

STATE OF NORTH DAKOTA
BEFORE THE NORTH DAKOTA PUBLIC SERVICE COMMISSION

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-21-381

**SURREBUTTAL TESTIMONY OF
KARL R. PAVLOVIC**

**Submitted on Behalf of
the Advocacy Staff of the
North Dakota Public Service Commission**

April 22, 2022

**DIRECT TESTIMONY OF
KARL R. PAVLOVIC**

QUALIFICATIONS

Q. PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.

A. My name is Karl Richard Pavlovic. My business address is 22 Brookes Avenue, Gaithersburg, MD 20877. I am a Senior Consultant with and the Managing Director of PCMG and Associates LLC.

Q. ARE YOU THE SAME KARL RICHARD PAVLOVIC WHO SUBMITTED DIRECT TESTIMONY ON BEHALF OF ADVOCACY STAFF ON MARCH 1, 2022 IN THIS PROCEEDING?

A. Yes. Exhibit KRP-1 to my direct testimony summarizes my qualifications and experience.

PURPOSE AND ORGANIZATION

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. I have been asked by the Commission's Advocacy Staff (1) to address the rebuttal testimony of NSP Witness Barthol regarding my direct testimony critique of NSP's proposed North Dakota Class Cost of Service Study (CCOSS)¹ and (2) revise my direct testimony recommended class revenue allocation and recommended rate design in light of Advocacy Staff Witness Mugrace's surrebuttal revenue requirement. Section III.A addresses Witness Barthol's rebuttal CCOSS testimony and Section III.B presents my revised revenue allocation and rate design.

¹ Rebuttal Testimony of Christopher J. Bathol, Exhibit CJB-2, pages 2-9.

1 **Q. HAVE YOU PREPARED ANY EXHIBITS IN SUPPORT OF YOUR**
2 **RECOMMENDATIONS?**

3 A. Yes. I have included the following exhibits:

4 Exhibit No. KRP-S1: Revised Corrected Exhibit CJB-1, Schedule 4

5 Exhibit No. KRP-S2: Revised Corrected Exhibit CJB-1, Schedule 5

6

7 **II. SUMMARY OF TESTIMONY AND CONCLUSIONS**

8 **Q. PLEASE SUMMARIZE YOUR TESTIMONY.**

9 A. My testimony finds that Witness Barthol's rebuttal testimony provides no reason to modify
10 or withdraw my direct testimony recommendations that the Commission:

11 • Direct that NSP's distribution mains be classified as wholly demand-related with
12 no customer-related component, consistent with the CCOSS' classification of
13 production plant, storage plant, transmission plant and regulator stations as only
14 demand-related.

15 • Direct that NSP's transmission, regulator station and distribution mains costs be
16 allocated using the Design Day demand method, consistent with the CCOSS'
17 allocation of production and storage costs.

18

19 **III. DISCUSSION**

20 **A. NSP'S NORTH DAKOTA CLASS COST OF SERVICE STUDY**

21 **Q. PLEASE SUMMARIZE YOUR DIRECT TESTIMONY CRITIQUE OF NSP'S**
22 **CLASS COST OF SERVICE STUDY.**

1 A. In my direct testimony I explained that NSP's proposed CCOSS (1) erroneously classifies a
2 portion of mains cost as customer-related using the minimum system method of
3 classification, contrary to the fact that customer-related costs are those costs that vary
4 directly with the number of customers per both Principles of Public Utility Rates and the
5 NARUC Gas Manual ² and (2) erroneously allocates demand-related transmission, regulator
6 station and mains costs using the average and peak demand method rather than the design
7 day demand method, contrary to the fact that demand-related costs are those costs that vary
8 directly with the maximum demand on the system per both Principles of Public Utility Rates
9 and the NARUC Gas Manual.³

10 Regarding the first point, I noted that customer-related classification of mains costs results
11 in over-allocation of mains costs to the residential class, i.e., an interclass subsidy of the
12 commercial & industrial classes. On that basis I recommended that mains costs be classified
13 as wholly demand-related.

