### **BEFORE THE NEBRASKA PUBLIC SERVICE COMMISSION**

IN THE MATTER OF THE APPLICATION ) OF BLACK HILLS NEBRASKA GAS, LLC, ) D/B/A BLACK HILLS ENERGY, RAPID ) CITY, SOUTH DAKOTA, SEEKING ) APPROVAL OF A GENERAL RATE ) INCREASE )

**APPLICATION NO. NG-124** 

### DIRECT TESTIMONY OF ETHAN J. FRITEL

Senior Regulatory Analyst

### ON BEHALF OF BLACK HILLS NEBRASKA GAS, LLC

Date: May 1, 2025

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AAIR	Annual Agricultural Infrastructure Repair Charge
Base Year	The twelve (12) months ended December 31, 2024
BHC	Black Hills Corporation
BH Nebraska Gas or Company	Black Hills Nebraska Gas, LLC d/b/a Black Hills Energy
BHSC	Black Hills Service Company, LLC
BHUH	Black Hills Utility Holdings, Inc.
CCOSS	Class Cost of Service Study
HDD	Heating Degree-Day
NOAA	National Oceanic and Atmospheric Administration
Test Year	The twelve (12) months ending on December 31, 2025 adjusted for known and measurable changes
WNA	Weather Normalization Adjustment

### TABLE OF ABBREVIATIONS AND ACRONYMS

1		<b>DIRECT TESTIMONY OF ETHAN J. FRITEL</b>
2		I. <u>INTRODUCTION</u>
3	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
4	A.	My name is Ethan J. Fritel. My business address is 7001 Mt. Rushmore Road, P.O. Box
5		1400, Rapid City, South Dakota 57702.
6	Q.	BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?
7	A.	I am employed by Black Hills Service Company, LLC ("BHSC") d/b/a Black Hills
8		Energy. I am a Senior Regulatory Analyst.
9		Black Hills Nebraska Gas, LLC d/b/a Black Hills Energy ("BH Nebraska Gas"
10		or "Company") is a wholly owned subsidiary of Black Hills Utility Holdings, Inc.
11		("BHUH"). BHUH is a wholly owned subsidiary of Black Hills Corporation ("BHC").
12	Q.	ON WHOSE BEHALF ARE YOU TESTIFYING?
13	A.	I am testifying on behalf of BH Nebraska Gas.
14		II. STATEMENT OF QUALIFICATIONS
15	Q.	WHAT ARE THE DUTIES AND RESPONSIBILITIES OF YOUR CURRENT
16		POSITION?
17	A.	I am responsible for gathering, researching and analyzing customer billing data, and
18		other information to prepare analyses in support of internal analysis and external
19		regulatory reports and filings.
20		
21		

1	Q.	PLEASE OUTLINE YOUR EDUCATIONAL AND PROFESSIONAL
2		BACKGROUND.
3	А.	My education, employment history and professional experience is provided in Direct
4		Exhibit EJF–1.
5	Q.	HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?
6	A.	No.
7		III. <u>PURPOSE OF TESTIMONY</u>
8	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
9	A.	The purpose of my testimony is to sponsor and support the billing determinants and
10		revenue proof used in developing the base rates proposed by BH Nebraska Gas in this
11		proceeding. Specifically, I present and discuss the following analyses, studies and
12		proposals:
13		1. The billing determinants and revenues under current rates, including:
14		• The Company's proposed Weather Normalization Adjustment
15		("WNA") of volumes for the Residential and Commercial customer
16		classes;
17		• The steps taken to develop WNA reflected in the billing determinants
18		for the proposed customer classes;
19		• The steps taken to include customer growth for number of bills and
20		therms for the Residential customer class; and
21		• The steps taken to include an adjustment to the Agricultural customer
22		class.

