Sales Service	16
		4. Firm and Interruptible Transportation Service	19
V.	Othe	r Revenues	20
VI.	Tarif	f Changes	20
VII.	Conclusion		21

Schedules

Summary of Qualifications	Schedule 1
Proposed Revenue Apportionment	Schedule 2
Detail of Customers, Sales, and Present and Proposed Revenues	Schedule 3
Comparison of Proposed Rate Design and CCOSS Results	Schedule 4
Summary of Present and Proposed Rates	Schedule 5
Comparison of Monthly Bills Using Present and Proposed Rates	Schedule 6
Cost of Gas Adjustment for Present and Proposed Rates	Schedule 7

1		I. INTRODUCTION
2		
3	Q.	PLEASE STATE YOUR NAME AND TITLE.
4	А.	My name is Martha E. Hoschmiller. I am a Principal Pricing Analyst.
5		
6	Q.	FOR WHOM ARE YOU TESTIFYING?
7	А.	I am testifying on behalf of Northern States Power Company, a Minnesota
8		corporation (NSP, Xcel Energy, or the Company). NSP is a wholly owned
9		subsidiary of Xcel Energy Inc.
10		
11	Q.	PLEASE SUMMARIZE YOUR QUALIFICATIONS AND EXPERIENCE.
12	А.	I have 18 years of regulatory experience with the Company, including 11 years
13		as a pricing analyst. I have worked on rate design, fuel clause and rider cost
14		recovery, cost allocations, and other pricing functions for the utility operating
15		subsidiaries of Xcel Energy Inc. I have a Bachelor of Arts in Mathematics from
16		Grinnell College. A detailed statement of my qualifications and experience is
17		provided in Exhibit(MEH-1), Schedule 1.
18		
19	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?
20	А.	The purpose of my testimony is to present the Company's proposed class
21		revenue apportionment and proposed class rate design.
22		
23	Q.	PLEASE SUMMARIZE NSP'S RATE DESIGN PROPOSAL.
24	А.	The Company proposes to increase the monthly Residential Delivery Services
25		Charge by \$2.75, from \$22.25 to \$25.00, and add a volumetric Distribution
26		Charge of \$0.06155 per therm. The Company also proposes to increase the
27		Commercial and Industrial (C&I) Firm Service volumetric Distribution Charge

1		for C&I Firm Service customers from \$0.13581 to \$0.18665 per therm. Finally,
2		the Company proposes to increase the Small Interruptible Service Customer
3		Charge from \$100.00 to \$125.00, and to increase the Distribution Charge for
4		Small Interruptible Service from \$0.11065 to \$0.14549 per therm and for Large
5		Interruptible Service from \$0.07636 to \$0.11330 per therm. This rate design will
6		provide the Company a reasonable opportunity to earn its authorized rate of
7		return while ensuring rates remain reasonable.
8		
9		II. RATE DESIGN GOALS
10		
11	Q.	WHAT ARE THE COMPANY'S PRIMARY PRICING OBJECTIVES IN THE DESIGN OF
12		NATURAL GAS RATES?
13	А.	The primary natural gas rate design objectives are:
14		1) To collect total revenues sufficient to recover the Company's test year
15		cost of service, including a reasonable return on investment;
16		2) To achieve fair and equitable rate levels that reflect the cost of providing
17		service to each customer class, as supported by the Class Cost of Service
18		Study (CCOSS);
19		3) To encourage efficient and economic energy use;
20		4) To moderate billing impacts, be understandable, and provide customer
21		choices; and
22		5) To provide value-based pricing and service conditions, where needed, to
23		allow the Company's natural gas services to be competitive with other
24		energy sources.

1 **III. REVENUE APPORTIONMENT** 2 3 WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY? Q. 4 In this section, I discuss the test year revenues, the Company's North Dakota А. 5 natural gas rate classes, the Company's class revenue apportionment proposal, 6 and the overall class impacts of the proposed revenue apportionment. 7 A. **Test Year Revenues** 8 9 WHAT ARE THE TEST YEAR REVENUES AT PRESENT AND PROPOSED RATES? Q. 10 А. The 2024 test year revenues, applying present and proposed rates for the 11 Company's North Dakota natural gas jurisdiction, are \$89.990 million and 12 \$98.453 million, respectively. The \$8.463 million difference between the two revenue levels is the base revenue deficiency described in Company witness 13 14 Benjamin C. Halama's Direct Testimony. Present rates refer to the rates 15 authorized in the Company's last natural gas rate case, Case No. PU-21-381. 16 The proposed base rates are designed to produce an increase in retail revenues 17 of \$8.446 million and other miscellaneous revenues of \$0.017 million. 18 Forecasted sales and transportation service volumes for the 2024 test year, 19 provided by Company witness John M. Goodenough, were applied to both the 20 present and proposed rates to obtain these test year revenues. Present and 21 proposed revenues are shown as base, fuel, and total revenues. 22

B. NSP's Natural Gas Services

23

- Q. WHAT GENERAL CATEGORIES OF SERVICE DOES THE COMPANY PROVIDE TO ITS
 NATURAL GAS CUSTOMERS IN NORTH DAKOTA?
- A. The Company provides sales service and transportation service. Sales servicecan be thought of as the more traditional "bundled" gas utility service offering,

in that Xcel Energy procures wholesale natural gas for these customers,
procures the interstate gas pipeline transportation, and distributes and resells
the gas to these customers. Transportation service customers acquire their own
gas supplies via an unregulated gas supplier and procure their own pipeline
transportation to our town border station(s). The Company then delivers this
third-party gas to the transportation customers' premises through the
Company's gas distribution system.

8

9 Customers, whether sales or transportation, can take either firm or interruptible 10 service. Firm service is typically not subject to curtailment and is priced to 11 include the costs of providing this reliability. Service to customers taking 12 interruptible service can be curtailed as needed to maintain system reliability and 13 is priced to reflect both the lower degree of service and the competitive 14 alternatives.

15

16 The vast majority of the Company's customers take firm, bundled sales service. 17 Customers must meet certain eligibility criteria to qualify for and receive 18 interruptible and/or transportation gas service.