14 Regarding the second point, I noted that the use of the average and peak method of
15 allocation results in the over-allocation of transmission, regulator stations and mains costs to
16 the commercial & industrial classes, i.e., an interclass subsidy of the residential class. On
17 that basis I recommended that the design day method of allocation be used, consistent with
18 NSP's design day allocation of production and storage costs.

19 **Q. PLEASE SUMMARIZE WITNESS BARTHOL'S REBUTTAL OF YOUR DIRECT**
20 **TESTIMONY.**

² Direct Testimony of Karl R. Pavlovic, pages 7-9.

³ Pavlovic Direct, pages 9-11.

1 A. Witness Barthol's rebuttal testimony responds to my testimony separately regarding the
2 classification and allocation of mains and the allocation of transmission and regulator
3 stations.

4 Regarding the classification of mains costs, Witness Barthol asserts (a) that the NARUC
5 Gas Manual references the minimum system classification of mains,⁴ (b) that the North
6 Dakota, Minnesota and Wisconsin Commissions have all accepted the minimum system
7 method for classification of mains,⁵ (c) that an example of mains costs that is not driven by
8 capacity is the cost of mains trenching,⁶ and (d) that the engineering and design costs of a
9 new main and the upsizing of pipelines upstream of a new main are based on the number of
10 customers to be served off the new main.⁷

11 Regarding NSP's Average and Peak method of allocating demand-related mains costs,
12 Witness Barthol asserts (a) that capacity-related, i.e., not customer-related, costs of mains
13 are associated with plant that is designed, installed and operated for two purposes: (1) to
14 deliver gas all year to customers and (2) to meet design day demand,⁸ (b) that therefore
15 capacity-related costs should be split into Average Capacity costs and Excess Capacity costs
16 and allocated on daily average sales and excess design day demand, respectively,⁹ and (c)
17 that design day allocation of mains makes no sense because it does not allocate any mains
18 costs to interruptible customers.¹⁰

19 Regarding NSP's Average and Peak method of allocating transmission and regulator
20 station costs, Witness Barthol asserts (a) that Average and Peak allocation of transmission

⁴ Barthol Rebuttal, page 3, lines 1-20.

⁵ Barthol Rebuttal, page 3, lines 22-30.

⁶ Barthol Rebuttal, page 5, lines 1-11.

⁷ Barthol Rebuttal, page 5, lines 13-22.

⁸ Barthol Rebuttal, page 4, lines 10-15 and page 7, lines 1-11.

⁹ Barthol Rebuttal, page 4, lines 16-22.

¹⁰ Barthol Rebuttal, page 5, line 24 to page 6, line 4.

1 and regulator station costs is longstanding practice for NSP in North Dakota,¹¹ (b) that the
2 commissions in Minnesota and Wisconsin have accepted Average and Peak allocation of
3 transmission and regulator stations,¹² (c) that Average and Peak allocation is appropriate for
4 transmission and regulator station costs for the same reasons as for mains costs,¹³ and (d)
5 that design day allocation of transmission and regulator station costs violates the
6 fundamental principle of cost causation, because it does not allocate any costs to the
7 interruptible classes.¹⁴

8 **Q. WHAT IS YOUR RESPONSE TO WITNESS BARTHOL'S REBUTTAL**
9 **TESTIMONY REGARDING MINIMUM SYSTEM CLASSIFICATION OF MAINS**
10 **AND AVERAGE AND PEAK ALLOCATION OF TRANSMISSION, REGULATOR**
11 **STATIONS AND MAINS?**

12 A. As a fundamental matter, whether the North Dakota, Minnesota and Wisconsin
13 commissions have or have not accepted minimum system classification of mains costs and
14 average and peak allocation of transmission, regulator station and mains costs is not
15 germane to the question of whether these methods are consistent with the principle of cost
16 causation. Specifically regarding minimum system classification of NSP's mains, Witness
17 Barthol provides no empirical evidence that any components of NSP's mains costs vary
18 directly with number of customers. Specifically regarding Average and Peak allocation,
19 Witness Barthol provides no empirical evidence that there is any component of NSP's
20 transmission, regulator station and mains costs that is a function of "average capacity" rather
21 than maximum demand on the system. Specifically regarding interruptible customers,

¹¹ Barthol Rebuttal, page 6, lines 20-26.