1		2. The customer class load factor analysis; and
2		3. The revenue under proposed rates to demonstrate that the proposed rates are
3		designed to recover the proposed revenue requirement.
4	Q.	ARE YOU SPONSORING ANY EXHIBITS OR SCHEDULES?
5	А.	Yes. I am sponsoring the following exhibits included within the documents comprising
6		Exhibit 1 of the Application:
7		• Section 5, Rule 004.06A - Base Year Unadjusted (Direct Exhibit EJF-5)
8		• Section 5, Rule 004.06B1 - Test Year Normalized Under Current Rates (Direct
9		Exhibit EJF-6 and EJF-7)
10		• Section 5, Rule 004.06B2 - Test Year Normalized Under Proposed Rates
11		(Direct EJF-13)
12		In addition, I sponsor the following testimony Exhibits:
13		• Direct Exhibit EJF – 1 – Statement of Qualifications
14		• Direct Exhibit EJF – 2 – Weather Normalization Adjustment
15		• Direct Exhibit EJF – 3 – Normal and Test Year Heating Degree Days
16		• Direct Exhibit EJF – 4 – Customer Growth Adjustment
17		• Direct Exhibit EJF – 5 – Base Year Billing Determinants and Revenues
18		• Direct Exhibit EJF – 6 – Summary of Revenue Adjustments
19		• Direct Exhibit EJF – 7 – Test Year Billing Determinants Under Current Rates
20		• Direct Exhibit EJF – 8 – Agricultural Normalization Adjustment
21		• Direct Exhibit EJF – 9 – Revenue Synchronization Adjustment
22		• Direct Exhibit EJF – 10 – Load Factor Analysis

1		• Direct Exhibit EJF – 11 – Revenue Proof		
2		• Direct Exhibit EJF – 12 – Bill Impacts		
3		• Direct Exhibit EJF – 13 – Adjusted Billing Determinants and Revenues Under		
4		Current and Proposed Rates by Month		
5	Q.	HAVE THE TESTIMONY AND EXHIBITS THAT YOU ARE SPONSORING		
6		BEEN PREPARED BY YOU OR UNDER YOUR SUPERVISION?		
7	A.	Yes.		
8		IV. BILLING DETERMINANTS AND REVENUES UNDER THE		
9		PROPOSED CUSTOMER CLASSES AND CURRENT RATES		
10	Q.	PLEASE DESCRIBE WHAT IS MEANT BY THE TERM BILLING		
11		DETERMINANTS.		
12	A.	Billing determinants include number of therms used to calculate a customer's bill, as		
13		well as the number of customer bills. A "therm" is a unit for quantity of heat that equals		
14		100,000 British thermal units. The billing determinants developed are used in the		
15		development of revenues under existing and proposed rates and in the allocation of		
16		costs to each customer class in the Class Cost of Service Study ("CCOSS") sponsored		
17		by Company witness, Mr. Douglas N. Hyatt. The billing determinants and calculated		
18		revenues are applicable to both interim and final rates.		
19				

1	Q.	HAVE YOU PREPARED A SUMMARY OF BASE YEAR BILLING
2		DETERMINANTS AND REVENUES BY CUSTOMER CLASS?
3	A.	Yes. The billing determinants reflected in Direct Exhibit EJF-5 show the base year
4		billing determinants and base rate revenues for the current customer classes including
5		several adjustments.
6	Q.	WHAT CUSTOMER CLASSES ARE CURRENTLY SERVED BY THE
7		COMPANY?
8	A.	The Company currently serves Jurisdictional customers in the Residential, Traditional
9		Sales Service Commercial and Energy Options Program Commercial classes, as well
10		as Non-Jurisdictional customers in the Agricultural, Maximum Rate, Interruptible,
11		Negotiated-Distribution, Negotiated-Transmission, Negotiated-Direct and Negotiated-
12		Direct classes.
13	Q.	IS THE COMPANY PROPOSING CHANGES TO ANY CUSTOMER
14		CLASSES?
15	A.	Yes, the Company is proposing to split the Jurisdictional Commercial customer class
16		into two classes. The explanation of this change can be found in Mr. Hyatt's testimony.
17	Q.	PLEASE DESCRIBE HOW COMMERCIAL ENERGY OPTIONS
18		CUSTOMERS DIFFER FROM TRADITIONAL SALES SERVICE
19		COMMERCIAL CUSTOMERS, AND HOW THE BILLING DETERMINANTS
20		AND REVENUES ARE SHOWN.
21	A.	The Energy Options tariff is available for the delivery of natural gas owned by a
22		Customer from Company's Town Border Station(s) to a meter location on the