19

20 Q. Please provide a summary of the Company's Services.

21 A. The Company's Services are summarized in Table 1 below:

1		Table 1
2		Company's Natural Gas Services by Class
3		Firm Sales
4		Residential
5		Commercial and Industrial
6		Interruptible Sales
7		Small Interruptible
		Large Interruptible
8		Transportation
9		Large Firm Transportation
10		Large Interruptible Transportation
11		
12		C. Revenue Requirement Apportionment
13	Q.	How was the proposed revenue requirement apportionment
14		DEVELOPED?
15	А.	The CCOSS provided by Company witness Christopher J. Barthol was the
16		starting point for the apportionment of the retail non-gas test year revenue
17		requirement among the rate classes. As noted in Company witness Barthol's
18		Direct Testimony, the CCOSS results indicate that customers under firm service
19		should receive a rate increase, and the interruptible customers should receive a
20		rate decrease.
21		
22		The goal of setting rates to equal embedded costs of service must, however, be
23		balanced with other goals, such as emphasizing value/competitive-based pricing
24		for competitive services and moderating rate increases. My goal was to move
25		toward the cost of service for each class, while moderating bill impacts for
26		customers. Using the CCOSS as a guide, I propose more moderate increases
27		among all of the rate classes than the CCOSS indicated, mitigating the impact

for Residential customers while still moving Residential class rates closer to their
 actual costs of service than their current rates are. A summary page from the
 CCOSS showing the difference between current revenues and costs is provided
 in Schedule 4.

5

6 The CCOSS suggests that the Residential class would need to generate a 24.53 7 percent increase in revenues to match the costs to serve. My proposal moderates 8 that with a 12.5 percent revenue increase for the Residential class. This increase 9 is slightly higher than the overall 9.4 percent revenue increase and moves the 10 Residential class revenue 20 percent toward the full cost to serve the Residential 11 class indicated in the CCOSS. Again, my objective is to moderate the impact to 12 Residential customers while making progress toward recovering the costs of 13 service indicated by the CCOSS. Moderating the billing impact on Residential 14 customers in this way requires revenue increases to other classes which will 15 result in revenues higher than their costs to serve. Specifically, I propose a 7.2 16 percent increase for the C&I Firm class and an 8.0 percent increase for the 17 Interruptible classes, classes which the CCOSS indicates should receive a rate 18 reduction. By moderating the Residential class increase and assigning some of 19 the increase to other classes, the Company is levelizing the overall revenue 20 requirement increases across its customer base, while still reflecting the overall 21 comparative weighting indicated by the CCOSS results.

22

Q. WHY IS IT REASONABLE TO MITIGATE THE RATE INCREASE FOR RESIDENTIALCUSTOMERS?

A. One of the objectives to consider in setting rates is to moderate the impact of
 CCOSS-based rate increases on any one customer class. A 24.53 percent rate
 increase for Residential customers would be significantly higher than the rate

increase on any other class. The revenue apportionment proposal continues to
 make progress by moving the Residential class toward its full cost of service,
 but it does so at a pace to help mitigate rate shock to our Residential customers.

4

5

6

Q. Does mitigating the rate increase for Residential customers still lead to reasonable rates for other customer classes?

7 А. Yes. To meet the Company's revenue requirement, lessening the rate increase 8 for Residential customers necessarily means a higher-than-indicated rate 9 increase for non-residential customers. However, the proposed rate increase for 10 all other classes is still materially lower than the rate increase for Residential 11 customers. The rate increases I propose for non-residential customers are also 12 lower on a percentage basis than the overall rate increase needed to meet the 13 Company's revenue requirement. This approach appropriately balances 14 competing interests, while moving the Company's rates incrementally toward the embedded cost of service. 15

16

17 Also, I reviewed the apportionment to ensure that long-standing rate 18 relationships between firm and interruptible rate classes, as well as between sales 19 service and transportation rate classes were maintained. This step helps to 20 ensure that proposed class apportionments are appropriate. For example, 21 Interruptible rates must be set at a discount relative to firm rates to reflect that 22 interruptible service customers do not contribute to Design Day costs. In 23 addition, the Large Interruptible class Distribution Charge rates must be set at 24 a discount relative to the Small Interruptible class to account for the economies 25 of scale attendant to serving Large Interruptible customers. The resulting 26 apportionment is provided in Exhibit___(MEH-1), Schedule 2.

1		Exhibit(MEH-1), Schedule 4 contains a comparison by class of the
2		proposed revenue increases to the revenue deficiencies indicated by the CCOSS.
3		
4	Q.	How are Transportation customers treated in the apportionment
5		PROCESS?
6	А.	Transportation customers are treated similarly to our sales customers, except
7		they procure their own gas supply. In order to assign Transportation customers
8		a similar non-gas responsibility, I combine the Large Interruptible
9		Transportation customers with the Large Interruptible class and Large Firm
10		Transportation customers with the C&I Firm class.
11		
12		D. Overall Class Impacts
13	Q.	PLEASE PROVIDE THE OVERALL CLASS IMPACTS OF THE COMPANY'S PROPOSED
14		REVENUE APPORTIONMENT AND COMPARED TO THE CCOSS-INDICATED
15		REVENUE APPORTIONMENT.
16	А.	Table 2 provides the overall class impacts of the Company-proposed
17		apportionment and compares it to the CCOSS-indicated apportionment.

1			Table 2		
2		Reve	nue Apportion	ment	
3		(\$000)			
4		Customer Class	Present Revenues	CCOSS Costs of Service	Proposed Revenue
5		Residential	\$35,610	\$44,344	\$40,061
6		% increase		24.53%	12.50%
7		C&I Firm	\$45,208	\$45,868	\$48,471
7		% increase		1.46%	7.22%
8		Small & Large Interruptible	\$9,173	\$8,241	\$9,904
9		% increase	\$89,990	-10.16% \$98,453	7.98% \$98,436
		Total Sales Service % increase	\$09,990	90,433 9.40%	9.39%
10		Other Revenue Increase			\$17
11		Total	\$89,990	\$98,453	\$98,453
12		% increase		9.40%	9.40%
13					
14 15 16	Q.	PLEASE EXPLAIN THE DIFFEREN SERVICE TOTAL OF \$98.453 M \$98.436 MILLION.			
17	А.	The difference between the CCOSS total and Proposed Revenue total is			
18		attributed to the \$0.017 million increase in late payment fees, and the proposed			
19		revenue has been reduced by			
20		revenues.			
21					
22		IV	. RATE DESI	GN	
23					
24	Q.	WHAT IS THE PURPOSE OF THIS	SECTION OF YO	UR TESTIMONY	?
25	А.	In this section of my testimony	y, I discuss the (Company's ove	erall objectives in
26		designing rates and present the proposed rates by class to collect the total			
27		revenue requirement.			