¹² Barthol Rebuttal, page 7, lines 4-7.

¹³ Barthol Rebuttal, page 7, lines 7-11.

¹⁴ Barthol Rebuttal, page 7, lines 20-24,

1 NSP's interruptible customers' maximum demand on the system is not accounted for in the
2 design, installation and operation of NSP's gas distribution system and is therefore not a
3 cost causative factor of NSP's production, storage, transmission, regulator station and mains
4 costs. I address the latter three points in detail below.

5 **III.A.1. NSP's Minimum System Classification of Mains**

6 **Q. IS THE MINIMUM SIZE METHOD OF MAINS CLASSIFICATION CONSISTENT**
7 **WITH THE PRINCIPLE OF COST CAUSATION?**

8 A. No. As I pointed out in my direct testimony¹⁵ and as Witness Barthol acknowledges in his
9 rebuttal testimony,¹⁶ the minimum size method applied to mains rests on a theory that
10 "assumes that there is a ... minimum size main necessary to connect the customer to the
11 system" (emphasis added).¹⁷ As I noted in my direct testimony, the NARUC Gas Manual
12 also observes that the minimum size theory and assumption are controversial.¹⁸ The theory
13 and assumption are controversial because they contradict the NARUC Gas Manual's cost-
14 causative definition and enumeration of customer-related costs, viz.,

15 "those operating costs found to vary directly with the number of customers served
16 ... the expenses of metering, reading, billing collecting, and accounting, as well as
17 those costs associated with the capital investment in metering equipment and in
18 customer service connections."¹⁹

¹⁵ Pavlovic Direct, page 8, lines 5-7.

¹⁶ Barthol Rebuttal, page 3, lines 15-20.

¹⁷ NARUC Gas Manual, page 22.

¹⁸ NARUC Gas Manual, page 22.

¹⁹ NARUC Gas Manual, page 22.

1 Minimum size customer classification of NSP's mains would be consistent with the
2 principle of cost causation only if NSP were to provide empirical evidence that some portion
3 of its mains costs varied directly with the number of customers served.

4 **Q. HAS NSP PROVIDED ANY EVIDENCE THAT A PORTION OF ITS MAINS**
5 **COSTS VARIES DIRECTLY WITH THE NUMBER OF CUSTOMERS SERVED?**

6 A. No. I specifically requested from Witness Barthol evidence that a quantifiable portion of
7 NPS's mains costs varies directly with the number of customers served.²⁰ As of the filing of
8 this surrebuttal testimony NSP has not responded to that data request.

9 **Q. DOES THE TRENCHING COST EXAMPLE DEMONSTRATE THAT A**
10 **PORTION OF MAINS COSTS VARIES DIRECTLY WITH THE NUMBER OF**
11 **CUSTOMERS?**

12 A. No. The main trenching cost example simply purports to identify a mains cost component
13 that is not a function of demand or capacity. The example says nothing about mains costs
14 varying directly with the number of customers. Moreover, I specifically requested from
15 Witness Barthol NSP data supporting the claim that NSP's trenching costs are not a function
16 of demand or capacity.²¹ As of the filing of this surrebuttal testimony NSP has not
17 responded to that data request.

18
19 **Q. DOES THE MAINS ENGINEERING AND DESIGN COST EXAMPLE**
20 **DEMONSTRATE THAT A PORTION OF MAINS COSTS VARIES DIRECTLY**
21 **WITH THE NUMBER OF CUSTOMERS?**

²⁰ NDPSC-5-2.

²¹ NDPSC-5-1.