1		Customer's premise. Energy Options customers use the Company's gas distribution
2		system in the same manner as other customers in the same class.
3		The Energy Options customers are charged the same base rates as Commercial
4		customers in the same class are charged. The billing determinants for the Energy
5		Options customers are shown separately from the other customers in the same customer
6		class as provided in Direct Exhibit EJF-7.
7	Q.	HAVE YOU PREPARED A SUMMARY OF REVENUES REFLECTING THE
8		ADJUSTED BASE RATE REVENUES?
9	А.	Yes. Direct Exhibit EJF-7 summarizes the Base Year revenues, as well as the
10		adjustments made to the base year to produce the adjusted test year revenues.
11		V. <u>WNA</u>
12	Q.	PLEASE DESCRIBE THE RATIONALE FOR ADJUSTING VOLUMES TO
13		REFLECT NORMAL WEATHER CONDITIONS.
14		
	А.	The discussion in this section is for the traditional WNA. The WNA Rider is discussed
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is necessary to adjust heating load to recognize what volumes would have been if
 conditions were normal.

3 Traditionally, warmer- or colder-than-normal weather is based on a comparison
4 of actual heating degree-days during a Base Year to the heating degree-days ("HDD")
5 that would be expected during a normal or typical year.

### 6 Q. PLEASE DEFINE A HEATING DEGREE-DAY.

7 A HDD is calculated by subtracting the average daily temperature from 65 degrees A. 8 Fahrenheit. Average daily temperature equals the average of the high and low 9 temperatures on each day. In the gas industry, 65 degrees Fahrenheit is commonly used 10 for this calculation as the base temperature because it is assumed that when average 11 daily temperatures reach a level below 65 degrees, heat sensitive customers will turn 12 their heaters on for space heating. If the average daily temperature exceeds 65 degrees, 13 the HDD for that day is set equal to zero. The sum of the daily HDDs for a particular 14 month is the monthly HDDs. Below is how HDDs are calculated. 15 Maximum (high) Temperature = A Fahrenheit 16 Minimum (low) Temperature = B Fahrenheit

- 17 The sum of A and B is C.
- 18 C divided by 2 is D.
- 19 65 D = HDDs.

## Q. HAS THE COMPANY MADE CHANGES TO THE WEATHER STATIONS BEING USED IN THE ANALYSIS COMPARED TO THE LAST RATE PROCEEDING?

A. Yes. In the last rate review proceeding,<sup>1</sup> the Company used weather stations in
Atkinson, Broken Bow, Cambridge, Gordon, Hastings, Kearney, Lincoln, Norfolk,
North Platte, Omaha, Scottsbluff, and Sidney. In this proceeding, the Company is
proposing to use weather stations in Aurora, Broken Bow, Chadron, Grand Island,
Imperial, Lincoln, McCook, Norfolk, North Platte, Omaha, Scottsbluff, Sidney,
Valentine.

### 10 Q. WHY IS THE COMPANY PROPOSING TO CHANGE THE WEATHER 11 STATIONS BEING USED IN THIS PROCEEDING?

A. The intent of BH Nebraska Gas is to group the towns around National Oceanic and Atmospheric Administration ("NOAA") weather stations where one would expect weather conditions (HDDs) to be similar based on geographic proximity. BH Nebraska Gas reviewed the location of the weather stations in relationship to its communities to ensure that the use of those weather stations is appropriate. In addition, some of the weather stations that were previously used are no longer reliably providing data.

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<sup>&</sup>lt;sup>1</sup> In the Matter of the Application of Black Hills Nebraska Gas, LLC, d/b/a Black Hills Energy, Rapid City, South Dakota, seeking approval of a general rate increase. Commission Application No. NG-109.

1 **Q.** 

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### . WHAT VOLUME AND CUSTOMER DATA HAS THE COMPANY USED FOR THE CALCULATION OF THE WNA?

- A. The Company used detailed historical billing records for the Residential customer class
  during the period of January 2017 through December 2024 and the Commercial
  customer class during the period of January 2022 through December 2024 as the source
  for monthly volumetric (usage) and customer data used for the calculation of the WNA.
  These time periods were chosen due to the availability of data for the respective
  customer classes.
- 9 Q. IS THE TIME PERIOD FOR NORMAL HDDs THE SAME LENGTH OF TIME
- 10 USED BY THE COMPANY IN ITS LAST RATE PROCEEDING?
- A. Yes, like its last rate application, the Company is again proposing to use a 10-year
  normal HDDs.