1	Q.	PLEASE DESCRIBE EXHIBIT	(MEH-1), SCHEDULES 2 THROUGH 6.
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2	А.	Exhibit(MEH-1), Schedule 2 summarizes the number of customers, therm
3		sales by customer class, and revenues from present and proposed rates. It also
4		displays the amount and percentage increases between present and proposed
5		revenues. The overall revenue increase of 9.4 percent includes a proposed 12.5
6		percent increase in Residential Firm Service, a 7.2 percent increase for the C&I
7		Firm Service class, and an 8.0 percent increase for Interruptible Service classes.
8		
9		Exhibit(MEH-1), Schedule 3 contains a more detailed report of the billing
10		units by customer class, the present and proposed rates, and the corresponding
11		present and proposed revenues.
12		
13		Exhibit(MEH-1), Schedule 4 provides the resulting class revenues under the
14		proposed test year revenue requirement compared to the class revenue
15		requirements as determined by the CCOSS.
16		
17		Exhibit(MEH-1), Schedule 5 summarizes the present and proposed rates.
18		
19		Exhibit(MEH-1), Schedule 6 contains a comparison of monthly bills at
20		present and proposed rates by class and at different usage levels.
21		
22		A. Revenue Recovery
23	Q.	HOW ARE XCEL ENERGY'S CURRENT SALES RATES STRUCTURED?
24	А.	The Company's current sales rates are structured as either one- or two-part
25		rates. One-part rates consist solely of a monthly fixed charge. Residential
26		customers are charged a one-part rate called the "Delivery Services Charge." All
27		non-residential customers are charged a two-part rate consisting of a monthly

- fixed "Customer Charge" and a volumetric "Distribution Charge" applied to
 their use during the billing period.
- 3

4 Q. Are there any other costs recovered from sales customers?

5 А. Yes, in addition to the fixed monthly charge and the volumetric Distribution 6 Charge, the Company recovers the cost of wholesale natural gas purchases for 7 delivery to sales customers through a Cost of Gas (COG) charge. The COG 8 also includes the pipeline transportation and storage costs associated with the 9 wholesale gas. Although the test year COG are included as part of this 10 proceeding, the fundamental rate design issues in this proceeding relate to 11 recovery of the Company's non-gas costs of providing distribution service to 12 sales customers.

13

14 Q. DO YOU HAVE ANY SCHEDULES SUPPORTING THE COG?

- A. Yes. Exhibit___(MEH-1), Schedule 7 contains a calculation of the COG used
 in Exhibit___(MEH-1), Schedules 2, 3, and 5. This is a "snapshot" calculation
 from the Company's 2024 budget and is not necessarily indicative of the
 Company's current month COG factor.
- 19

20 Q. DO YOU PROPOSE ANY INCREASES TO THE RESIDENTIAL DELIVERY SERVICES 21 CHARGE OR ANY CUSTOMER CHARGES?

A. Yes. The Company proposes an increase in the Residential Delivery Services
Charge and Small Interruptible Customer Charge because the revenues
generated by these charges are below the customer-driven costs of service in
each of these customer classes. To achieve the desired rate structure and
revenue apportionment, the Company also proposes to add a Distribution

1		Charge for the Residential class and increase Distribution Charges for the C&I
2		Firm and Interruptible classes.
3		
4		B. Detailed Rate Design and Rate Impacts
5		1. Residential Service
6	Q.	WHAT CHANGE IS XCEL ENERGY PROPOSING TO THE RESIDENTIAL CHARGES?
7	А.	The Company is proposing a 20 percent movement toward cost for the
8		Residential class. This includes an increase to the monthly Residential Delivery
9		Services Charge from \$22.25 to \$25.00. The Company is also proposing to add
10		a Distribution Charge of \$0.06155 per therm. If the revenue requirement
11		increase authorized in this case is lower than requested, then the Company
12		proposes to lower the proposed Distribution Charge to effect the change.
13		
14	Q.	Why is the Company proposing a volumetric Distribution Charge
15		NOW?
16	А.	The Company has had a Residential fixed Delivery Services charge with no
17		volumetric distribution charge since 2005.1 The level of the fixed Delivery
18		Services Charge was updated once in 2007, ² and again in 2022 ³ after a fifteen-
19		year gap in rate increase requests. This rate structure benefits our customers by
20		providing appropriate economic pricing signals, reduces intra-class subsidies,
21		and provides bill stability, as I discuss below. It also benefits the Company
22		through revenue stability. However, the Company notes that there was some
23		opposition to our Residential rate structure in our last rate case. We propose a
24		small volumetric charge for the Residential class in this case as an

¹ Case No. PU-04-578

² Case No. PU-06-525

³ Case No. PU-21-381

acknowledgement that there is some discomfort around a 100 percent fixed charge rate structure for Residential customers.

3

2

1

In prior rate cases, the Commission has queried what fixed charge rate would ultimately be too high and would necessitate a volumetric component of Residential class rates. The Company does not believe that there is an absolute number beyond which a fixed charge should not be assessed. The Company maintains that our rate design goals could be accomplished through a Delivery Services change with no volumetric charge, and we would be supportive of continuing that rate structure as an outcome of this rate case.

11

12 Q. IF THE COMPANY WERE TO CONTINUE WITH THE CURRENT RATE STRUCTURE OF
13 A DELIVERY SERVICES CHARGE WITH NO VOLUMETRIC DISTRIBUTION
14 CHARGE, WHAT DELIVERY SERVICES CHARGE WOULD YOU SUPPORT?