1 A. No. Despite Witness Barthol’s claim that the engineering and design costs of a new main
2 and the upsizing of mains upstream of the new main are a function of the number of
3 customers to be served by the new main, a simple thought experiment demonstrates that this
4 is not the case. The engineering and design costs of a new main and upstream upsizing will
5 be the same whether the new main is to serve the maximum demand of a single customer or
6 the equivalent aggregate maximum demand of several smaller customers.

7 **Q. DOES WITNESS BARTHOL’S REBUTTAL TESTIMONY PROVIDE ANY**
8 **REASON FOR YOU TO MODIFY OR WITHDRAW YOUR**
9 **RECOMMENDATION THAT NSP’S CCROSS CLASSIFY MAINS COSTS AS**
10 **WHOLLY DEMAND RELATED?**

11 A. No.

12 **III.A.2. NSP’s Average and Peak Allocation of Transmission, Regulator**
13 **Station and Mains Costs**

14 **Q. IS AVERAGE AND PEAK DEMAND ALLOCATION OF NSP’S TRANSMISSION,**
15 **REGULATOR STATION AND MAINS COSTS CONSISTENT WITH THE**
16 **PRINCIPLE OF COST CAUSATION?**

17 A. No. The average and peak demand allocation method assumes a theoretical “average
18 capacity” of NSP’s distribution system that cannot be the basis for the design, installation
19 and operation of that system. Were the distribution system to be designed, installed and
20 operated to serve the average demand or capacity of NSP’s customers, the distribution
21 system would not be able to serve the aggregate maximum demand of its customers. Design
22 day demand, which is the aggregate maximum demand that all gas utilities, including NSP,

1 use for the design, installation and operation is the allocation method that is consistent with
2 the principle of cost causation.

3
4 **Q. HAS NSP PROVIDED ANY EVIDENCE THAT A PORTION OF ITS**
5 **TRANSMISSION, REGULATOR STATION AND MAINS COSTS VARIES**
6 **DIRECTLY WITH THE AVERAGE DEMAND OR CAPACITY ON ITS**
7 **DISTRIBUTION SYSTEM?**

8 A. No. I specifically requested from Witness Barthol evidence that a quantifiable portion of
9 NPS's transmission, regulator station and mains costs varies directly with the average
10 demand or capacity of its customers.²² As of the filing of this surrebuttal testimony NSP has
11 not responded to that data request.

12 **Q. DOES WITNESS BARTHOL'S REBUTTAL TESTIMONY PROVIDE ANY**
13 **REASON FOR YOU TO MODIFY OR WITHDRAW YOUR**
14 **RECOMMENDATION THAT NSP'S CCROSS USE DESIGN DAY DEMAND TO**
15 **ALLOCATE TRANSMISSION, REGULATOR STATION AND MAINS COSTS?**

16 A. No.

17 **III.A.3. NSP's Interruptible Customers and Cost Causation**

18 **Q. DO INTERRUPTIBLE CUSTOMERS CAUSE DEMAND-RELATED COSTS OF**
19 **NSP'S TRANSMISSION, REGULATOR STATION AND MAINS?**

20 A. No. As Witness Barthol states in rebuttal, interruptible customers are curtailed when system
21 demand reaches design day maximum demand.²³ The reason interruptible customers are
22 curtailed is that NSP's system has not been designed to serve the interruptible customers'

²² NDPSC-5-3.

²³ Barthol Rebuttal, page 6, lines 1-4 and page 7, lines 15-17.

1 demand at maximum system demand. That in turn means that interruptible customers
2 demand is not a cause of the demand-related costs of NSP's distribution system. That is
3 why design day allocation of the distribution system's demand-related costs allocates none
4 of those costs to interruptible customers. While interruptible customers make use of the
5 system, they cause none of the demand-related costs. Because the demand of interruptible
6 customers is curtailed under design day conditions, they cause only customer-related costs,
7 viz., "those operating costs found to vary directly with the number of customers served ...
8 the expenses of metering, reading, billing collecting, and accounting, as well as those costs
9 associated with the capital investment in metering equipment and in customer service
10 connections."²⁴

11 **Q. DOES DESIGN DAY DEMAND ALLOCATION OF TRANSMISSION,**
12 **REGULATOR STATION AND MAINS COSTS VIOLATE THE PRINCIPLE OF**
13 **COST CAUSATION?**

14 A. No. As I just explained, to allocate NSP's transmission, regulator station and mains
15 demand-related costs to interruptible customers would violate the principle of cost
16 causation, because interruptible customers do not cause the demand-related costs of NSP's
17 transmission, regulator station and mains demand-related costs.