### Q. WHY ARE YOU PROPOSING TO USE A 10-YEAR NORMAL FOR WEATHER NORMALIZATION?

A. Use of a 10-year period provides reasonable balance between using a sufficiently long
period of time to capture both warmer and colder conditions and giving recognition
that the more recent past is generally a better predictor of the near future. The time
period used should recognize that rates approved in this proceeding will be in effect
over the near term.

# Q. WHAT WERE THE ACTUAL HEATING SEASON WEATHER CONDITIONS IN THE COMPANY'S SERVICE TERRITORY FOR THE 12-MONTH PERIOD ENDING DECEMBER 31, 2024?

A. Based on a comparison of actual 2024 HDDs to normal HDDs for the 10-year period
ending December 31, 2024, conditions were warmer than normal. Table EJF-1 below
summarizes conditions at the 13 weather stations that BH Nebraska Gas used in this
proceeding:

2024 Actual **10 Year** Heating Normal Weather Degree Heating **Percent Warmer than** Station Davs **Degree Days** Normal 5% Aurora 5,455 5,714 Broken Bow 6,014 6,666 10% 7% Chadron 6,302 6,766 9% Grand Island 5,202 5,720 5,239 5,836 10% Imperial Lincoln 4,906 5,588 12% McCook 5,044 5,518 9% Norfolk 5,451 6,225 12% North Platte 5,590 6,155 9% 5,090 10% Omaha 5,628 9% Scottsbluff 5,599 6,176 Sidney 5,521 6,121 10% Valentine 6,177 6,530 5%

Table	EJF-1:	Actual	and N	ormal	HDDs
Lant	LUI I.	Include	and 1	or mai	

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These deviations are significant enough that BH Nebraska Gas concluded a

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heating adjustment to reflect normal weather conditions was warranted.

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### Q. PLEASE SUMMARIZE THE METHODOLOGY USED TO DETERMINE THE RELATIONSHIP BETWEEN USAGE AND WEATHER.

A. The Company used multiple linear regression analyses to define the relationship between volumes and variables that represent weather conditions. Multiple linear regression is a statistical approach commonly used to predict the value of a dependent variable (use per customer) using multiple independent variables (including current month HDDs and previous month HDDs). In this regard, the goal is to explain the dependent variable with reasonable accuracy using as few independent variables as possible.

10	Multiple regression	yields an	equation	of the form:

11  $Y = B + A_1X_1 + A_2X_2 + ... + A_KX_K$ 

12 where

13 Y is the dependent variable

14	В	is the y-intercept (or constant)
15	$X_1X_K$	are the independent variables

16  $A_1...A_K$  are the regression coefficients

With respect to the Company's use of multiple linear regression as a tool in developing adjustments to reflect normal weather conditions, the dependent variable (Y) is monthly use per customer and is calculated by dividing monthly volumes by monthly number of customers. Monthly use per customer is used as the dependent variable instead of total monthly volumes because use per customer reduces the effect of growth or decline in total volumes due to changes in numbers of customers.

1		Independent variables $(X_1X_K)$ are typically weather variables such as HDDs. The
2		intercept (B) is a monthly constant. The constant represents usage that is not affected
3		by the independent variables. The coefficients $(A_1A_K)$ are developed from the
4		regression analysis based on the best fit (least squares).
5		The Company calculates several statistics in connection with the regression
6		analyses to assist in the evaluation of the significance (degree to which the independent
7		variables explain the dependent variable) of the various variables in explaining use per
8		customer.
9	Q.	IS THIS THE SAME METHODOLOGY USED BY THE COMPANY IN THE
10		COMPANY'S LAST RATE REVIEW FILING?
11	A.	Yes.
12	Q.	WHAT DATA DID THE COMPANY USE IN PERFORMING THE MULTIPLE
13		LINEAR REGRESSION ANALYSIS DESCRIBED ABOVE?
14	A.	The analysis was based on actual monthly use per customer (dependent variable), and
15		actual monthly HDDs (independent variables). The Company ran separate regression
16		analyses on each of the proposed customer classes (Residential, Small Commercial
17		Service, and Large Commercial Service). The regression analysis produced coefficients
18		that the Company used to determine use per customer per HDD.
19	Q.	FOR WHICH CUSTOMER CLASSES IS THE COMPANY PROPOSING TO
20		ADJUST VOLUMES?
21	A.	The Company is proposing to adjust volumes for classes of customers where it can be
22		demonstrated that the gas usage for that customer class is sensitive to changes in winter