A. The Company's proposal is consistent with a \$29.00 Delivery Services Charge
with no volumetric Distribution Charge. This level of Delivery Services Charge
would provide the same bill impact to an average Residential customer as our
proposed Residential rate increase in this case.

19

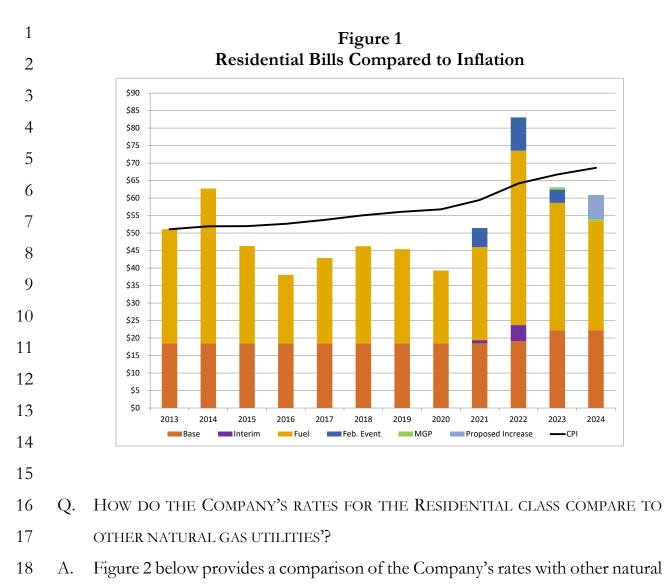
Q. WHAT ARE THE BENEFITS TO RESIDENTIAL CUSTOMERS OF SETTING THE
DELIVERY SERVICES CHARGE AT THE PROPOSED LEVEL?

A. There are several benefits to Residential customers. First, the rate structure
sends appropriate economic signals to customers. As indicated in the CCOSS,
the majority of costs to service Residential customers are fixed, meaning they
do not fluctuate with usage. Recovering costs through a fixed charge
corresponds with the cost cause.

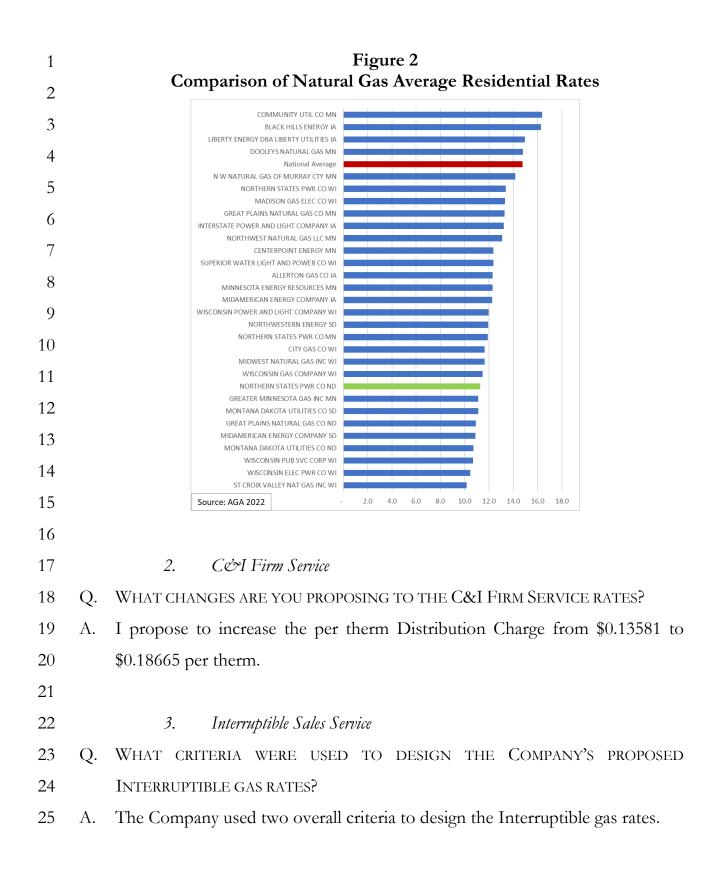
1 Secondly, it reduces intraclass subsidization. Distribution service costs for 2 Residential customers are fairly uniform. A lower Delivery Services Charge and 3 higher volumetric Distribution Charge would increase the amount that high-4 usage Residential customers subsidize low-usage Residential customers. 5 6 Third, bills are more stable because they fluctuate less between the high-usage 7 winter months and low-usage summer months. In the winter, when weather is 8 cold, customers use considerably more natural gas than in the summertime. 9 Therefore, a higher Delivery Services Charge has the impact of spreading the 10 cost uniformly over the year and lowers bills in the winter months when they 11 are the highest. 12 13 Fourth, it makes changes to rates more transparent. Rate increases are not as 14 visible to customers when implemented through a volumetric rate charge. 15 16 Q. WHAT IS THE BILL IMPACT OF THIS PROPOSAL FOR THE RESIDENTIAL CLASS? 17 А. A typical Residential customer using 65 therms per month will experience a 18 \$6.75 increase in their average monthly bill. A comparison of bills for various 19 usage levels under present and proposed rates is shown on Exhibit (MEH-20 1), Schedule 6. 21 22 HOW DOES THE COMPANY'S PROPOSAL FOR THE RESIDENTIAL CLASS COMPARE Q. 23 TO INFLATION? 24 With the Company's proposal, we have maintained bill growth below inflation А.

since 2013. Figure 1 below shows the comparison.

25



19 gas investor-owned distribution companies.



1 The first criterion provides that Interruptible rates should reflect the anticipated 2 value of service to the customer. This requires that Interruptible rates be 3 competitive with the cost of alternate fuels. The upper limit used for the 4 Interruptible commodity pricing was the price of No. 2 fuel oil because most 5 of these customers use No. 2 fuel oil as their primary alternate fuel. This 6 criterion also requires a reasonable discount from firm prices because 7 interruptible service is of lower value. If No. 2 fuel oil is priced higher than firm 8 gas service, then the corresponding firm rates, less a reasonable discount, 9 become the upper limits for Interruptible rates.