18 **Q. DOES WITNESS BARTHOL'S REBUTTAL TESTIMONY REGARDING**
19 **INTERRUPTIBLE CUSTOMERS PROVIDE ANY REASON FOR YOU TO**
20 **MODIFY OR WITHDRAW YOUR RECOMMENDATION THAT NSP'S CCOSS**
21 **USE DESIGN DAY ALLOCATION FOR TRANSMISSION, REGULATOR**
22 **STATION AND MAINS COSTS?**

²⁴ NARUC Gas Manual, page 22.

1 A. No.

2

3 **B. REVISED NORTH DAKOTA CLASS REVENUE ALLOCATION AND RATE**

4 **DESIGN**

5 **Q. HAVE YOU REVISED YOUR RECOMMENDED REVENUE ALLOCATION AND**
6 **RATE DESIGN CONSISTENT WITH ADVOCACY STAFF WITNESS**
7 **MUGRACE’S SURREBUTTAL REVENUE REQUIREMENT?**

8 A. Yes. Table 1 below shows my revised class revenue allocation and Table 2 shows my
9 revised rate design.

10 **Table 1: Comparison of Class Revenue Requirement Apportionment (\$000)**

Rate Class (A)	NSP Proposed Revenue ²⁵ (B)	Revised Proposed Revenue ²⁶ (C)	Increase (Decrease) (D)
Residential	\$30,817	\$26,888	(\$3,929)
C&I Firm	\$35,256	\$35,113	(\$143)
Small & Large Interruptible	\$9,464	\$9,261	(\$203)
Total	\$75,536	\$71,262	(\$4,274)

11

²⁵ Direct Testimony of Christopher J. Barthol, page 31, Table 6 Proposed Revenue.

²⁶ Exhibit KRP-S1; Surrebuttal Testimony of Dante Mugrace, Schedule S-DM-1.

1 **Table 2: Revised Recommended Class Rates²⁷**

Residential (RC 401): 0.3% revenue increase with Delivery Service Charge decreased 2.8% from \$18.48/month to \$17.96/month;
Commercial and Industrial (RC 403, 410): 10.1% revenue increase with (a) Basic Service Charge increased 31.7% from \$30.00/month to \$39.50/month and (b) Distribution Charge increased 26.5% from \$0.10800/therm to \$0.13664/therm;
Small Interruptible (RC 404): 5.9% revenue increase with (a) Basic Service Charge increased 33.3% from \$75.00/month to \$100.00/month and (b) Distribution Charge increased 8.0% from \$0.08800/therm to \$0.09500/therm;
Large Interruptible (RC 405): 8.2% revenue increase with (a) Basic Service Charge increased 9.1% from \$275.00/month to \$300/month and (b) Distribution Charge increased 44.9% from \$0.05120/therm to \$0.07420/therm;

2

3

4 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

5 **A.** Yes.

²⁷ Exhibit KRP-S2.

	Rate Code	Avg Cust.	Dkt Sales	Present Revenues			Proposed Revenue			Increase					
				Base	Fuel	Total	Base	Fuel	Total	Base	Fuel	Total	%	%	%
Firm Service															
Residential	401	51,811	3,969,079	11,489,515	15,307,684	\$26,797,199	\$11,167,781	\$15,720,345	\$26,888,126	-\$321,734	-2.8%	\$412,661	2.7%	\$90,927	0.3%
Commercial and Industrial	410	9,092	6,494,932	9,843,987	22,057,904	\$31,901,891	\$12,454,859	\$22,657,878	\$35,112,737	\$2,610,872	26.5%	\$599,974	2.7%	\$3,210,846	10.1%
Total Firm Service		60,903	10,464,011	21,333,502	37,365,588	\$58,699,090	\$23,622,640	\$38,378,223	\$62,000,863	\$2,289,138	10.7%	\$1,012,635	2.7%	\$3,301,773	5.6%
Interruptible Service															
Small C&I	404	63	569,913	558,374	1,636,515	\$2,194,889	\$628,709	\$1,695,768	\$2,324,477	\$70,335	12.6%	\$59,253	3.6%	\$129,588	5.9%
Large C&I	405	25	2,993,984	1,476,382	4,932,326	\$6,408,708	\$1,825,430	\$5,110,911	\$6,936,341	\$349,048	23.6%	\$178,585	3.6%	\$527,633	8.2%
Total Interruptible Service		88	3,563,897	2,034,756	6,568,841	\$8,603,597	\$2,454,139	\$6,806,679	\$9,260,818	\$419,383	20.6%	\$237,838	3.6%	\$657,221	7.6%
Total Retail		60,991	14,027,908	23,368,258	43,934,429	\$67,302,687	\$26,076,779	\$45,184,902	\$71,261,681	\$2,708,521	11.6%	\$1,250,473	2.8%	\$3,958,994	5.9%
Other Gas Revenues															
Late Pay Penalties				\$155,340		\$155,340			\$174,344					\$19,004	12.2%
Connection Charges				\$113,904		\$113,904			\$170,177					\$56,273	49.4%
Return Check Charges				\$6,516		\$6,516			\$6,516					\$0	0.0%
Connect Smart				\$3,011		\$3,011			\$3,011					\$0	0.0%
Interchange Gas				\$63,229		\$63,229			\$63,229					\$0	0.0%
Other Gas Revenue				\$90,112		\$90,112			\$90,112					\$0	0.0%
Ltd Firm Sales - Rsrvs & Vols				\$120,420		\$120,420			\$120,420					\$0	0.0%
LP Sales to Others - MN				\$0		\$0			\$0					\$0	0.0%
Contr In Aid Cons Tax Gr-Up				\$0		\$0			\$0					\$0	0.0%
Other - Miscellaneous				-\$2,148		-\$2,148			-\$2,148					\$0	0.0%
Total Other Gas Revenues				\$550,384		\$550,384			\$625,660					\$75,277	13.7%
Total Retail Sales and Other Revenues				\$67,853,071		\$67,853,071			\$71,887,341					\$4,034,271	5.9%

PU-21-381
Exhibit KRP-S2

Northern States Power Company
Natural Gas Utility - State of North Dakota
Detail of Customers, Sales, and Present and Proposed Revenues

Case No. PU-21-____
Exhibit____(CJB-1), Schedule 5
Page 1 of 1
Corrected

Residential Service

	Units		Present		Proposed		Increase	
	Bills	Therms	Rate	Revenue	Rate	Revenue	Amount	Percent
Delivery Services Charge	621,727		\$ 18.48	\$11,489,515	\$ 17.96	\$ 11,167,781	\$ (321,734)	
Distribution Charge		39,690,789	\$ -	\$ -	\$ -	\$ -	\$ -	
MGP		39,690,789	\$ -	\$ -	\$ 0.01040	\$ 412,661	\$ 412,661	
Cost of Gas Charge								
Summer (Apr-Oct)		8,443,492	\$ 0.33921	\$ 2,864,147	\$ 0.33921	\$ 2,864,147		
Winter (Nov-Mar)		<u>31,247,297</u>	<u>\$ 0.39823</u>	<u>\$12,443,537</u>	<u>\$ 0.39823</u>	<u>\$ 12,443,537</u>		
Total		39,690,789	\$ 0.38567	\$15,307,684	\$ 0.38567	\$ 15,307,684	\$ -	
Average Customers	51,811							
			Total	\$26,797,199		\$ 26,888,126	\$ 90,927	0.30%

Commercial and Industrial Service

	Units		Present		Proposed		Increase	
	Bills	Therms	Rate	Revenue	Rate	Revenue	Amount	Percent
Basic Service Charge	109,101		\$30.00	\$ 3,273,030	\$39.50	\$ 4,309,490	\$ 1,036,460	
Distribution Charge		64,949,321	\$ 0.10800	\$ 7,014,527	\$ 0.13664	\$ 8,874,955	\$ 1,860,428	
Discount		7,242,210	\$(0.06125)	\$(443,570)	\$(0.09952)	\$(720,767)	\$(277,197)	
MGP		57,707,111	\$ -	\$ -	\$ 0.01040	\$ 599,974	\$ 599,974	
Cost of Gas Charge								
Summer (Apr-Oct)		15,634,588	\$ 0.33921	\$ 5,303,463	\$ 0.33921	\$ 5,303,463		
Winter (Nov-Mar)		<u>42,072,522</u>	<u>\$ 0.39823</u>	<u>\$16,754,441</u>	<u>\$ 0.39823</u>	<u>\$ 16,754,441</u>		
Cost of Gas Charge		57,707,111	\$ 0.38224	\$22,057,904	\$ 0.38224	\$ 22,057,904	\$ -	
Average Customers	9,092							
			Total	\$31,901,891		\$ 35,121,556	\$ 3,210,846	10.10%

Small Interruptible Service

	Units		Present		Proposed		Increase	
	Bills	Therms	Rate	Revenue	Rate	Revenue	Amount	Percent
Basic Service Charge	758		\$ 75.00	\$ 56,850	\$ 100.00	\$ 75,800	\$ 18,950	
Distribution Charge		5,699,135	\$ 0.08800	\$ 501,524	\$ 0.09500	\$ 541,418	\$ 39,894	
MGP		5,699,135	\$ -	\$ -	\$ 0.01040	\$ 59,253	\$ 59,253	
Cost of Gas Charge		5,699,135	\$ 0.28715	\$ 1,636,515	\$ 0.28715	\$ 1,636,515	\$ -	
Average Customers	63							
			Total	\$ 2,194,889		\$ 2,312,986	\$ 118,097	5.40%

Large Interruptible Service

	Units		Present		Proposed		Increase	
	Bills	Therms	Rate	Revenue	Rate	Revenue	Amount	Percent
Basic Service Charge	300		\$ 275.00	\$ 82,500	\$ 300.00	\$ 90,000	\$ 7,500	
Distribution Charge		29,939,839	\$ 0.05120	\$ 1,532,920	\$ 0.07420	\$ 2,221,536	\$ 688,616	
Discount		12,763,099	\$(0.01089)	\$(139,038)	\$(0.03781)	\$(482,620)	\$(343,582)	
MGP		17,176,740	\$ -	\$ -	\$ 0.01040	\$ 178,585	\$ 178,585	
Cost of Gas Charge		17,176,740	\$ 0.28715	\$ 4,932,326	\$ 0.28715	\$ 4,932,326	\$ -	
Average Customers	25							
			Total	\$ 6,408,708		\$ 6,939,827	\$ 531,119	8.30%

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

Northern States Power Company
2021 Natural Gas Rate Increase
Application

Case No. PU-21-381

Verification

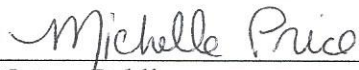
State Of Maryland)
) ss.
County Of Montgomery)

Karl Richard Pavlovic, being first duly sworn on oath, deposes and states that he has read the surrebuttal testimony and exhibits submitted in the above captioned matters under his name, that they were prepared by him or under his direction, that he knows the contents thereof, and that the same are true and correct to the best of his knowledge and belief.



Karl Richard Pavlovic

Subscribed and sworn to before me this 21st day of April, 2022.



Notary Public
My Commission Expires: 3/10/2025

MICHELLE A. PRICE
NOTARY PUBLIC STATE OF MARYLAND
My Commission Expires March 10, 2025