temperature conditions. These customers use natural gas primarily for space heating.
 The variation in monthly HDDs typically explains most of the variation in volumes
 used by customers who use natural gas in space heating applications. The customer
 classes that the Company is proposing to adjust are the Residential and the two
 proposed jurisdictional Commercial classes (Small Commercial Service and Large
 Commercial Service).

### 7 Q. PLEASE DESCRIBE THE COMPANY'S WEATHER NORMALIZATION 8 REGRESSION RESULTS.

A. To identify anomalies in usage patterns over the different periods, the Company
performed regression analyses in decreasing blocks of time (January 2017 - December
2024, January 2018 - December 2024, January 2019 - December 2024, etc.) for each
of the customer classes. Direct Exhibit EJF-2, Table 3 summarizes the results of each
of the regression analyses performed. The Company evaluated the results of each of
these time periods using four criteria to determine which period should be used to
define usage characteristics. These four criteria are as follows:

- 16 1. Consistency of predicted normal use per customer;
- 17 2. Average annual HDDs for the period evaluated being near
  18 normal;
- 19 3. R squared values in the 90% range are common; and
- 20 4. Obvious changes as reflected in coefficients and statistics.
- Direct Exhibit EJF-2, Table 3 shows which regression analysis the Company chose for
   each customer class. In all cases, the Company selected the eight-year period from

January 2017 through December 2024 for Residential customers and the three-year period from January 2022 through December 2024 for both Small- and Large Commercial Service customers. Given the data available, these time periods satisfy the four criteria identified above and closely align to the period used in the calculation of normal HDDs. Based on these regression analyses, the Company concluded it is reasonable to develop a heating volume adjustment for all the customer classes previously identified.

### 8 Q. HOW DID THE COMPANY DETERMINE THE WNA APPLICABLE TO THE 9 RESIDENTIAL AND COMMERCIAL CUSTOMER CLASSES?

A. This calculation is summarized in Direct Exhibit EJF-2, Table 2. The heating adjustment per customer is the difference between normal and actual HDDs multiplied by its respective HDD coefficients (current and prior months) for each month of the Base Year. The heating adjustment is determined by using coefficients from Direct Exhibit EJF-2, Table 3 and the ten-year average HDD data shown in Direct Exhibit EJF-3, Table 1.

After the monthly heating adjustment per customer (i.e., therm/customer) was calculated, the respective number of customers for each month of the Base Year was multiplied by each of these figures to determine the total volumetric adjustment. As shown in Direct Exhibit EJF-2, Table 1, the Company's heating adjustment represents an increase in sales of 16,739,377 therms for Residential customers, 4,546,618 therms for Small Commercial Service customers and 742,089 therms for Large Commercial Service customers, for a total adjustment of 22,028,083 therms. These adjustments result in an increase in Base Year volumes, which is consistent with actual conditions
 being warmer than normal during the Base Year.

### 3 Q. HOW DID THE COMPANY DETERMINE THE WEATHER4NORMALIZATION REVENUE ADJUSTMENTS?

5 A. The volumetric WNA adjustments shown in Direct Exhibit EJF-2, Table 1 are detailed 6 by customer class and by weather station. For each customer class, the margin 7 adjustment is determined by multiplying the weather normalization volume times the 8 appropriate margin rate. The revenue adjustments for each of the customer classes are 9 shown in Direct Exhibit EJF-7. These adjustments result in an increase in Test Year 10 revenues of \$3,304,212 which is consistent with the weather conditions being warmer 11 than normal during the Base Year, and is incorporated into Direct Exhibit SKJ-2, Schedule I-5. 12

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#### VI. OTHER ADJUSTMENTS

#### 14 Q. ARE YOU SPONSORING ANY OTHER REVENUE ADJUSTMENTS?

A. Yes. The other adjustments include a customer growth adjustment, two adjustments
related to agricultural customers, an adjustment for incremental Test Year System
Safety and Integrity Rider ("SSIR") revenues, and a revenue synchronization
adjustment.

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#### A. <u>Customer Growth Adjustment</u>

### 21 Q. PLEASE DESCRIBE THE CUSTOMER GROWTH ADJUSTMENT.

A. The customer growth as detailed in Direct Exhibit EJF-4, shows an estimated customer
 growth adjustment of an additional of 44,588 Residential customer bills. This results

1	in an increase of \$1,245,606 in revenue, as shown in Direct Exhibit EJF-7. The		
2	customer growth adjustment is based upon the trend of the average number of		
3	customers for the Residential customer class over the five calendar years ending		
4	December 31, 2024, as shown in Direct Exhibit EJF-4. Also included in the Customer		
5	Growth Adjustments is an adjustment made for a customer that was included in the		
6	Jurisdictional Commercial customer class during the base year but moved to the Non-		
7	Jurisdictional Negotiated Distribution customer class for the Test Year. This adjustment		
8	removed \$13,530 from total Jurisdictional revenues and added \$94,500 to the Non-		
9	Jurisdictional revenues. The customer growth adjustment is detailed in Direct Exhibit		
10	EJF-7 in the following categories:		
11	I. Number of Bills (Page 1, Line 4);		
12	II. Therms (Normalized for Weather) (Page 1, Line 11);		
13	III. Gas Cost Revenue (Page 2, Line 5);		
14	IV. Volumetric Charge Revenue (Page 2, Line 13);		
15	V. Monthly Charge Revenue (Page 2, Line 22); and		
16	VI. Total Margin Revenue (Page 2, Line 27).		
17	The adjusted billing determinants that rely on the adjustments under these categories is		
18	used in the CCOSS. The total revenue adjustment of \$1,326,576 is also used in Direct		
19	Exhibit SKJ-2, Schedule I-6.		
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### Q. CAN YOU DESCRIBE HOW THE RESIDENTIAL CUSTOMER GROWTH ADJUSTMENT WAS CALCULATED?

3 A. Yes. The projected growth in the Residential number of bills and therms for the Test 4 Year is reflected in the billing. The growth in the number of therms is calculated by 5 multiplying the average number of therms (weather normalized) used by current 6 residential customers by the projected number of additional bills. The number of therms 7 for the winter and summer seasons are calculated by multiplying the average therms 8 (weather normalized) per bill for current customers by the projected number of 9 additional bills in each season. The number of customer bills and therms are used to 10 calculate the additional gas cost, volumetric, and monthly charge revenue.

11 12

### B. <u>Agricultural Customer Adjustment</u>

### 13 Q. WHAT ADJUSTMENTS TO AGRICULTURAL CUSTOMERS WERE MADE?

### A. Agricultural volumes were adjusted to reflect normal conditions, and an adjustment was made to revenues to capture a new annual charge.

### 16 Q. PLEASE EXPLAIN THE RATIONALE FOR ADJUSTING AGRICULTURAL

### 17 **VOLUMES TO REFLECT NORMAL CONDITIONS.**

# A. The Company is proposing to adjust agricultural volumes to reflect normal conditions. Like the WNA, the intent of this adjustment is applied so that Test Year volumes reflect sales that would be expected in an otherwise "normal" or typical year.

### Q. DURING THE BASE YEAR, WERE AGRICULTURAL VOLUMES NORMAL?

A. No. Direct Exhibit EJF-8, Line 11 shows that for the Base Year, agricultural
volumes were lower than they were for the previous nine years. Based on this
low usage level, the Company concluded that an adjustment to agricultural
sales volumes was necessary.

### 7 Q. FOR PURPOSES OF THE COMPANY'S PROPOSED AGRICULTURAL 8 ADJUSTMENT, HOW IS NORMAL DEFINED?

9 A. The Company defines normal as the ten-year average usage from January 2015
10 through December 2024 using the same methodology as was performed in the
11 Company's previous rate application.

### 12 Q. HOW DID THE COMPANY CALCULATE THE AGRICULTURAL

### 13 ADJUSTMENT FOR THE BASE YEAR ENDED DECEMBER 31, 2024?

A. First, the Company calculated the ten-year average therms for the agricultural customers, Direct Exhibit EJF-8, Line 12. The Company used this ten-year average as the basis for "normal." Next, the difference between the ten-year average therms and the actual Base Year therms was calculated, Direct Exhibit EJF-8, Column B, Line 14. This results in a total volumetric adjustment of 3,715,342 therms.

1	Q.	ONCE THE TOTAL VOI	LUMETRIC	ADJUSTMENT	WAS
2		DETERMINED, HOW DID T	HE COMPAN	Y ALLOCATE	THIS
3		ADJUSTMENT INTO THE TIERS USED FOR BILLING?			
4	А.	The first tier of the agricultural rates (first 5,000 therms) is the baseload usag			ıd usage
5		for agricultural customers. Since the agricultural adjustment is based on			
6		conditions not being normal (i.e., other than baseload), the adjustment was			
7		allocated to the second tier based on the percentage of volumes that were billed			
8		in that tier in the Base Year.	in that tier in the Base Year.		
9	Q.	HAS THE COMPANY CALCULATED THE MARGIN IMPACT OF THE			
10		PROPOSED AGRICULTURAL A	DJUSTMENT T	TO REFLECT NO	RMAL
11		CONDITIONS?			
12	А.	Yes, Column I, Line 2 of Direct Exh	ibit EJF-9 shows	s the Company's p	roposed
13		margin adjustment to the Base	Year Agricultur	al customer reve	enue of
14		\$811,002, and is incorporated into Exhibit SKJ-2, Schedule I-7.			
15	Q.	WHAT OTHER ADJUSTMENT WAS MADE TO THE AGRICULTURAL			
16		CUSTOMER CLASS REVENUES	?		
17	А.	An adjustment was made to the agricult	ural customer rev	enues to account for	• the new
18		Annual Agricultural Infrastructure Repa	ir Charge ("AAIF	<b>C</b> ").	
19	Q.	PLEASE EXPLAIN HOW THE AI	)JUSTMENT F	OR THE NEW AN	NNUAL
20		CHARGE TO AGRICULTURAL	CUSTOMERS	WAS CALCULA	ГED?
21	А.	The AAIR charge applicable to agricult	tural customers in	Rate Area 5 began	in April
22		2025. The revenue adjustment was calcu	ulated by multiply	ing the number of cu	stomers,

1		as shown in the 2025 Annual Report Agricultural Choice Gas Program Supplier		
2		Selections, by the annual charge of \$130. The resulting revenue adjustment of \$987,870		
3		is shown in Column H, Line 2 of Direct Exhibit EJF-9 and in Direct Exhibit SKJ-2,		
4		Schedule I-7.		
5		C. <u>2025 Incremental SSIR Adjustment</u>		
6	Q.	PLEASE EXPLAIN THE ADJUSTMENT FOR INCREMENTAL SSIR		
7		<b>REVENUES?</b>		
8	A.	This adjustment proposes an incremental increase in SSIR revenues as approved in		
9		Application No. NG-112.4. The adjustment results in an increase in revenues of		
10		\$3,519,761, which is shown in Column J of Direct Exhibit EJF-9 and on Schedule I-8		
11		of Direct Exhibit SKJ-2.		
12		D. <u>Synchronization Adjustment</u>		
13	Q.	PLEASE DESCRIBE WHY A SYNCHRONIZATION ADJUSTMENT IS		
14		NECESSARY?		
15	A.	The Synchronization Adjustment is necessary to account for the difference between		
16		booked revenues and the revenues that result from applying the current rates to Test		
17		Year billing determinants. The total amount of adjustment between billed and		
18		calculated revenue based upon rates effective between January 1, 2024, and December		
19		31, 2024, is (\$58,914) as shown in Direct Exhibit EJF-9, column E. This adjustment		
20		can also be seen on Schedule I-4 of Direct Exhibit SKJ-2.		

### VII. LOAD FACTOR STUDY

### 2 Q. PLEASE DEFINE A LOAD FACTOR.

A. In the context in which the Company is using it, the load factor is defined as the customer class average daily use divided by its peak day use. It is a measure of how effectively a customer class utilizes the capacity needed to serve it. For example, if one customer class has a load factor of 25%, meaning that its average daily use is 25% of its peak day use, and another customer class has a load factor of 50%, meaning that its average daily use is 50% of its peak day use, then the second class is utilizing the capacity required to serve that class twice as effectively as the first class.

10

### Q. HOW IS THE LOAD FACTOR USED?

A. The Company uses customer class load factors in its CCOSS to determine the peak day
requirements used for the peak day allocation. The load factors used by the Company
are shown on Direct Exhibit EJF-10 for the Residential, Small Commercial Service,
Large Commercial Service, Maximum Rate, Negotiated Distribution and Negotiated
Transmission customer classes.

#### 16 Q. PLEASE EXPLAIN HOW THE LOAD FACTORS FOR THE RESIDENTIAL

#### 17 AND COMMERCIAL CUSTOMER CLASSES WERE CALCULATED.

A. In Direct Exhibit EJF-10, the load factors for the Residential and Commercial customer
classes were developed by using the HDD statistical results, the normal heating degree
days to develop load factors that were used in conjunction with the billing determinants
to develop weighted load factors for each class. For example, the 23.17% load factor
for the Residential customer class (Line 16 of Direct Exhibit EJF-10), 21.09% for the

1		Small Commercial Service customer class (Line 31 of Direct Exhibit EJF-10) and
2		27.41% for the Large Commercial Service class (Line 46 of Direct Exhibit EJF-10) are
3		the figures used in the Company's CCOSS.
4		VIII. <u>DEVELOPMENT OF THE REVENUES UNDER COST-BASED AND</u>
5		PROPOSED RATES
6	Q.	PLEASE DESCRIBE HOW YOU DEVELOPED THE REVENUES UNDER
7		COST-BASED AND PROPOSED RATES.
8	А.	The revenues under cost-based and proposed rates were developed using the Test Year
9		billing determinants shown in Direct Exhibit EJF-5. The cost-based and proposed rates
10		for the Residential, Small Commercial Service and Large Commercial Service
11		customer classes are shown in Direct Exhibit DNH-6 and described by Mr. Hyatt in his
12		direct testimony.
13		The revenues under cost-of-service base rates are shown in Section 6, and
14		revenue deficiency in Section 8, within Direct Exhibit EJF-11. The revenues are based
15		upon the billing determinants shown in Sections 1 & 2 of Direct Exhibit EJF-7 and the
16		cost-of-service rates shown in Section 2 of Direct Exhibit DNH-6.
17		The revenues under proposed rates are shown in Section 10, and revenue
18		deficiency in Section 12 of Direct Exhibit EJF-11. The revenues are based upon the
19		billing determinants shown in Direct Exhibit EJF-7 and the proposed rates shown in
20		Section 3 of Direct Exhibit DNH-6.

### IX. <u>CUSTOMER BILL IMPACTS</u>

### 2 Q. PLEASE DESCRIBE THE RESULTING CUSTOMER BILL IMPACTS BASED

### **3 ON THE PROPOSED RATES.**

- 4 A. The customer bill impacts are shown in Direct Exhibit EJF-12, Page 3 and summarized
- 5 below. The average customer bill impacts include proposed base rates, cost of gas,
- 6 SSIR Rider, and HEAT Program rider.

7

1

### **Table EJF-2: Customer Bill Impacts**

	Residential	Small Commercial	Large Commercial
	Average Bill	Average Bill	Average Bill
Typical Monthly Bill - Current Rates - \$	\$66.69	\$144.41	\$1,139.02
Typical Monthly Bill - Proposed Rates - \$	\$72.96	\$150.70	\$1,239.54
Difference from Current Rates - \$	\$6.27	\$6.29	\$100.52
Change from Current Rates - %	9.4%	4.4%	8.8%

8

9

### X. <u>CONCLUSION</u>

### 10 Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?

- 11 A. Yes.
- 12

#### STATE OF SOUTH DAKOTA ) ) SS COUNTY OF PENNINGTON )

I, Ethan Fritel, being first duly sworn on oath, depose and state that I am the witness identified in the foregoing prepared testimony and I am familiar with its contents, and that the facts set forth are true to the best of my knowledge, information and belief.

Ethan Fritel

Subscribed and sworn to before me this 14 day of April, 2025.



My Commission Expires:

Notary Public

My commission expires June 22, 2029