10

11 The second criterion applied to design Interruptible gas rates is that 12 Interruptible customers should not be subsidized by other classes of service. 13 Therefore, Interruptible rates should recover at least the Company's COG plus 14 variable operating and maintenance expenses.

15

16 Q. How were the Interruptible rates developed based on these17 criteria?

18 Xcel Energy is proposing an overall increase of 8.0 percent for the Interruptible А. 19 Customer classes, which maintains a level of discount from firm service 20 consistent with the discount in place today. The current Customer Charge for 21 the Small Interruptible Service class is lower than the CCOSS average of 22 customer-related expenses. Therefore, I am proposing to increase the Small 23 Interruptible Customer Charge from \$100 to \$125 per month. The proposed 24 Distribution Charge for the Small Interruptible Service class is an increase from 25 \$0.11065 to \$0.14549 per therm. The proposed Distribution Charge for the 26 Large Interruptible Service class is an increase from \$0.07636 to \$0.11330 per 27 therm.

Table 3 below illustrates the current and proposed level of discount between
 Firm and Interruptible Sales Service.

- 3
- 4
- 5

6

7

8

9

10

11

 Table 3

 Average Bill Comparison-Commercial Firm and Interruptible Classes

Class	Avg Usage	Avg Bill - Present Rates	Avg Bill - Proposed Rates
Commercial Firm	7,626	\$4,694	\$5,082
Small Interruptible	7,626	\$3,715	\$4,006
% Discoun	it	21%	21%
Commercial Firm	53,171	\$32,519	\$35,223
Large Interruptible	53,171	\$23,656	\$25,621
% Discour	ıt	27%	27%

- 12
- 13

14 Q. WHY IS IT IMPORTANT TO HAVE INTERRUPTIBLE CUSTOMERS?

15 The willingness of Interruptible customers to trade firm service for a discount А. 16 enhances system reliability and flexibility. In particular, since an Interruptible 17 customer has agreed not to receive service at particular times, the Company's 18 demand forecast can be reduced accordingly. This results in greater reliability, 19 because the gas and pipeline capacity that would have ordinarily been needed 20 to serve these customers can be used to serve other customers. This also reduces 21 costs for all customers since the Company can now plan for less firm gas than 22 would have otherwise been required.

23

$\label{eq:quantum_eq} 24 \qquad Q. \quad \text{How do the Interruptible classes reduce costs for all customers?}$

A. The Interruptible classes reduces costs for all customers in several ways. The
throughput from these customers on our systems creates a higher load factor,
resulting in lower gas costs, which flow through the COG. In addition, if

1		Interruptible customers switched to Firm service, the Company could need to
2		make additional capital investments and capacity purchases to firm up service
3		to these customers.
4		
5	Q.	WILL THE PROPOSED INTERRUPTIBLE RATES RECOVER MORE THAN THE COSTS
6		IMPOSED BY THESE CLASSES?
7	А.	Yes. The proposed Interruptible rates would recover \$1.663 million above the
8		CCOSS revenue requirement for these customers, thereby reducing the residual
9		costs that must be recovered from firm customers.
10		
11		4. Firm and Interruptible Transportation Service
12	Q.	WHAT CHANGES ARE YOU PROPOSING FOR THE TRANSPORTATION RATES?
13	А.	Transportation rates are the same as the corresponding sales rates, except that
14		Transportation customers pay a slightly higher Customer Charge to reflect the
15		additional customer-related cost of serving such customers. This approach
16		ensures that we will be indifferent to the customer's choice of gas procurement
17		(i.e., Xcel Energy sales gas or gas purchased from a third-party marketer).
18		Therefore, my explanation of the proposed Customer Charges and Distribution
19		Charges for sales customers also holds true for the corresponding
20		Transportation rates. One nuance with the Transportation rates is that our
21		Large Commercial Firm Transportation service customers pay a Distribution
22		Demand Charge in addition to Customer and Distribution Energy Charges.
23		This per therm Distribution Demand Charge is applied to these customers'
24		monthly billed demand.
25		
26		Our Large Commercial Interruptible Transportation Service and Large

27 Commercial Firm Transportation service customers have rate ranges set with

1 minimum and maximum rates with their actual rates negotiated within that 2 given range. For our Large Commercial Interruptible Transportation Service 3 customers, we have set the maximum Distribution Charge at \$0.11330 per 4 therm. This rate is set at the Distribution Charge for our Large Interruptible 5 sales service class. For Large Commercial Firm Transportation service 6 customers, we have increased the maximum Energy and Demand Charges by 7 the same percentage increase to our C&I Firm sales service class' Distribution 8 Charge. We are proposing to increase the maximum Energy and Demand 9 Charges to \$0.05999 and \$1.20286 per therm, respectively. We are proposing to increase the minimum Energy Charge for Large Commercial Firm 10 11 Transportation service customers from \$0.00898 to \$0.01240 per therm. This 12 ensures that customers on this service will pay at least the average incremental 13 cost to serve this class. 14 15 V. OTHER REVENUES 16 17 HAVE YOU INCLUDED INCREASED OTHER REVENUES IN TOTAL REVENUES? Q. | 18 Yes. Other revenues have increased \$17,006 for increasing late payment charges А. 19 as shown on page 1 of Exhibit (MEH-1), Schedule 2. This increase in 20 revenues is shown with the increase in late payment charges on page 5, lines 14 21 and 15 of Company witness Barthol's Exhibit (CJB-1), Schedule 3. It is also 22 shown on Exhibit (MEH-1), Schedule 4. The proposed increase in these 23 charges reduces the proposed increase in retail revenues. 24 25 VI. TARIFF CHANGES 26 27 Q. DOES THE COMPANY PROPOSE CHANGES TO ITS TARIFFS?

1	А.	Yes. The Company is proposing tariff changes that correspond to the rate
2		design proposed in my testimony. The proposed tariffs are included in
3		legislative and non-legislative formats in Volume 2.
4		
5		VII. CONCLUSION
6		
7	Q.	PLEASE BRIEFLY SUMMARIZE YOUR TESTIMONY.
8	А.	The Company's CCOSS is an appropriate ratemaking tool in this case and was
9		used to inform a class revenue apportionment that provides moderate
10		movement toward the cost of service. The Company's proposed rates are
11		reasonable, consistent with its rate design objectives, and improve customer
12		equity. The Company added a volumetric Distribution Charge for the
13		Residential class while maintaining the rest of the prior rate design structure
14		with updated rate components to collect the revenue requirement. Finally, the
15		Company has also proposed various reasonable changes to its tariffs.
16		
17	Q.	DOES THIS CONCLUDE YOUR TESTIMONY?

18 A. Yes, it does.

Case No. PU-23-____ Exhibit____(MEH-1), Schedule 1 Page 1 of 1

Statement of Qualifications

Martha E. Hoschmiller

OVERVIEW

My responsibilities at Xcel Energy include rate design conducted in support of the Company's rate cases and providing pricing function support and other related analyses for the utility operating subsidiaries of Xcel Energy.

PROFESSIONAL EXPERIENCE

Principal Pricing Analyst; Xcel Energy, NSPM	2022 – Present
Regulatory Case Specialist II; Xcel Energy, NSPM	2019 - 2022
Reliability Standards Analyst; Xcel Energy, Xcel Energy Services	2015 - 2019
Senior Pricing Analyst; Xcel Energy, NSPM	2008 - 2015
Pricing Analyst; Xcel Energy, NSPM	2005 - 2008
Project Coordinator; Xcel Energy, NSPM	2004 - 2005
Project Coordinator (contractor); Xcel Energy, NSPM	2001 - 2004

EDUCATIONAL EXPERIENCE

Grinnell College; BA Mathematics	1995
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Northern States Power Company State of North Dakota Gas Jurisdiction **Proposed Revenue Apportionment**

	Rate	Avg	Dkt	Pı	resent Revenu	ues	Pre	oposed Reven	ue			Incre	ease		
	Code	Cust.	Sales	Base	Fuel*	Total	Base	Fuel*	Total	Base	%	Fuel	%	Total	%
Firm Service															
Residential	401	54,948	4,285,129	14,671,197	20,938,674	\$35,609,871	\$19,121,988	\$20,938,674	\$40,060,662	\$4,450,791	30.3%	\$ 0	0.0%	\$4,450,791	12.5%
Commercial and Industrial	410	<u>9,648</u>	<u>7,990,310</u>	<u>14,075,936</u>	<u>31,131,595</u>	\$45,207,531	<u>\$17,339,290</u>	<u>\$31,131,595</u>	<u>\$48,470,885</u>	\$3,263,354	<u>23.2%</u>	<u>\$0</u>	0.0%	<u>\$3,263,354</u>	7.2%
Total Firm Service		64,596	12,275,439	28,747,134	52,070,268	\$80,817,402	\$36,461,278	\$52,070,268	\$88,531,547	\$7,714,145	26.8%	\$ 0	0.0%	\$7,714,145	9.5%
Interruptible Service															
Small C&I	404	54	497,468	615,678	1,856,786	\$2,472,464	\$805,304	\$1,856,786	\$2,662,090	\$189,625	30.8%	\$ 0	0.0%	\$189,625	7.7%
Large C&I	405	<u>24</u>	<u>1,564,971</u>	<u>1,222,741</u>	<u>5,477,452</u>	<u>\$6,700,193</u>	<u>\$1,764,852</u>	<u>\$5,477,452</u>	<u>\$7,242,304</u>	<u>\$542,111</u>	<u>44.3%</u>	<u>\$0</u>	0.0%	<u>\$542,111</u>	<u>8.1%</u>
Total Interruptible Service		78	2,062,439	1,838,420	7,334,238	\$9,172,658	\$2,570,156	\$7,334,238	\$9,904,394	\$731,736	39.8%	\$ 0	0.0%	\$731,736	8.0%
Total Sales Service		<u>64,674</u>	<u>14,337,878</u>	<u>30,585,554</u>	<u>59,404,507</u>	<u>\$89,990,060</u>	<u>\$39,031,434</u>	<u>\$59,404,507</u>	<u>\$98,435,941</u>	<u>\$8,445,881</u>	<u>27.6%</u>	<u>\$0</u>	<u>0.0%</u>	<u>\$8,445,881</u>	<u>9.4%</u>
Other Gas Revenues															
Late Payment Revenue Incr	rease								\$17,006					\$17,006	
Total Sales and Other Gas R	evenues					<u>\$89,990,060</u>			<u>\$98,452,947</u>					<u>\$8,462,887</u>	<u>9.4%</u>

*The Fuel Costs include Manufactured Gas Plant Site Remediation Costs

Residential Service

	Units		Pre	sent	Proposed		Increase	
	Bills	Therms	Rate	Revenue	Rate	Revenue	Amount	Percent
Delivery Services Charge	659,380	40.054.000	\$22.25	\$14,671,197	\$25.00	\$16,484,491	\$1,813,294	
<u>Distribution Charge</u> Non-Fuel Subtotal		42,851,288	<u>\$0.00000</u>	<u>\$0</u> \$14,671,197	<u>\$0.06155</u>	<u>\$2,637,497</u> \$19,121,988	<u>\$2,637,497</u> \$4,450,791	30.3%
Cost of Gas Charge								
Summer (Apr-Oct)		9,141,311	\$0.44030	\$4,024,928	\$0.44030	\$4,024,928		
Winter (Nov-Mar)		<u>33,709,977</u>	\$ <u>0.50174</u>	\$ <u>16,913,746</u>	\$ <u>0.50174</u>	\$ <u>16,913,746</u>		
Total		42,851,288	\$0.48864	\$20,938,674	\$0.48864	\$20,938,674	\$ 0	
Average Customers	54,948							
			Total	\$35,609,871		\$40,060,662	\$4,450,791	12.5%

Commercial and Industrial Service

	Ur	nits	Pre	sent	Prop	oosed	Increas	se
	Bills	Therms	Rate	Revenue	Rate	Revenue	Amount	Percent
Basic Service Charge	115,772		\$35.00	\$4,052,037	\$35.00	\$4,052,037	\$0	
Distribution Charge		79,903,103	\$0.13581	\$10,851,640	\$0.18665	\$14,913,914	\$4,062,274	
<u>Discount</u>		<u>15,714,397</u>	<u>(\$0.05267)</u>	(\$827,741)	<u>(\$0.10351)</u>	<u>(\$1,626,661)</u>	<u>(\$798,920)</u>	
Non-Fuel Subtotal				\$14,075,936		\$17,339,290	\$3,263,354	23.2%
Cost of Gas Charge								
Summer (Apr-Oct)		17,490,302	\$0.44030	\$7,700,996	\$0.44030	\$7,700,996		
Winter (Nov-Mar)		<u>46,698,404</u>	\$ <u>0.50174</u>	\$ <u>23,430,599</u>	\$ <u>0.50174</u>	\$ <u>23,430,599</u>		
Cost of Gas Charge		64,188,706	\$0.48500	\$31,131,595	\$0.48500	\$31,131,595	\$ 0	
Average Customers	9,648							
			Total	\$45,207,531		\$48,470,885	\$3,263,354	7.2%
nall Interruptible Service								
		nits		sent		oosed	Increas	
	Bills	Therms	Rate	Revenue	Rate	Revenue	Amount	Percen
Basic Service Charge	652		\$100.00	\$65,231	\$125.00	\$81,538	\$16,308	
Distribution Charge		<u>4,974,676</u>	<u>\$0.11065</u>	<u>\$550,448</u>	<u>\$0.14549</u>	<u>\$723,766</u>	\$173,318	
Non-Fuel Subtotal				\$615,678		\$805,304	\$189,625	30.8%
Cost of Gas Charge		4,974,676	\$0.37325	\$1,856,786	\$0.37325	\$1,856,786	\$0	
Average Customers	54							
		,	Total	\$2,472,464		\$2,662,090	\$189,625	7.7%

Large Interruptible Service

	Units		Present		Proposed		Increase	
	Bills	Therms	Rate	Revenue	Rate	Revenue	Amount	Percent
Basic Service Charge	288		\$275.00	\$79,2 00	\$275.00	\$79,2 00	\$0	
Distribution Charge		15,649,711	\$0.07636	\$1,195,012	\$0.11330	\$1,773,125	\$578,113	
<u>Discount</u>		<u>974,595</u>	<u>(\$0.05281)</u>	<u>(\$51,470)</u>	<u>(\$0.08975)</u>	<u>(\$87,473)</u>	<u>(\$36,002)</u>	
Non-Fuel Subtotal				\$1,222,741		\$1,764,852	\$542,111	44.3%
Cost of Gas Charge		14,675,116	\$0.37325	\$5,477,452	\$0.37325	\$5,477,452	\$ 0	
Average Customers	24							
			Total	\$6,700,193		\$7,242,304	\$542,111	8.1%

Northern States Power Company State of North Dakota Gas Jurisdiction **Comparison of Proposed Rate Design and CCOSS Results** (000s)

Case No. PU-23-___ Exhibit___(MEH-1), Schedule 4 Page 1 of 1

	(1)	(2)	(3)	(4)	(5)
			Revenue		Difference Between
		Present	Deficiency	Total Effect	CCOSS Revenue
Customer Class		Revenues	Indicated	of Proposed	Deficiency and
			by CCOSS	Rates	Proposed Rates
Residential	\$ increase	\$35,610	\$8,734	\$4,451	\$4,283
	% increase		24.53%	12.5%	12.0%
Commercial	\$ increase	\$45,208	\$661	\$3,263	(\$2,602)
	% increase		1.46%	7.2%	-5.8%
Interruptible Service	\$ increase	\$2,472	(\$330)	\$190	(\$520)
(Small Volume)	% increase		-13.36%	7.7%	-21.0%
Interruptible Service	\$ increase	\$6,700	(\$602)	\$542	(\$1,144)
(Large Volume)	% increase		-8.98%	8.1%	-17.1%
Other Revenues	\$ increase			\$17	(\$17)
	% increase				
Total	\$ increase	\$89,990	\$8,463	\$8,463	\$0
	% increase		9.4%	9.4%	0.0%

Rate Design - Class Impact by Rate Component

		(1)	(2)	(3)	(4)			
			Overall Impacts of Proposed Rates					
Custome	r Class		Delivery /					
Custome		Present	Basic Service	Distribution	Total Effect of			
		Revenues	Charges	Charges	All Changes			
Residential	\$ increase	\$35,610	\$1,813	\$2,637	\$4,451			
	% increase		5.1%	7.4%	12.5%			
Commercial	\$ increase	\$45,208	\$0	\$3,263	\$3,263			
	% increase		0.0%	7.2%	7.2%			
Small Interruptible	\$ increase	\$2,472	\$16	\$173	\$190			
	% increase		0.7%	7.0%	7.7%			
Large Interruptible	\$ increase	\$6,700	\$0	\$542	\$542			
	% increase		0.0%	8.1%	8.1%			
Total	\$ increase	\$89,990	\$1,830	\$6,616	\$8,446			
	% increase		2.0%	7.4%	9.4%			

Northern States Power Company State of North Dakota Gas Jurisdiction **Summary of Present and Proposed Rates**

Case No. PU-23-___ Exhibit___(MEH-1), Schedule 5 Page 1 of 1

-	Present Rates	Proposed Rates
Residential Firm Service		
Delivery Services Charge	\$22.25 / Month	\$25.00 / Month
Distribution Charge	\$0.00000 /Therm	\$0.06155 /Therm
Cost of Gas	\$0.48864 /Therm	\$0.48864 /Therm
<u>C&I Firm Service</u>		
Basic Service Charge	\$35.00 /Month	\$35.00 /Month
Distribution Charge	\$0.13581 /Therm	\$0.18665 /Therm
Cost of Gas	\$0.48500 /Therm	\$0.48500 /Therm
Small C&I Interruptible Service		
Basic Service Charge	\$100.00 /Month	\$125.00 /Month
Distribution Charge	\$0.11065 /Therm	\$0.14549 /Therm
Cost of Gas	\$0.37325 /Therm	\$0.37325 /Therm
Large C&I Interruptible Service		
Basic Service Charge	\$275.00 /Month	\$275.00 /Month
Distribution Charge	\$0.07636 /Therm	\$0.11330 /Therm
Cost of Gas	\$0.37325 /Therm	\$0.37325 /Therm

RESIDENTIAL FIRM SERVICE

Use	Bill Amount	Bill Amount		
<u>(Therms)</u>	(Present)	(Proposed)	Increase	Percent
0	\$22.25	\$25.00	\$2.75	12.4%
10	\$27.14	\$30.50	\$3.37	12.4%
20	\$32.02	\$36.00	\$3.98	12.4%
30	\$36.91	\$41.51	\$4.60	12.5%
40	\$41.80	\$47.01	\$5.21	12.5%
50	\$46.68	\$52.51	\$5.83	12.5%
65	\$54.01	\$60.76	\$6.75	12.5%
75	\$58.90	\$66.26	\$7.37	12.5%
100	\$71.11	\$80.02	\$8.91	12.5%
200	\$119.98	\$135.04	\$15.06	12.6%
300	\$168.84	\$190.06	\$21.22	12.6%
500	\$266.57	\$300.10	\$33.53	12.6%

COMMERCIAL & INDUSTRIAL FIRM SERVICE

Use	Bill Amount	Bill Amount		
<u>(Therms)</u>	(Present)	(Proposed)	Increase	Percent
0	\$35.00	\$35.00	\$0.00	0.0%
50	\$66.04	\$68.58	\$2.54	3.8%
100	\$97.08	\$102.17	\$5.08	5.2%
250	\$190.20	\$202.91	\$12.71	6.7%
500	\$345.41	\$370.83	\$25.42	7.4%
690	\$463.47	\$498.56	\$35.09	7.6%
750	\$500.61	\$538.74	\$38.13	7.6%
1,000	\$655.81	\$706.65	\$50.84	7.8%
3,000	\$1,897.43	\$2,049.95	\$152.52	8.0%
5,000	\$3,139.05	\$3,393.25	\$254.20	8.1%
7,500	\$4,691.08	\$5,072.38	\$381.30	8.1%
10,000	\$6,243.10	\$6,751.50	\$508.40	8.1%

SMALL VOLUME INTERRUPTIBLE SERVICE

Use	Bill Amount	Bill Amount		
<u>(Therms)</u>	(Present)	(Proposed)	Increase	Percent
1,000	\$583.90	\$643.74	\$59.84	10.2%
3,000	\$1,551.70	\$1,681.22	\$129.52	8.3%
5,000	\$2,519.50	\$2,718.70	\$199.20	7.9%
7,500	\$3,729.25	\$4,015.55	\$286.30	7.7%
7,626	\$3,790.36	\$4,081.06	\$290.70	7.7%
10,000	\$4,939.00	\$5,312.40	\$373.40	7.6%
20,000	\$9,778.00	\$10,499.80	\$721.80	7.4%

LARGE VOLUME INTERRUPTIBLE SERVICE

Use	Bill Amount	Bill Amount		
<u>(Therms)</u>	(Present)	(Proposed)	Increase	Percent
1,000	\$724.61	\$761.55	\$36.94	5.1%
3,000	\$1,623.83	\$1,734.65	\$110.82	6.8%
5,000	\$2,523.05	\$2,707.75	\$184.70	7.3%
7,500	\$3,647.08	\$3,924.13	\$277.05	7.6%
10,000	\$4,771.10	\$5,140.50	\$369.40	7.7%
50,000	\$22,755.50	\$24,602.50	\$1,847.00	8.1%
54,339	\$24,706.48	\$26,713.77	\$2,007.29	8.1%
100,000	\$45,236.00	\$48,930.00	\$3,694.00	8.2%
150,000	\$67,716.50	\$73,257.50	\$5,541.00	8.2%
200,000	\$90,197.00	\$97,585.00	\$7,388.00	8.2%

Winter

Summer

Peak Day Demand Costs - Total	\$12,117,846	
(1) Twelve Month Peak Day Demand Costs	\$7,177,385	
(2) Firm Demand Billing Units (therms)	107,039,994	
(3) Firm Demand Cost per Therm	\$0.06705	
(4) Winter Peak Day Demand Costs	\$4,940,461	
(5) Firm Demand Billing Units (therms)	80,408,381	
(6) Firm Demand Cost per Therm	\$0.06144	

Commodity Costs

(Taken From Budget)	Class Commodity <u>Cost</u>	Commodity Cost per therm	Total capacity & Commodity <u>Cost per therm</u>	Total capacity & Commodity <u>Cost per therm</u>
Residential Firm	\$15,571,344	\$0.36338	\$0.43043	\$0.49188
Commercial Firm	\$23,324,956	\$0.36338	\$0.43043	\$0.49188
Small Interruptible	\$1,807,703	\$0.36338	\$0.36338	\$0.36338
Large Interruptible	\$5,332,658	\$0.36338	\$0.36338	\$0.36338
Transportation	<u>\$0</u>			
TOTAL	\$46,036,661	\$0.36338		
Manufactured Gas Plant Site Remediation Costs	Class Commodity <u>Cost</u>	MGP <u>Cost per therm</u>		

Residential Firm	\$422,797	\$0.00987
Commercial Firm	\$633,326	\$0.00987
Small Interruptible	\$49,083	\$0.00987
Large Interruptible	\$144,794	\$0.00987
Transportation	<u>\$0</u>	
TOTAL	\$1,250,000	\$0.00987

Total Cost of Gas

\$59,404,507

STATE OF NORTH DAKOTA BEFORE THE PUBLIC SERVICE COMMISSION

NORTHERN STATES POWER COMPANY 2024 NATURAL GAS RATE INCREASE APPLICATION Case No. PU-23-____

AFFIDAVIT OF Martha E. Hoschmiller

I, the undersigned, being first duly sworn, depose and say that the foregoing is the Direct Testimony of the undersigned, and that such Direct Testimony and the exhibits or schedules sponsored by me to the best of my knowledge, information and belief, are true, correct, accurate and complete, and I hereby adopt said testimony as if given by me in formal hearing, under oath.

handlen

Martha E. Hoschmiller

Subscribed and sworn to before me, this $\underline{14}$ day of December, 2023.

Notary Public

My Commission Expires:

