BEFORE THE NEBRASKA PUBLIC SERVICE COMMISSION

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IN THE MATTER OF THE APPLICATION OF BLACK HILLS NEBRASKA GAS, LLC, d/b/a BLACK HILLS ENERGY SEEKING APPROVAL OF A 2023 SYSTEM SAFETY & INTEGRITY RIDER

Application No. NG-112.2

NOTICE OF FILING OF PUBLIC ADVOCATE'S EXAMINATION OF THE SSIR RIDER FOR THE 2023 PROGRAM YEAR

The Public Advocate, Intervenor in the above-referenced proceeding, does hereby give notice of filing his "*Examination of the System Safety & Integrity Rider of Black Hills Nebraska Gas, LLC d/b/a Black Hills Energy for the 2023 Program Year* prepared by Blue Ridge Consulting Services on behalf of the Public Advocate and dated October 17, 2023. Eight copies of the Examination, plus an electronic copy in PDF and Microsoft Word format, are being submitted herewith in accordance with 291NAC9-004.12. Electronic and/or hard copies are being provided, as appropriate, in accordance with the service list.

Dated this 17th day of October 2022.

PUBLIC ADVOCATE

By: /s/ William F. Austin

William F. Austin, #10140 2511 S 77th Place Lincoln, Nebraska 68506 <u>Williamaustin1949@gmail.com</u>

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of "Public Advocate's Examination of SSIR Rider for the 2023 Program Year" was served electronically on this 17th day of October 2022:

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<u>/s/ William F. Austin</u>

William F. Austin



Before the Nebraska Public Service Commission Docket No. NG-112.2

Examination of the System Safety and Integrity Rider of Black Hills Nebraska Gas, LLC d/b/a Black Hills Energy for the 2023 Program Year

on behalf of the Nebraska Public Advocate

October 17, 2022

Prepared by Blue Ridge Consulting Services, Inc. 114 Knightsridge Road Travelers Rest, SC 29690 (864) 420-8084

NPSC Received 10/17/2022

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DISCLAIMERS

In the context of this report, Blue Ridge Consulting Services, Inc. ("Blue Ridge") intends the words *audit* and *examination* as they are commonly understood in the utility regulatory environment: as a regulatory review, a field investigation, or a means of determining the appropriateness of a financial presentation for regulatory purposes. The word *audit*, for example, is not intended in its precise accounting sense as an examination and verification of booked numbers and related source documents for financial reporting purposes. Neither is the term *audit* in this case an analysis of financial statement presentation in accordance with the standards established by the American Institute of Certified Public Accountants (AICPA) and the Financial Accounting Standards Board (FASB). The reader should distinguish regulatory reviews, such as those that this report's authoring firm, Blue Ridge Consulting Services, Inc. ("Blue Ridge") performs, from financial audits performed by independent certified public accountants.

This document and the opinions, analyses, evaluations, and recommendations are for the sole use and benefit of the contracting parties. Blue Ridge intends no third-party beneficiaries, and therefore, assumes no liability whatsoever to third parties for any defect, deficiency, error, or omission in any statement contained in or in any way related to this document or the services provided.

Blue Ridge prepared this report based in part on information not within its control. While Blue Ridge believes the information provided herein is reliable, the firm does not guarantee the accuracy of the information it has relied upon.

ORGANIZATION OF BLUE RIDGE'S REPORT

Blue Ridge organized this report according to the following major sections: Executive Summary; Overview of Investigation; and Observations, Findings, and Recommendations. The report also contains appendices. The Executive Summary provides summaries of the subject utility's application requests, Blue Ridge's findings and recommendations on those requests, and the effects of the recommendations.

The Overview of Investigation provides the background, purpose of the project, project scope, and information reviewed.

The Observations, Findings, and Recommendations section documents Blue Ridge's analysis and conclusions regarding the components that comprise the System Safety and Integrity Rider (SSIR) Charge. In that section, Blue Ridge addresses the eight evaluation questions identified in the Overview related to the purpose of the project:

- 1) Are the Company's processes and controls sufficient so as not to adversely affect the costs of the System Safety and Integrity Recovery Charge?
- 2) Does the application provide the information required by Commission orders and specified in the SSIR Tariff?
- 3) Are the System Safety and Integrity Projects eligible for recovery?
- 4) Is the revenue requirement associated with the Eligible System Safety and Integrity Costs requested by Black Hills Energy in compliance with Commission orders and as specified in the SSIR Tariff?
- 5) Is the System Safety and Integrity Rider Charge calculated in compliance with Commission orders and as specified in the SSIR Tariff?
- 6) Is the amount and timing of the System Safety and Integrity Rider Charge request within the limits established by the Commission?
- 7) What is the appropriate level of recovery of the System Safety and Integrity Rider Charge?
- 8) Did the Company timely file the annual surveillance filings with the required information in compliance with Commission orders?

The appendices include the background information reviewed, abbreviations and acronyms, data requests and information provided, and Blue Ridge's workpapers.

EXECUTIVE SUMMARY

On August 1, 2022, Black Hills Nebraska Gas, LLC, d/b/a Black Hills Energy (hereinafter referred to as "Black Hills Energy," "BHE," or "Company"), filed an application with the Nebraska Public Service Commission ("Commission") seeking approval to adjust the System Safety and Integrity Rider (SSIR) charge to be effective January 1, 2023, for rate areas one, two, three, and five. The Company proposes the adjusted 2023 SSIR charges to apply to rate schedules applicable to all BHE jurisdictional Residential, Commercial, and Energy Option customers. The Company's proposed SSIR charge reflects the overall SSIR charges applicable to the referenced rate schedules to cover the incremental annual revenue requirement impact of costs incurred by the Company with respect to SSIR projects as defined on Tariff Sheet Nos. 127 through 131. These eligible projects were not included in the rate base calculation in the rate review for Nebraska assets in Commission Application No. NG-109. Each of the SSIR projects is expected to be in service and used and useful by December 31, 2023.

In its August 1, 2022, application, the Company sought approval of the jurisdictional revenue requirements of \$10,023,374 attributable to jurisdictional total capital projects (2021–2023) of \$131,873,208, and the jurisdictional portion of 2023 Data Infrastructure Improvement Program (DIIP) costs recoverable through the SSIR, totaling \$2,807,557. The Company's application included the 2021 true-up of \$631,121, resulting in a total requested amount to be collected in 2023 of \$13,462,052.

During its review, Blue Ridge recommended, and the Company concurred, that several adjustments should be made in the calculation of the 2023 SSIR Rider Charge. These adjustments included (1) reflect the reduction in the Nebraska tax rate in the ADIT NOL calculation, (2) correct the formula for depreciation expense, (3) use the correct Actual Customer Bills in the 2021 true-up calculation, (4) use the SSIR revenue requirements approved in NG-109 in the 2021 true-up calculation, and (5) include monthly interest for any over/under in the true-up balance.

The following table summarizes the effect of those adjustments on Revenue Requirements and true-up calculations.

Line No.	Description	As Filed		Ac	djustment	 Adjusted	Adjustment
1	Gross Plant - 13 Month Average December 31, 2023	\$	92,409,938	\$	-	\$ 92,409,938	
2	Accumulated Depreciation - 13 Month Average December 31, 2023		(2,473,501)		-	(2,473,501)	
3	ADIT Pro Rated (net of 190 and 282)		(1,688,720)		(246)	 (1,688,967)	Adj #1
4	Total Rate Base		88,247,718		246	 88,247,471	
5	Weighted Average Cost of Capital		6.71%		0.00%	6.71%	
6	Return on Transmission Plant and Transmission CWIP	\$	5,917,009	\$	(17)	\$ 5,916,993	
7	Income Tax Expense		1,529,220		(4)	1,529,215	
8	Depreciation Expense		2,050,408		(151,926)	1,898,481	Adj #2
9	Property Tax Expense		526,737		-	526,737	
10	Revenue Requirement	\$	10,023,374	\$	151,947	\$ 9,871,426	
11	DIIP Expense		2,807,557		-	2,807,557	
12	Revenue to be Collected in 2023 before True-Up	\$	12,830,931	\$	(151,947)	\$ 12,678,984	
13	Customer Bill True Up		(5,136)		205,787	200,651	Adj #3, #5
14	Revenue Requirement True up		1,183,107		162,441	1,345,548	Adj #4, #5
15	Data Improvement project true up		(546 <i>,</i> 850)		(20,343)	(567,193)	Adj #5
16	Amount to collect in 2023	\$	13,462,052	\$	195,938	\$ 13,657,990	

Table 1: 2023 Adjusted Revenue Requirement Calculation

The adjusted SSIR revenue requirements and true-up results in the following recommend 2023 SSIR Charge.

Description	Res	sidential	Со	mmercial
2021 Approved SSIR Charge-\$/Month	\$	0.62	\$	1.23
2022 Approved SSIR Charge-\$/Month	\$	2.07	\$	6.25
2023 Proposed SSIR Charge-\$/Month	\$	3.12	\$	9.69
2023 Proposed SSIR Charge-\$/Year	\$	37.41	\$	116.30

Table 2: Recommended Fixed Charge Rate by Class

Blue Ridge also had several other recommendations:

- 1. Blue Ridge recommends that the tariff be modified, regarding the timing of when the Public Advocate's examination report should be filed, removing the language "not later than sixty days after the Annual Application is filed" and replacing it with "in accordance with the procedural schedule established after the Annual Application is filed."
- 2. Regarding the Company's request for the Commission to approve 2023 SSIR proposed spending amounts by SSIR project eligible *category*. Should events outside the Company's control prohibit the planned spending on a specific project, Blue Ridge recommends that the Company may pursue these activities with their accompanying qualifications:
 - a. The Company should submit, as it has agreed to, an informational filing documenting the reason(s) the planned spending was not possible. The informational filings may be reviewed during the true-up.
 - b. The Company may use the funds on another already-identified project within the same category.
 - c. The Company may reassign those costs to new projects that were not listed among its application's 39 identified projects for 2023 if, prior to including the project in its 2023 list, upon identification of a new project for inclusion, the Company provide, in an informational filing to the Commission and the Public Advocate, the new project information, including justification, in similar fashion to what was provided in Exhibit 1 of the NG-112.2 filing. After review by the Public Advocate, and with the Commission's approval, the Company may then add the project to the year's stable of SSIR projects.
 - d. All future applications will continue to provide projected spending on a project basis by category similar to what has been provided in prior applications. Once the future application is reviewed by the Public Advocate and approved by the Commission, the Company may manage the SSIR dollars within eligible project categories as discussed above.
 - e. The Company should revise the tariff to allow transfer of funds within budget category along with the requirements discussed above.
- 3. The Company proposes, and Blue Ridge recommends, accepting the following modification to the language in the tariff:
 - ii. Details of the Project costs incurred during the previous calendar year, including an explanation of how the Project costs were managed and any deviations between budgeted and actual costs, <u>actual or projected inservice dates</u>, and the expected schedule for completion of the

previous calendar year's projects. [Emphasis added to denote new wording.]

- 4. While the Schedule E Consolidated Accumulated Depreciation balance is not used elsewhere in the model and there is no effect on revenue requirements, we recommend that the Consolidated formula be corrected to include the balance for Obsolete Infrastructure.
- 5. Blue Ridge recommends that the tariff be modified to reflect the following changes.

ebraska Natural Ga	s Tariff	Cancels Third Revised Sheet No. 129	Deleted: Second
led with the Nebras	a Public Service Commission	K 100110010010010010010010010010010010010	(Deleted. Second
	RATE SCHEDULES AND		
	SYSTEM SAFETY AND INTE	GRITY RIDER (SSIR)	
ANNUAL APPLICATION AND ANNUAL SURVEILLANCE FILINGS (Continued)	the Public Advocate shall p staff before the Commissic become effective not later th the Annual Application. If the complies with the requireme enter an order authorizing t Safety and Integrity Rider (a hearing on the Annual Application at which resent his or her report and shall act as trial an. The Commission shall issue an order to an January 1 of the year following the filing of commission finds that the Annual Application ents of this SSIR Tariff, the Commission shall he Company to collect the proposed System Charge, including any SSIR True-Up Amount ance, effective on January 1 of the following	
	of the end of each calendar the rate base separated into	n annual surveillance filing, within ninety days year. Such filings shall include calculations of o regular and SSIR components, the realized e base components, along with supporting	Deleted: s Deleted: sixty
	status of the previous cal projected in-service dates, a	e filing shall include an update regarding the endar year's SSIR Project costs, <u>actual or</u> and, <u>if any remain uncompleted at the time of</u> ryreillance filing, the expected schedule for	Deleted: current
	completion,	<u>and expected conclude for</u>	Deleted: over the remainder of the calendar year
DEFINITIONS	negative, of SSIR revenues the Eligible System Safet Company for that particular on that balance at a rate of	shall be equal to the balance, positive or at the end of a particular calendar year less y and Integrity Costs as projected by the calendar year, plus monthly interest calculated equal to the then current rate of interest on ned by the Federal Energy Regulatory	
	percentage equal to the average cost of capital gru in the jurisdictional compone balances associated with th which the System Safety a exclusive of all plant in-servir requirements approved in th plant-related ownership co investment, including depre and all taxes including inc projected jurisdictional com expenses related to the Pro the System Safety and Integ	Integrity Costs" shall mean (1) a return, at a Company's currently authorized weighted based up for taxes, on the projected increase ent of the month ending net plant in-service he Projects for the particular calendar year in nd Integrity Rider Charge shall be in effect, ze included in the determination of the revenue the Company's last general rate case; (2) the sts associated with such incremental plant ciation, accumulated deferred income taxes, ome taxes and property taxes; and (3) the ponent of the operation and maintenance jects for the particular calendar year in which prity Rider Charge shall be in effect. The d plant related costs associated with	
DATE OF ISSUE: <u>A</u> SSUED BY: Rober		EFFECTIVE DATE: January 1, 2023	Deleted: November 30 Deleted: 1

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OVERVIEW OF INVESTIGATION

BACKGROUND

On May 1, 2014, SourceGas Distribution LLC, Golden, Colorado ("SourceGas") filed an application with the Commission seeking approval to put into effect an SSIR Tariff and charge. The application requested to adjust the Customer Charge applicable to all customers served under Rate Schedule CGS (Choice Gas Service) and Rate Schedule ACGS-NSS (Agricultural Choice Gas Service—Non-Seasonal Service) to recover certain system safety and integrity costs outside the context of a general rate case.

On October 28, 2014, the Commission issued an Order approving in part SourceGas's request for an SSIR. The Commission approved the SSIR with certain modifications and conditions. In addition to providing for a more formal review process, the Order required that SourceGas file a general rate case every sixty (60) months, pay interest to ratepayers on any over-collection of SSIR revenues, and make quarterly surveillance filings. Finally, in the Order, the Commission found that should SourceGas implement the SSIR charge, the utility would not file a general rate case prior to January 1, 2017.

On October 31, 2014, SourceGas filed SourceGas Distribution's Nineteenth Revised Tariff Sheet No. 7, which reflected the addition of the Safety and Integrity Charge in SourceGas's rates effective November 1, 2014.

Following technical conferences and motions to reconsider, the SSIR was ultimately approved under the following provisions:

- 1. SourceGas must not file a general rate case prior to January 1, 2016.
- 2. A general rate case application pursuant to §66-1838 must be filed at least every sixty (60) months.
- 3. Future applications shall be filed no later than October 1 to allow for a more formalized review process and in order for a surcharge to be effective by February 1 of the following year.
- 4. All future SSIR filings will be made in the present docket.
- 5. SourceGas should file the final reconciliation calculations on or before October 1 annually.
- 6. Reconciliation calculations should include interest on any overcollection or under-collection of SSIR revenue.
- 7. SourceGas must file quarterly surveillance filings within sixty (60) days of the end of each quarter. Such filing shall include calculations of the rate base separated into regular and SSIR components, the realized rates of return on the rate base components, along with supporting calculations. Additionally, the filing should include an update regarding the status of the SSIR project costs, in service dates, and expected schedule over the ensuing duration of the SSIR.
- 8. No limit on the SSIR charge was implemented at this time. However, the Commission may impose a limit should the Commission find that the requested surcharge is of such a magnitude as to not be in the best interest of the ratepayers.
- 9. SourceGas may file an SSIR application for 2015 costs on or before November 20, 2014, with an implementation date of February 1, 2015. The filing will require a more limited review to ensure that the projects and associated costs are eligible and the calculations are accurate.

On February 12, 2016, Black Hills Energy acquired SourceGas. BHE applied for renewal of the existing SSIR.

On January 26, 2021, in Docket NG-109, the Commission entered an order approving a general rate increase for BHE and approved a stipulation reached between BHE and the Public Advocate

renewing the SSIR for a period of five years. The Stipulation included the following language related to the SSIR.

37. SSIR Renewal, Modification, and Statewide Expansion.

The Parties agree that (1) the System Safety and Integrity Rider ("SSIR") mechanism should be renewed for a period of five years, (2) the SSIR mechanism is expanded to cover safety infrastructure projects throughout all of the BH Nebraska Gas rate areas, (3) the Parties will continue to work collaboratively prior to the December 10th Technical Conference and continue collaborating prior to BH Nebraska Gas filing its 2022 SSIR application on drafting tariff language, SSIR application and audit requirements, and supporting SSIR projects based on measurable criteria that improve safety and mitigate risk, (4) modify the SSIR's definition of eligible projects, categories, and criteria as will be agreed upon between the Parties subject to further agreed-upon refinement of the SSIR requirements over the next month and continue the collaboration prior to BH Nebraska Gas filing its 2022 SSIR Application, and (5) unless otherwise permitted by the Commission, the cost of installation or replacement of natural gas pipeline intended primarily to facilitate customer growth requirements, whether for identified or expected customers, will not be eligible for recovery under the SSIR tariff and other similar riders that permit the recovery of investment in capital investment projects that focus on customer safety.

The Parties agree that BH Nebraska Gas may include within the 2021 SSIR Projects the cost of those projects identified in Hearing Exhibit No. BH-JB-2 (Mr. Bennett's Direct Testimony Exhibit No. JLB-5 -2021 SSIR Application), with the exception of the four reliability pipeline looping projects identified by the Public Advocate in the Answer testimony of Charles Fijnvandraat. The Parties agree that the cost of the Data Integrity Improvement Program ("DIIP") may be recovered through the SSIR Charge.

The Parties agree to develop mutually acceptable criteria to more accurately define shallow pipe and obsolete pipe replacements and to establish a defensible basis and measurable criteria to demonstrate which, if any, reliability projects should be SSIR eligible. The Parties commit to finalizing the necessary criteria prior to the filing of the BH Nebraska Gas 2022 SSIR Application.¹

The SSIR Tariff was updated to reflect the Commission's order following the rate case. Effective March 1, 2021, the tariff was modified to reflect the mutually acceptable criteria to more accurately define shallow pipe and obsolete pipe replacements and to establish a defensible basis and measurable criteria to demonstrate which, if any, reliability projects should be SSIR eligible.²

The SSIR Tariff also requires the Public Advocate to conduct an examination of the Annual Application. The Public Advocate chose Blue Ridge to support the examination.

¹ NG-109 Joint Stipulation and Agreement of Settlement between Black Hills Nebraska, LLC d/b/a Blue Hills Energy and the Public Advocate of Nebraska (October 28, 2020), pages 15–16. ² BHE SSIR Tariff, Second Revised Sheet Nos. 129 and 129.1 (March 1, 2021).

PURPOSE OF PROJECT

The purpose of the project is to comply with the assessment language of the tariff:

The Public Advocate shall conduct an examination of the Annual Application. The Public Advocate shall cause an examination to be made of the Annual Application to confirm that the under lying actual and projected Eligible System Safety and Integrity Costs ("SSIR revenue requirement") are in accordance with this SSIR Tariff and to confirm proper calculation of the SSIR True-Up Amount and the Deferred SSIR Balance. The Commission shall require a report regarding such examination to be prepared and filed by the Public Advocate with the Commission not later than sixty days after the Annual Application is filed. No other revenue requirement or rate making issue shall be examined in consideration of the Annual Application unless the consideration of such affects the determination of the validity of the System Safety and Integrity Rider Charge.³

Blue Ridge recommends that the tariff be modified, regarding the timing of when the Public Advocate's examination report should be filed, removing the language "not later than sixty days after the Annual Application is filed," and replacing it with "in accordance with the procedural schedule established after the Annual Application is filed."

Part of the review is to confirm that the underlying actual and projected Eligible System Safety and Integrity Costs ("SSIR revenue requirement") are in accordance with the SSIR Tariff and to confirm proper calculation of the SSIR True-Up Amount and the Deferred SSIR Balance. Therefore, this examination answers these specific evaluation questions:

1. Are the Company's processes and controls sufficient so as not to adversely affect the costs of the System Safety and Integrity Recovery Charge?

This task focuses on gaining an understanding of the Company's processes and controls that affect the plant balances and expense categories within the SSIR. The goal is to determine whether those cost controls are adequate and not unreasonable in their effect on the underlying costs and calculation of the proposed SSIR cost recovery charge rates and rate schedules.

2. Does the application provide the information required by Commission orders and specified in the SSIR Tariff?

This task evaluates whether BHE's annual application was filed by August 1 and provides the required information, specifically these items identified in the tariff:

- Pertinent information and supporting data related to Eligible System Safety and Integrity Costs, including, at a minimum, Project description and scope, Project costs, and projected in-service dates for the Projects budgeted to be completed in the upcoming calendar year
- Details of the Projects costs incurred during the previous calendar year, including an explanation of how the Project costs were managed and any deviations between budgeted and actual costs
- The calculation of the SSIR True-Up Amount, if any

³ BHE SSIR Tariff, Second Revised Sheet No. 127, B (January 1, 2022).

• The calculation of the Deferred SSIR Balance, if any⁴

In addition, during this task, Blue Ridge evaluates the requirement that as part of its analysis, the Company shall identify and describe the proposed SSIR Projects that are for high-risk gas infrastructure by providing its risk assessment for each such Project, including, if applicable, the probability of failure, the consequences of failure for the SSIR Project, and how the Company prioritized the SSIR Project for which it seeks recovery.⁵

3. Are the System Safety and Integrity Projects eligible for recovery?

This task evaluates each of the Projects that BHE has included within its application against Commission orders and the SSIR Tariff to determine eligibility for recovery through the SSIR. Specific transactional testing criteria will be established to validate eligibility of the project and its associated costs.

The specific criteria for eligibility as an SSIR Project are set out in the SSIR Tariff at Third Revised Sheet Nos. 129–129.1 and generally include projects involving the Company's Transportation Integrity Management Program and the Company's Distribution Integrity Management Program as well as compliance with PHMSA rules and regulations and facility relocations required by entities possessing the power of eminent domain.

The SSIR Tariff further states that projects eligible for recovery under the SSIR Tariff generally include these types⁶:

- i. Replacement of Bare Steel Distribution Mains
- ii. Replacement of High-Risk Transmission Pipelines
- iii. Replacement of Service Lines
- iv. Installation of Barricades to Protect At-Risk Meter, Regulator, and Valve settings
- v. Cathodic Protection and Corrosion Prevention
- vi. Town Boarder Station Upgrades or Replacements
- vii. Top of Ground, Shallow (less than three feet cover and posing risk) and Exposed Pipe
- viii. At-Risk Meter Relocations and Inside Meter Relocations with Replacement of Meter as part of a capital activity
- ix. Obsolete Infrastructure (e.g., PVC Pipe posing risk or the removal of which provides ancillary benefits supported by risk model analysis and results)
- x. Required Facility Relocations
- xi. Data Infrastructure Improvement Program

The SSIR Tariff further provides that the Company shall use three distinct risk models corresponding to the TIMP, DIMP, and the At-Risk Meter Relocation (ARMR) Program. All three models shall use objective and external factors and provide scores that correlate to proactive analysis of system risk.

In addition to the risk models, the Company shall consider other criteria, such as the availability of internal and external crews; project management constraints; local economic development plans; customer inconvenience and impact; other specific regulatory requirements; threat assessment; corrosion control analysis; pipeline vintage; pipeline material; pipeline design and class location; pipeline configuration and segmentation;

⁴ BHE SSIR Tariff, Second Revised Sheet No. 127, A, i–iv (January 1, 2022).

⁵ BHE SSIR Tariff, Second Revised Sheet No. 130, Definitions, C (January 1, 2022).

⁶ BHE SSIR Tariff, First Revised Sheet No. 129.1, Definitions, C (January 1, 2022).

pipeline system constraints; pipeline replacement history; population density; pipeline maintenance and internal inspection history; pipeline piggability; existence and reliability of pipeline asset and testing records; pipeline leakage and other incident history; subject matter expert knowledge; Project timeframe; weather and climate constraints on the construction season; permitting constraints; probability of pipeline testing failures and dewatering constraints; service outage management; and pipeline source of supply and availability of alternate gas supply.

As part of the analysis, the Company shall identify and describe the proposed SSIR Projects that are for high-risk gas infrastructure by providing its risk assessment for each such SSIR Project, including, if applicable, the probability of failure, the consequences of failure for the SSIR Project, and how the Company prioritized the SSIR Project for which it seeks recovery.⁷

4. Is the revenue requirement associated with the Eligible System Safety and Integrity Costs requested by BHE in compliance with Commission orders and as specified in the SSIR Tariff?

This task reviews the components and calculations used by BHE to determine its revenue requirement associated with recovery of the Eligible System Safety and Integrity Costs against what is required in Commission orders and the SSIR Tariff.

Specifically, the SSIR Tariff states that Eligible System Safety and Integrity Costs means (1) a return, at a percentage equal to the Company's currently authorized weighted average cost of capital grossed up for taxes, on the projected increase in the jurisdictional component of the month ending net plant in-service balances associated with the Projects for the particular calendar year in which the System Safety and Integrity Rider Charge shall be in effect, exclusive of all plant in-service included in the determination of the revenue requirement approved in the Company's last general rate case; (2) the plant-related ownership costs associated with such incremental plant investment, including depreciation, accumulated deferred income taxes, and all taxes including income taxes and property taxes; and (3) the projected jurisdictional component of the operation and maintenance expenses related to the Projects for the particular calendar year in which the System Safety and Integrity Rider Charge shall be in effect.⁸

The return and income taxes and plant related costs associated with improvements or upgrades to facilities, made at the discretion of the Company to extend service or for future growth that is not specifically required by statute or regulation, shall be excluded from Eligible System Safety and Integrity Costs.⁹

5. Is the System Safety and Integrity Rider Charge calculated in compliance with Commission orders and as specified in the SSIR Tariff?

This task reviews the components and calculations of the System Safety and Integrity Rider Charge to determine whether they comply with Commission orders and as specified in the SSIR Tariff.

Specifically, the System Safety and Integrity Rider Charge shall be equal to the Eligible System Safety and Integrity Costs, plus or minus the SSIR True-Up Amount, plus or minus the Deferred SSIR Balance, multiplied by the customer class allocation basis authorized by the

⁷ BHE SSIR Tariff, Second Revised Sheet Nos. 129.1 and 130, Definitions, C (January 1, 2022).

⁸ BHE SSIR Tariff, Second Revised Sheet No. 128, Definitions, B (January 1, 2022).

⁹ BHE SSIR Tariff, Second Revised Sheet No. 128–129, Definitions, B (January 1, 2022).

Commission to determine the class cost of service in the Company's most recent general rate case, divided by the applicable number of bills for the particular customer class, as follows:

System Safety and Integrity Rider Charge = ((A \pm B \pm C) * D) / E

Where:

- A = Eligible System and Safety and Integrity Costs
- B = SSIR True-Up Amount
- C = Deferred SSIR Balance
- D = Customer class allocation basis authorized by the Commission to determine the class cost of service in the Company's most recent general rate case
- E = Applicable number of bills for the particular customer class¹⁰

The SSIR True-Up Amount shall be equal to the difference, positive or negative, between the Eligible System Safety and Integrity Costs as projected for a particular calendar year and the actual Eligible System Safety and Integrity Costs incurred by the Company for that particular calendar year, plus monthly interest calculated on that difference at a rate equal to the then current rate of interest on pipeline refunds established by the Federal Energy Regulatory Commission.¹¹

The Deferred SSIR Balance shall be equal to the balance, positive or negative, of SSIR revenues at the end of a particular calendar year less the Eligible System Safety and Integrity Costs as projected by the Company for that particular calendar year, plus monthly interest calculated on that balance at a rate equal to the then current rate of interest on pipeline refunds established by the Federal Energy Regulatory Commission.¹²

The calculated rate shall be an adjustment to the Customer Charge applicable to the Company's Jurisdictional Residential, Commercial, and Commercial—EO customers.¹³

Whenever the Company implements changes in base rates as a result of a final Commission order in a general rate case setting new rates based on approved revenue requirements, the Company shall simultaneously adjust the SSIR to remove all costs that have been included in base rates.¹⁴

6. Is the amount and timing of the System Safety and Integrity Rider Charge request within the limits established by the Commission?

This task compares the amount and timing of BHE's System Safety and Integrity Rider Charge request to the limits established by the Commission.

¹⁰ BHE SSIR Tariff, Second Revised, Sheet Nos. 130–131, Section "SSIR Adjustment Calculation," A (January 1, 2022).

¹¹ BHE SSIR Tariff, Second Revised Sheet No. 130, Definitions, D (January 1, 2022).

¹² BHE SSIR Tariff, Second Revised Sheet No. 128, Definitions, Item A (January 1, 2022).

¹³ BHE SSIR Tariff, Second Revised , Sheet No. 131, Section "SSIR Adjustment Calculation," B (January 1, 2022). ¹⁴ BHE SSIR Tariff, Second Revised , Sheet No. 131, Section ""SSIR Adjustment with Changes in Base Rates, (January 1, 2022).

Each proposed revision in the System Safety and Integrity Rider Charge shall be accomplished by filing an application by August 1 of each year to take effect on the following January 1 (the "Annual Application").¹⁵

The Company shall not make effective any revision to the System Safety and Integrity Rider Charge that includes the addition of new SSIR Projects not previously recovered through the SSIR Charge if the Company has not had a general rate proceeding decided or dismissed by issuance of a Commission order within sixty months immediately preceding the date upon which the revision to the System Safety and Integrity Rider Charge otherwise would take effect.¹⁶

The Company shall continue to make annual revisions to the SSIR Charge to reflect appropriate true-ups and adjustments to the calculations, consistent with the other provisions contained in the System Safety and Integrity Rider Tariff, for each year that the Company is allowed to collect the SSIR Charge.¹⁷

7. What is the appropriate level of recovery of the System Safety and Integrity Rider Charge?

This task accumulates Blue Ridge's recommended adjustments and provides a revised level of recovery for the Commission's consideration, if necessary.

8. Did the Company timely file the annual surveillance filing with the required information in compliance with Commission orders?

This task confirms that BHE timely filed the annual surveillance filings with the required information.

Specifically, BHE must file annual surveillance filings within sixty (60) days of the end of the calendar year. The filings shall include calculations of the rate base separated into regular and SSIR components, the realized rates of return on the rate base components and supporting calculations. Additionally, the filing shall include an update regarding the status of the current calendar year's SSIR project costs, projected in-service dates, and expected schedule over the remainder of the calendar year.¹⁸

PROJECT SCOPE

The project scope includes the application filed by Black Hills Energy on August 1, 2022: *Re: In the Matter of the Application of Black Hills Nebraska Gas, LLC d/b/a Black Hills Energy seeking approval of a 2023 System Safety & Integrity Rider Charge,* Docket No. NG-112.2. The Application includes the 2023 proposed projects and the reconciliation calculations for the 2020 Projects.

¹⁵ BHE SSIR Tariff, Second Revised, Sheet No. 127, Section "Annual Application and Quarterly Surveillance Filings," A. (January 1, 2022).

¹⁶ BHE SSIR Tariff, Second Revised, Sheet No. 131, Section ""SSIR Adjustment with Changes in Base Rates, (January 1, 2022).

¹⁷ BHE SSIR Tariff, Second Revised, Sheet No. 131, Section ""SSIR Adjustment with Changes in Base Rates, (January 1, 2022).

¹⁸BHE SSIR Tariff, Second Revised Sheet No. 128, Item D (January 1, 2022).

INFORMATION REVIEWED

Blue Ridge reviewed the following information and has included electronic copies within Appendix A:

- 1. State Natural Gas Regulation Act §§ 66-1810, 66-1825, and 66-1838
- 2. Nebraska Administrative Code Title 291, Chapter 9—Nebraska Public Service Commission
- 3. Application No. NG-109 [Last Base Rate Case and 2021 SSIR Projects]
 - a. Hearing Exhibit No. BH-JB- 2 (Mr. Bennett's Direct Testimony Exhibit No. JLB-5-2021 SSIR Application)
 - b. Public Advocate Answer Testimony of Charles Fijnvandraat, page 10 [excluded four reliability pipeline looping projects

Table 3: NG-109 Excluded Reliability Pipeline Looping Projects¹⁹

Line				Project Category /	In Service	Total Company
No.	Project #	Project Name	Criteria	Account Allocator	Date	Project Amount
87	FP.10063929	10063929-Giles to Valaretta Drive (system loop)	Reliability	Loops	21-Aug	\$127,760
88	FP.10064514	10064514-Hwy 31 & Giles DRS (system loop/bolster)	Reliability	Loops	21-Aug	\$120,000
89	FP.10072085	10072085-Columbus Capacity Loop	Reliability	Loops	21-Aug	\$40,600
90	FP.10072131	10072131-David City Capacity Loop	Reliability	Loops	21-Aug	\$121,000

- c. Joint Stipulation and Agreement of Settlement Between Black Hills Nebraska Gas, LLC d/b/a Black Hills Energy and the Public Advocate of Nebraska (October 28, 2020)
- d. Order Approving Stipulation and Settlement Agreement (January 26, 2021)
- 4. Black Hills Nebraska Gas, LLC d/b/a Black Hills Energy, Nebraska Natural Gas Tariff, downloaded on August 1, 2022, from the Nebraska Public Service Commission web page
- 5. Application NG 112.1 (2022 SSIR Projects)
 - a. BHE-1 Black Hills 2022 SSIR Application
 - b. BHE-2 Black Hills 2022 SSIR Application Model
 - c. Public Advocates report on the Examination of the System Safety and Integrity Rider of Black Hills Nebraska Gas, LLC d/b/a Black Hills Energy for the 2022 Program Year (October 29, 2021)
 - d. BHE-3 2022 Black Hill's response to Public Advocates Report
 - e. Blue Ridge's 11/3/2021 Supplement to Report Filed on 10/29/2021, ERT Issue Update
 - f. Order Approving 2022 SSIR Charge (December 14, 2021)
- 6. Application No. NG-112.2 (2023 SSIR Projects)
 - a. Black Hills 2023 SSIR Application and Model
 - b. Updated Exhibit 2-2023 SSIR Model (September 25, 2022)

During the audit process, Blue Ridge requested and was provided additional information. A list of the data requested is included as Appendix C. Electronic copies of the information obtained is also provided with this report.

¹⁹ NG-109, Exhibit JLB-5, page 70.

OBSERVATIONS, FINDINGS, AND RECOMMENDATIONS

This section documents Blue Ridge's analysis regarding these System Safety and Integrity Rider and the evaluation questions identified under the Purpose of the Project subsection:

- 1. Are the Company's processes and controls sufficient so as not to adversely affect the costs of the System Safety and Integrity Recovery Charge?
- 2. Does the application provide the information required by Commission orders and specified in the SSIR Tariff?
- 3. Are the System Safety and Integrity Projects eligible for recovery?
- 4. Is the revenue requirement associated with the Eligible System Safety and Integrity Costs requested by BHE in compliance with Commission orders and as specified in the SSIR Tariff?
- 5. Is the System Safety and Integrity Rider Charge calculated in compliance with Commission orders and as specified in the SSIR Tariff?
- 6. Is the amount and timing of the System Safety and Integrity Rider Charge request within the limits established by the Commission?
- 7. What is the appropriate level of recovery of the System Safety and Integrity Rider Charge?
- 8. Did the Company timely file the annual surveillance filing with the required information in compliance with Commission orders?

1. PROCESSES AND CONTROLS

1. Are the Company's processes and controls sufficient so as to not adversely affect the costs of the System Safety and Integrity Recovery Charge?

This task focuses on gaining an understanding of the Company's processes and controls that affect the plant balances and expense categories within the SSIR. The goal is to determine whether those cost controls are adequate and not unreasonable in their effect on the underlying costs and calculation of the proposed SSIR cost recovery charge rates and rate schedules.

To address this task, Blue Ridge first reviewed the work performed in its examination in the several audit reports submitted under Docket NG-0078, which preceded and informed the NG-112 renewal. Blue Ridge also requested and received policies and procedures for the identification and categorization of SSIR projects as well as the development of the SSIR.²⁰ The Company confirmed that no updates were made in 2022 to policies and procedures for the identification and categorization of SSIR projects or for the development of the SSIR.²¹

The Company states that eligible projects must meet one of these criteria: (1) complying with TIMP, (2) complying with DIMP, (3) complying with PHMSA regulations, and (4) facility relocations over \$20,000.

In addition, the SSIR Application is broken down into these categories:

- 1. Replacement of Bare Steel Distribution
- 2. Replacement of Transmission pipelines
- 3. Barricades
- 4. Cathodic Prevention and Corrosion Prevention

²⁰ BHE response to SSIR 2022 PA-18.

²¹ BHE response to SSIR 2023 PA-8.

- 5. Town Border Stations
- 6. Top-of-Ground, Span, Shallow, and Exposed Pipe Replacement
- 7. MEGA Rule Projects
- 8. Meter Relocations
- 9. Obsolete Infrastructure
- 10. Obsolete Pipe Replacement
- 11. Facility Relocations Projects
- 12. Data Infrastructure Improvement Program

The Company explained that the SSIR projects are developed through a collaboration among the Company's Pipeline System Integrity Engineers, BH Nebraska Operations, and Regulatory and Finance teams. Using historical records in conjunction with previous years' data, risk analysis and scoring is performed using the Company's risk models. From the results of this analysis, pipeline segments are scored, and at-risk meter scoring is developed through a Geospatial Information System (GIS). These results are then validated and reviewed through state-level meetings. Projects are then developed and run through a segmentation process to address the highest consequence first. It is through these steps that the Pipeline System Integrity team works with Operations to identify and develop SSIR Projects. The results of the process are reviewed through meetings annually.

The Company's processes and controls were found to be adequate and not unreasonable.

2. REQUIRED INFORMATION

2. Does the application provide the information required by Commission orders and specified in the SSIR Tariff?

This task evaluates whether BHE's annual application was filed by August 1 and provides the required information.

<u>Requirement</u>: BHE filed its annual application on or before August 1.²²

Blue Ridge found that the Company filed its application on August 1, 2022.

<u>Requirement</u>: The approved SSIR Tariff requires that the Annual Report Pertinent information and supporting data related to Eligible System Safety and Integrity Costs, including, at a minimum, Project description and scope, Project costs, and projected in-service dates for the Projects budgeted to be completed in the upcoming calendar year.²³

The Company's Application includes 39 projects (30 capital projects and nine DIIP projects) for 2023. Blue Ridge found that the Company provided project descriptions, scope, and estimated project costs, for the 30 capital projects and nine DIIP projects.

The Company provided projected in-service dates for the 30 capital projects with its application. The nine DIIP projects did not include in-service dates within the application, but the Company provided additional information upon request.²⁴ In-service dates for these types of projects tend to be variable and are frequently phased into service as specific blocks of work become used and useful. The data related to the project will be readily available for employees to use while work continues

²² BHE SSIR Tariff, Second Revised Sheet No. 127, A, i-iv (January 1, 2022).

²³ BHE SSIR Tariff, Second Revised Sheet No. 127, A, i-iv (January 1, 2022).

²⁴ BHE response to SSIR 2023 PA-3.

on the remainder of the project. The estimated completion dates for the DIIP projects are provided below:

- Transmission/Gathering TVC Records—12/31/23
- Gas Service Card Mapping—12/31/23
- Distribution Main & Service Centerline Survey—12/31/23

The DIIP projects are multi-year and will be continued from a prior year. Blue Ridge was informed during a Technical Session that the DIIP projects are expected to be complete by 2030 with a few million dollars spent each year.²⁵

While the Company did provide projected spending on a project level in its application, it is requesting that the Commission approve 2023 SSIR proposed spending by SSIR project eligible category rather than by project. The Company argues that inflation and historical events never before seen or experienced have resulted in significant challenges for the Company. These events include Storm Uri and Global Pandemic/Supply Chain. The Company believes the ability to manage SSIR dollars within an eligible project category, rather than on an individual project basis, allows for flexibility to adjust spend or add projects, when impacted by significant events outside the Company's control. The Company proposes the following 2023 SSIR Project Budgets by Project Category. ²⁶

Project Category	In-Service Date	Total Jurisdictional		Non Jurisdictional
ARMR	Dec-23	\$23,856,677	\$22,693,996	\$1,162,681
Bare Steel	Nov-23	\$2,030,691	\$1,689,352	\$341,339
Cathodic Protection	Nov-23	\$100,000	\$81,853	\$18,147
Obsolete Infrastructure	Nov-23	\$8,247,515	\$7,068,842	\$1,178,673
TOG/Shallow/Exposed	Nov-23	\$14,409,186	\$11,987,145	\$2,422,041
Town Border Stations	Nov-23	\$1,045,000	\$766,421	\$278,579
MEGA Rule (TIMP)	Nov-23	\$515,000	\$287,710	\$227,290
DIIP	Dec-23	\$3,258,210	\$3,258,210	\$0
Total		\$53,462,279	\$47,833,529	\$5,628,750

Table 4: BHE Proposed 2023 SSIR Project Budgets by Project Category

The Company's Application includes a request for the Commission to approve the 2023 SSIR proposed spending amounts by SSIR project eligible *category*. Blue Ridge understands the Company's proposal to allow spending reallocation within, but not across, categories due to events outside the Company's control. We considered two separate scenarios.

First, should events outside the Company's control prohibit the planned spending on a specific project, we recommend that the Company should be allowed to use the funds on another alreadyidentified project within the same category. In this case, Blue Ridge recommends that the Company submit, as it has agreed to,²⁷ an informational filing documenting the reason the planned spending was not possible. The informational filings could be reviewed during the true-up.

²⁵ Technical Session held on September 16, 2022.

²⁶ NG-112.2, BHE SSIR Application (August 1, 2022), SSIR Exhibit 1-2023 SSIR Application Narrative, page 8–10.

²⁷ BHE response to SSIR 2023 PA-5(b).

Second, should events outside the Company's control prohibit the planned spending on a specific project, the Company also proposes possibly reassigning those costs to new projects that were not listed among its application's 39 identified projects for 2023. The Company provided an example to explain such a situation:

The Company has provided detail on seven Top of Ground ("TOG"), Shallow, and Exposed Pipe 2023 SSIR projects for a total jurisdictional spend of approximately \$12 million. As an example, in the event the Company is unable to complete Project X, those dollars could be reassigned to Project Y, increasing the amount of Project Y TOG to be replaced, **or assigned to a new Project Z** that falls within the same TOG/Shallow/Exposed Pipe SSIR eligible product category. (Emphasis added.)²⁸

Blue Ridge understands the example signifying "Project Y" as one already identified for 2023 in its application and "Project Z" as one not identified in its application but similar in category and qualification.

In this case, again, Blue Ridge recommends that the Company submit an informational filing documenting the reason the planned spending was not possible. Additionally, because the Public Advocate would not have opportunity to review the new (Project Z-type) projects during its initial review of all 2023 projects, Blue Ridge recommends that, prior to including the project in its 2023 list, the Company immediately (once the project is identified for inclusion) provide the new project information, including justification, in similar fashion to what was provided in Exhibit 1 of the NG-112.2 filing in an informational filing to the Commission and the Public Advocate. After review by the Public Advocate, and with the Commission's approval, the Company may then add it to the year's stable of SSIR projects.

All future applications would continue to provide projected spending on a project basis by category similar to what has been provided in prior applications. Once the future application is reviewed by the Public Advocate and approved by Commission, the Company may manage the SSIR dollars within eligible project categories as discussed above.

Blue Ridge also recommends that the tariff be revised to allow transfer of funds within budget categories along with the requirements discussed above.

<u>Requirement</u>: The Annual Application shall include details of the Project costs incurred during the previous calendar year, including an explanation of how the Project costs were managed and any deviations between budgeted and actual costs.²⁹

The Company proposes, and Blue Ridge recommends, accepting the following modification to the language in the tariff:

ii. Details of the Project costs incurred during the previous calendar year, including an explanation of how the Project costs were managed and any deviations between budgeted and actual costs, <u>actual or projected in-service dates, and the expected</u> <u>schedule for completion of the previous calendar year's projects</u>.³⁰

Exhibit 3 of the Company's Application included a budget to actual comparison of the 2021 SSIR Projects to the budgeted amounts in NG-109. The Company's forecasted jurisdictional spend for 2021

 ²⁸ NG-112.2, BHE SSIR Application (August 1, 2022), SSIR Exhibit 1-2023 SSIR Application Narrative, page 10.
 ²⁹ BHE SSIR Tariff, Second Revised Sheet No. 130, Definitions, C (January 1, 2022).

³⁰ ³⁰ NG-112.2, BHE SSIR Application (August 1, 2022), SSIR Exhibit 4 – Nebraska Consolidated Tariff_ REDLINED, Annual Application and Annual Surveillance Filings, A.ii.

was \$44,304,121 for SSIR-eligible capital projects, including O&M DIIP projects. The actual 2021 jurisdictional spend was \$1,301,854 less than the as-filed proposed spend. The following table shows the 2021 forecast vs. actual variances by category.

	NG-109		
Category	Forecast	Actual	Variance
ARMR	\$21,735,226	\$25,881,019	(\$4,145,793)
Bare Steel	\$1,901,747	\$1,536,310	\$365,437
Charts	\$11,624	\$8,924	\$2,700
Facility Relocations	\$0	\$1,352,226	(\$1,352,226)
Loops	\$0	\$0	\$0
Meter Install	\$3,295,440	\$2,366,318	\$929,122
PVC	\$1,352,088	\$1,559,133	(\$207,045)
TOG/Shallow/Exposed	\$14,011,251	\$9,027,999	\$4,983,252
Town Border Stations	\$1,131,697	\$1,039,917	\$91,780
Total SSIR Capital Expenditures	\$43,439,073	\$42,771,846	\$667,227
DIIP	\$865,048	\$230,421	\$634,627
Total SSIR Recoverable Expenditures	\$44,304,121	\$43,002,267	\$1,301,854

The Company explained the following significant variances:

- Bare Steel—Replacement of Bare Steel Distribution Mains SSIR Project Category jurisdictional spend was \$365,437 less than original projected budget amounts due to lack of interest from contractors to complete the work based on the level of uncertainty and complexity.
- Town Boarder Station—Actual Town Boarder Station Upgrades and Replacements SSIR Project Category jurisdictional spend was \$91,780 less than original projected budget amounts
- TOG, Exposed and Shallow Main—TOG, Shallow, and Exposed Pipe SSIR Project Category jurisdictional spend was \$4,983,252 less than original projected jurisdictional budget amounts.
- ARMR—Actual At-Risk Meter Relocation SSIR Project Category spend exceeded original projected jurisdictional budget amounts by \$4,145,793. Additional dollars were spent on this program to make up the forecasted underspend in other program categories.
- Obsolete Infrastructure—Obsolete Infrastructure SSIR Project Category jurisdictional spend was \$724,777 less than original projected jurisdictional budget amounts.
- Facility Relocation—Required Facility Relocations SSIR Project Category jurisdictional spend totaled \$1,352,226. These Projects are included in the SSIR in an Annual SSIR Application in arrears, as projects of this type have a possibility of change, cancellations, or identification of additional qualified projects.
- DIIP—The Data Infrastructure Improvement Program SSIR Project Category jurisdictional spend was \$634,627 less than original projected budget amounts. BH Nebraska Gas experienced challenges during 2021 due to Storm Uri which delayed the start of the gas service card mapping project, followed by the upgrade of the ESRI

Geographic Information System (GIS), which caused technology slowdowns that delayed the project.³¹

Blue Ridge found that the Company's explanation of how the Project costs were managed and any deviations between budgeted and actual costs for the 2021 SSIR Projects are not unreasonable.

Requirement: The Annual Application shall include the calculation of the SSIR True-Up Amount, if any. ³²

Blue Ridge found that the Company's Application includes the calculation of the SSIR True-Up Amount from the 2021 projects and is consistent with the methodology included in the Company's NG-109 application and the SSIR approved by the Commission.³³. See further discussion in Section 5. System Safety and Integrity Rider Charge Calculation for further information.

<u>Requirement</u>: The Annual Application shall include the Calculation of the Deferred SSIR Balance, if any.³⁴

Blue Ridge found that the Company's Application includes the calculation of the Deferred SSIR Balance from the 2021 projects consistent with the methodology model approved in NG-109. For further information, see discussion in Section 5, System Safety and Integrity Rider Charge Calculation.

<u>Requirement</u>: As part of its analysis, the Company shall identify and describe the proposed SSIR Projects that are for high-risk gas infrastructure by providing its risk assessment for each such Project, including, if applicable, the probability of failure, the consequences of failure for the Project, and how the Company prioritized the SSIR Project for which it seeks recovery.³⁵

Blue Ridge found, as part of our Project testing discussed in the Eligibility of Projects section of this report, the Company provided the required information on the 39 projects included within the Company's Application or explained alternatives used to identify and rank the projects.

3. ELIGIBILITY OF PROJECTS

3) Are the System Safety and Integrity Projects eligible for recovery?

This task evaluates each of the Projects, included within BHE's application, against Commission orders and the SSIR Tariff to determine eligibility for recovery through the SSIR. Specific transactional testing criteria were established to validate eligibility of the projects and their associated costs. This section also summarizes testing completed to confirm specific requirements addressed in other sections, such as required information and the exclusion of betterments.

<u>Requirement</u>: As stated in the SSIR Tariff, Eligible System Safety and Integrity Projects are one or more of the following:

³¹ NG-112.2, BHE SSIR Application (August 1, 2022), Exhibit 3 2021 SSIR Project Details.

³² BHE SSIR Tariff, Second Revised Sheet No. 127, A, i-iv (January 1, 2022).

³³ NG-109, Hearing Exhibit No. BH-JB- 2 (Mr. Bennett's Direct Testimony Exhibit No. JLB-5-2021 SSIR Application), Exhibit JLB-5, 2021, Exhibit 2, Table B, Order Approving Stipulation and Settlement Agreement (January 26, 2021), page 14 and Joint Stipulation and Agreement of Settlement Between Black Hills Nebraska Gas, LLC D/B/A Black Hills Energy and the Public Advocate of Nebraska (October 28, 2020), page 15.
³⁴ BHE SSIR Tariff, Second Revised Sheet No. 127, A, i–iv (January 1, 2022).

³⁵ BHE SSIR Tariff, Second Revised Sheet No. 130, Definitions, C (January 1, 2022).

Docket No. NG-112.2

Examination of the System Safety and Integrity Rider for the 2023 Program Year of Black Hills Energy

- 1. TIMP: Projects to comply with Code of Federal Regulations Title 49 (Transportation), Part 192 (Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards), Subpart O (Gas Transmission Pipeline Integrity Management), including Projects in accordance with the Company's transmission integrity management program (TIMP) and Projects in accordance with State enforcement of Subpart O and the Company's TIMP
- 2. DIMP: Projects to comply with Code of Federal Regulations Title 49 (Transportation), Part 192 (Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards), Subpart P (Gas Distribution Pipeline Integrity Management), including Projects in accordance with the Company's distribution integrity management program (DIMP) and Projects in accordance with State enforcement of Subpart P and the Company's DIMP
- 3. PHMSA: Projects to comply with final rules and regulations of the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration that become effective on or after the filing date of the Application requesting approval of this SSIR
- 4. Relocations: Facility relocation projects with a per-Project total cost of \$20,000 or more, exclusive of all costs that have been, are being, or will be reimbursed otherwise, that are required due to construction or improvement of a highway, road, street, public way, or other public work by or on behalf of the United States, the State of Nebraska, a political subdivision of the State of Nebraska, or another entity having the power of eminent domain³⁶

The SSIR Tariff further states that the following types of projects are generally eligible for recovery under the SSIR Tariff:

- i. Replacement of Bare Steel Distribution Mains
- ii. Replacement of High-Risk Transmission Pipelines
- iii. Replacement of Service Lines
- iv. Installation of Barricades to Protect At-Risk Meter, Regulator, and Valve settings
- v. Cathodic Protection and Corrosion Prevention
- vi. Town Boarder Station Upgrades or Replacements
- vii. Top of Ground, Shallow (less than three feet cover and posing risk) and Exposed Pipe
- viii. At-Risk Meter Relocations and Inside Meter Relocations with Replacement of Meter as part of a capital activity
- ix. Obsolete Infrastructure (e.g., PVC Pipe posing risk or the removal of which provides ancillary benefits supported by risk model analysis and results)
- x. Required Facility Relocations
- xi. Data Infrastructure Improvement Program

The Company shall use three distinct risk models corresponding to the TIMP, DIMP, and the At-Risk Meter Relocation (ARMR) Program. All three models shall use objective and external factors and provide scores that correlate to proactive analysis of system risk.³⁷

In addition to the risk models, the Company shall consider other criteria, such as the availability of internal and external crews; project management constraints; local economic development plans; customer inconvenience and impact; other specific regulatory requirements; threat assessment; corrosion control analysis; pipeline vintage; pipeline

³⁶ BHE SSIR Tariff, Third Revised Sheet Nos. 129 and 129.1, Definitions, C (January 1, 2022).

³⁷ BHE SSIR Tariff, Second Revised Sheet Nos. 129 and 129.1, Definitions, C (January 1, 2022).

material; pipeline design and class location; pipeline configuration and segmentation; pipeline system constraints; pipeline replacement history; population density; pipeline maintenance and internal inspection history; pipeline piggability; existence and reliability of pipeline asset and testing records; pipeline leakage and other incident history; subject matter expert knowledge; Project timeframe; weather and climate constraints on the construction season; permitting constraints; probability of pipeline testing failures and dewatering constraints; service outage management; and pipeline source of supply and availability of alternate gas supply.³⁸

Description of Projects

The Company provided a narrative describing the 2023 SSIR Projects. The Company identified 12 types of projects, totaling \$53,462,279, and provided background, classification under the SSIR Tariff, objective criteria analyzed, project description, and the specific projects. The following list includes the 12 types of projects, number of projects, and total cost by type:

- 1. Meter Relocations—seven projects totaling \$23,856,677
- 2. Replacement of Bare Steel Distribution Main—two projects totaling \$2,030,691
- 3. MEGA Rule Projects—three projects totaling \$515,000
- 4. Town Boarder Station—six projects totaling \$1,045,000
- 5. Top of Ground (TOG), Span, Shallow, and Exposed Pipe Replacement—Seven projects totaling \$14,409,186
- 6. Obsolete Pipe Replacement—three projects totaling \$2,311,647
- 7. Obsolete Infrastructure— three projects totaling \$5,935,868
- 8. Replacement of Transmission Pipeline—no projects or costs included
- 9. Barricades—no projects or costs included
- 10. Cathodic Protection and Corrosion Prevention—one project totaling \$100,000
- 11. Required Facility Relocation Projects—no costs included
- 12. DIIP—nine projects totaling \$3,258,210

The Company's Application includes 39 (30 capital projects and nine DIIP) projects for 2023.

During discovery, the Company determined that two projects were miscategorized as DIMP rather than TIMP. The Company stated it would provide an updated model at the end of discovery. The update results in no change to the 2023 rates proposed in the original August 1, 2022, filing.³⁹

A modified excerpt from the Company's update listing the 2023 proposed projects by type is provided in the following table.⁴⁰

³⁸ BHE SSIR Tariff, Second Revised Sheet No. 130, Definitions, C (January 1, 2022).

³⁹ BHE Response to 2023 Data Request PA3(c)(i).

⁴⁰ WP Exh 2-2023 SSIR Model NG112.2-Updated Version 9.26.22, Tab Projects for Rpt.

ine No.	Project #	Project Name	Criteria	Project Category	In Service Date	Total Company Project Amount	Jurisdictional Totals	Jurisdictional Totals
1	FP.10080234	10080234 - Mega Rule - Kearney	TIMP	TIMP	Nov-23	\$ 150,000	83,799	66,20
2	FP.10080237	10080237 - Mega Rule - McCook	TIMP	TIMP	Nov-23	\$ 190,000	106,145	83,85
3	FP.10080247	10080247 - Mega Rule - Albion	TIMP	TIMP	Nov-23	\$ 175,000	97,766	77,23
4	FP.10077467	*10077467 - TOG - Holdrege 12	ТІМР	TOG/Shallow/Exposed	Nov-23	\$ 2,134,000	1,775,294	358,70
5	FP.10080280	*10080280 - Replace Shallow Main-Hwy 26 in Oshkosh	ТІМР	TOG/Shallow/Exposed	Nov-23	\$ 61,275	50,976	10,29
			Total TIMP			\$ 2,710,275	\$ 2,113,980	\$ 596,29
6	FP.10077433	10077433 - ARMR - Albion	DIMP	ARMR	Dec-23	\$ 2,350,403	2,235,853	114,55
7	FP.10077450	10077450 - ARMR - Holdrege	DIMP	ARMR	Dec-23	\$ 1,776,160	1,689,596	86,56
8	FP.10077458	10077458 - ARMR - Cozad	DIMP	ARMR	Dec-23	\$ 2,552,879	2,428,462	124,41
9	FP.10077462	10077462 - ARMR - Lincoln	DIMP	ARMR	Dec-23	\$ 11,940,431	11,358,502	581,92
10	FP.10077472	10077472 - ARMR - Benkelman	DIMP	ARMR	Dec-23	\$ 1,321,153	1,256,765	64,38
11	FP.10077480	10077480 - ARMR - Norfolk	DIMP	ARMR	Dec-23	\$ 1,061,309	1,009,586	51,72
12	FP.10077490	10077490 - ARMR - Scotts Bluff	DIMP	ARMR	Dec-23	\$ 2,854,342	2,715,232	139,11
13	FP.10077475	10077475 - Bare Steel - Norfolk	DIMP	Bare Steel	Nov-23	\$ 1,620,691	1,348,269	272,42
14	FP.10080262	10080262 - Bare Steel - Cortland, Sheridan St (SSIR)	DIMP	Bare Steel	Nov-23	\$ 410,000	341,083	68,91
15	FP.10080300	10080300 - CP Remote Monitor Unit Installs - Kearney	DIMP	Cathodic Protection	Nov-23	\$ 100,000	81,853	18,14
16	FP.10077459	10077459 - PVC- Kearney	DIMP	PVC	Nov-23	\$ 1,792,000	1,490,783	301,21
17	FP.10080240	10080240 - Sutton PVC 4" Edgar	DIMP	PVC	Nov-23		179,675	36,30
18	FP.10080242	10080242 - PVC Kearney 2	DIMP	PVC	Nov-23	\$ 303,669	252,625	51,04
19	FP.10075105N	10075105N - TOG Trans - Holdrege 9	DIMP	TOG/Shallow/Exposed	Nov-23	\$ 7,424,000	6,176,099	1,247,90
20	FP.10077453	10077453 - TOG - Holdrege 10	DIMP	TOG/Shallow/Exposed	Nov-23		3,208,801	648,34
21	FP.10080263	10080263 - Span replacement - N 35th & Superior St (SSIR)	DIMP	TOG/Shallow/Exposed	Nov-23	\$ 689,411	573,528	115,88
22	FP.10080264	10080264 - Span replacement - N 48th & Dead Man's Run (SSIR)	DIMP	TOG/Shallow/Exposed	Nov-23	. ,	51,877	10,48
23	FP.10080267	10080267 - Span replacement - 9 bridge (SSIR)	DIMP	TOG/Shallow/Exposed	Nov-23	\$ 180,993	150,570	30,42
24	FP.10077429	10077429 - TBS Replacement - Bayard	DIMP	Town Border Stations	Nov-23	\$ 170,000	124,681	45,31
25	FP.10077438	10077438 - TBS Replacement - Hays Springs	DIMP	Town Border Stations	Nov-23		124,681	45,31
26	FP.10077493	10077493 - TBS Replacement - Ewing	DIMP	Town Border Stations	Nov-23	\$ 170,000	124,681	45,31
27	FP.10077518	10077518 - TBS Replacement - Polk	DIMP	Town Border Stations	Nov-23	. ,	124,681	45,31
28		TBS Replacement - Atkinson	DIMP	Town Border Stations	Nov-23	. ,	143,016	51,98
29		TBS Replacement - Oshkosh	DIMP	Town Border Stations	Nov-23		124,681	45,31
			Total DIMP			. ,		\$ 4,242,34
30	FP.10075203N	10075203N - Chart Replacements - Omaha	Obsolete Infrastruc	ture Charts	Nov-23	. , ,	142,071	22,92
31	FP.10075255N	10075255N - Chart Replacements - Lincoln	Obsolete Infrastruc		Nov-23	. ,	142,071	22,92
32	FP.10075287N	10075287N - Chart Replacements - Scottsbluff	Obsolete Infrastruc		Nov-23	. ,	25,831	4,16
33	FP.10080298	10080298 - Chart Replacements - Kearney	Obsolete Infrastruc		Nov-23		58,981	9,51
34	FP.10063950N	10063950N - Lincoln AMI	Obsolete Infrastruc		Nov-23	. ,	1,220,094	183,86
35	FP.10075282N	10075282N - LSG ERT Upgrade - ALLIANCE	Obsolete Infrastruc		Nov-23		1,144,884	172,52
36	FP.10075283N	10075283N - LSG ERT Upgrade - SIDNEY	Obsolete Infrastruc		Nov-23	, , , -	619,914	93,41
37	FP.10075284N	10075284N - LSG ERT Upgrade - YORK	Obsolete Infrastruc		Nov-23	. ,	746,088	112,43
38	FP.10075285N	10075285N - LSG ERT Upgrade - SUTTON	Obsolete Infrastruc		Nov-23		837,880	126,26
39	FP.10077466	10077466 - 84th & O St - Remove obsolete valve	Obsolete Infrastruc		Nov-23		207,945	42,05
			Total Obsolete Infra		-		\$ 5,145,759	

Table 6: Updated 2023 Projects Sorted by Criteria and Category

Project Testing

Each 2023 Project was evaluated based on objective criteria identified as T1 through T8 in the following section. Blue Ridge summarizes its review findings regarding the criteria below each identified testing criterion.

T1 Did each Project include the Project description and scope, costs, and in-service date required by the SSIR Tariff and Commission Orders?

The Company uses a November 30 in-service date to allow for rain dates, holidays, or other outside impacts out of BHE's control that could prevent BHE from completing the project by year-end. BHE has found this practice to be successful for completing projects in the necessary time frame.⁴¹

Blue Ridge found that the Company provided the project description, scope, costs, and estimated in-service dates required by the SSIR Tariff and Commission Orders. The actual information is expected to be provided in the October 1 2023, filing.

T2 For the proposed projects that are for high-risk gas infrastructure, did the Company provide a risk assessment, including the probability of failure, the consequence of failure, and how Company prioritized the project for recovery?

Blue Ridge reviewed the project descriptions to determine if risk rankings were provided and can be evaluated once the projects are complete. We reviewed the Risk Ranking detail used for Town Border Stations (TBS) to understand the selection criteria and to review Risk Ranking scores. As a result of a technical session conducted with the Company on September 16, 2022, we were able to understand the process of how the Company prioritizes projects for inclusion in the SSIR and how the portfolio of investments is reviewed among the subject-matter experts.⁴² The process used is not unreasonable, and the process is auditable as long as the Company provides justification for project changes within each category.⁴³

Blue Ridge concludes that the Company provided risk rankings as objective criteria in the filing where appropriate and in accordance with the SSIR criteria.

T3 Does the project description align with an approved eligible System Safety and Integrity Project categories?

As stated in the SSIR Tariff, Eligible System Safety and Integrity Projects must meet one or more of the following:

- TIMP: Projects to comply with Code of Federal Regulations Title 49 (Transportation), Part 192 (Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards), Subpart O (Gas Transmission Pipeline Integrity Management), including Projects in accordance with the Company's transmission integrity management program (TIMP) and Projects in accordance with State enforcement of Subpart O and the Company's TIMP
- 2. DIMP: Projects to comply with Code of Federal Regulations Title 49 (Transportation), Part 192 (Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards), Subpart P (Gas Distribution Pipeline Integrity Management), including

⁴¹ BHE response to SSIR 2023 PA-5.

⁴² BHE response to SSIR 2022 PA-02. PA-03, PA-18, PA-24, PA-27,

⁴³ BHE response to SSIR 2022 PA-03.

Projects in accordance with the Company's distribution integrity management program (DIMP) and Projects in accordance with State enforcement of Subpart P and the Company's DIMP

- 3. PHMSA: Projects to comply with final rules and regulations of the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration that become effective on or after the filing date of the Application requesting approval of this SSIR
- 4. Relocations: Facility relocation projects with a per-Project total cost of \$20,000 or more, exclusive of all costs that have been, are being, or will be reimbursed otherwise, that are required due to construction or improvement of a highway, road, street, public way, or other public work by or on behalf of the United States, the State of Nebraska, a political subdivision of the State of Nebraska, or another entity having the power of eminent domain

The SSIR Tariff further states, generally, these types of projects are eligible for recovery under the SSIR Tariff:

- i. Replacement of Bare Steel Distribution Mains
- ii. Replacement of High-Risk Transmission Pipelines
- iii. Replacement of Service Lines
- iv. Installation of Barricades to Protect At-Risk Meter, Regulator, and Valve settings
- v. Cathodic Protection and Corrosion Prevention
- vi. Town Boarder Station Upgrades or Replacements
- vii. Top of Ground, Shallow (less than three feet cover and posing risk) and Exposed Pipe
- viii. At-Risk Meter Relocations and Inside Meter Relocations with Replacement of Meter as part of a capital activity
- ix. Obsolete Infrastructure (e.g., PVC Pipe posing risk or the removal of which provides ancillary benefits supported by risk model analysis and results)
- x. Required Facility Relocations
- xi. Data Infrastructure Improvement Program

The Company categorized the 39 projects within the 2023 Project List based on qualifications for eligibility:

During discovery, the Company determined that two projects were miscategorized as DIMP rather than TIMP. The Company provided an updated model at the end of discovery. The update results in no change to the 2023 rates proposed in the original August 1, 2022, filing.⁴⁴ The original and updated filings break down the projects by category:

- DIMP—26 projects, jurisdictional total \$39,141,850; update to 24 projects, jurisdictional total \$37,315,580
- TIMP—three projects, jurisdictional total \$287,710; update to five projects, jurisdictional total \$2,113,980
- Obsolete Infrastructure—10 projects, jurisdictional total \$5,145,759
- DIIP—nine projects, Jurisdictional total \$3,258,210

⁴⁴ BHE Response to 2023 Data Request PA3(c)(i) and Exh 2 – 2023 SSIR Model NG112.2 – Updated Version 9.26.22.

Docket No. NG-112.2

Examination of the System Safety and Integrity Rider for the 2023 Program Year of Black Hills Energy

Blue Ridge found that all the projects within the 2023 Project list align with an approved eligible SSIR category and are consistent with prior SSIR type of projects.

Three of the nine projects within the 2023 Project List are DIIP projects that had projected spending in 2023:

- 1. Transmission/Gathering Traceable, Verifiable and Complete (TVC) Records
- 2. Gas Service Card Mapping
- 3. Distribution Main & Service Centerline Survey

Data improvement project costs are incurred to improve the integrity of historical data. Improvement of historical data strengthens BHE's ability to perform risk modeling and ultimately improves BHE's ability to operate.⁴⁵ The programs included in the 2023 DIIP are prioritized to update the most critical information related to PHMSA requirements and system critical information⁴⁶ and are used to support risk ranking. The three data improvement projects are multi-year projects, where continual progress is made toward completion.⁴⁷ In summary, Blue Ridge did not find anything in the DIIP project scope that is unusual, out of the ordinary, or abnormal for the Gas industry.

T4 Did the Company properly exclude the cost of Betterments for projects that extended service or for future growth?

The SSIR Tariff states that the return and income taxes and plant-related costs associated with improvements or upgrades to facilities, made at the discretion of the Company to extend service for future growth that is not specifically required by statute or regulation, shall be excluded from Eligible System Safety and Integrity Costs.⁴⁸

The capital projects did not contain any betterments.

T5 Are the project estimates in sufficient detail, and do they include supporting documentation to support estimated costs?

The Company proposes to be allowed to manage spending within each category rather than on a project-by-project basis within each category due to external events outside its control:

Subject to the Commission's approval, the Company believes the ability to manage SSIR dollars within an eligible project category, rather than on an individual project basis, allows for flexibility to adjust spend, or add projects, when impacted by significant events outside the Company's control, such as those described above. SSIR eligible product categories are listed in the Company's Tariff, Sheet No. 129.1, Definitions, Part C System Safety and Integrity Projects, Section v.

Blue Ridge found the Company's /project estimates within each category not unreasonable and have sufficient detail to support the estimated costs.

T6 Should any of the projects, or work within the projects, have been classified as 0&M expense in accordance with Title 18 of the Code of Federal Regulations (18 CFR)?

⁴⁵ BHE Response to 2023 Data Request PA-3(e)(iv).

⁴⁶ BHE Response to 2023 Data Request PA-3(e)(i).

⁴⁷ BHE Response to 2023 Data Request PA-3(e)(iii).

⁴⁸ BHE SSIR Tariff, Second Revised Sheet No. 128–129, Definitions, B (January 1, 2022).

Blue Ridge found that, except for the DIIP projects, the Company properly classified the projects as capital. The DIIP projects are an incremental O&M expense, and Blue Ridge found the inclusion of DIIP costs as O&M expenses consistent with the approved SSIR Tariff.

T7 Is there anything in the review that indicates the project or its estimated costs should not be included in the SSIR?

Blue Ridge did not find anything that would indicate that the project or estimated costs should not be included in the SSIR.

T8 Does the project satisfy all other criteria (such as the availability of internal and external crews; project management constraints; local economic development plans; customer inconvenience and impact; other specific regulatory requirements; threat assessment; corrosion control analysis; pipeline vintage; pipeline material; pipeline design and class location; pipeline configuration and segmentation; pipeline system constraints; pipeline replacement history; population density; pipeline maintenance and internal inspection history; pipeline piggability; existence and reliability of pipeline asset and testing records; pipeline leakage and other incident history; subject matter expert knowledge; Project timeframe; weather and climate constraints on the construction season; permitting constraints; probability of pipeline testing failures and dewatering constraints; service outage management; and pipeline source of supply and availability of alternate gas supply)?

Within this audit, Blue Ridge reviewed information related to project estimates for 2023 and the actual project cost for 2021. The 2023 project estimates contain sufficient detail as to reasons and basis for project selection. For the 2021 projects, the variance explanations, along with any changes in the forecasted in-service dates, identified any manpower, weather constraints, or other issues that would have caused a project to slip or be over or under budget.

4. REVENUE REQUIREMENT

4. Is the revenue requirement associated with the Eligible System Safety and Integrity Costs requested by BHE in compliance with Commission orders and as specified in the SSIR Tariff?

This task reviews the components included and the calculations used by BHE to determine its revenue requirement associated with recovery of the Eligible System Safety and Integrity Costs against what is required in Commission orders and the SSIR Tariff.

The SSIR Tariff states that Eligible System Safety and Integrity Costs means (1) a return, at a percentage equal to the Company's currently authorized weighted average cost of capital grossed up for taxes, on the projected increase in the jurisdictional component of the month ending net plant inservice balances associated with the Projects for the particular calendar year in which the System Safety and Integrity Rider Charge shall be in effect, exclusive of all plant in service included in the determination of the revenue requirement approved in the Company's last general rate case; (2) the plant-related ownership costs associated with such incremental plant investment, including depreciation, accumulated deferred income taxes, and all taxes including income taxes and property taxes; and (3) the projected jurisdictional component of the System Safety and Integrity Rider Charge shall be component of the operation and maintenance expenses related to the Projects for the particular calendar year in which the System Safety and Integrity Rider Charge shall be in effect.⁴⁹

⁴⁹ BHE SSIR Tariff, Second Revised Sheet No. 128, Definitions, B (January 1, 2022).

In addition, the SSIR Tariff requires that the return and income taxes and plant related costs associated with improvements or upgrades to facilities, made at the discretion of the Company to extend service or for future growth that is not specifically required by statute or regulation, shall be excluded from Eligible System Safety and Integrity Costs.⁵⁰

The Company's proposed SSIR revenue calculation (prior to true-up amounts) follows.

Table 7: Company Proposed Revenue Requirement Calculation (Prior to True-Up Amounts and
Adjustments) as of December 31, 202351

Line		
No.	Description	Amount
1	Gross Plant - 13 Month Average December 31, 2022	\$ 92,409,938
2	Accumulated Depreciation - 13 Month Average December 31, 2022	(2,473,501)
3	ADIT Pro Rated (net of 190 and 282)	 (1,688,720)
4	Total Rate Base	\$ 88,247,718
5	Weighted Average Cost of Capital	6.71%
6	Return on Rate Base	\$ 5,917,009
7	Income Tax Expense	\$ 1,529,220
8	Depreciation Expense	2,050,408
9	Property Tax Expense	 526,737
10	Total Operating Expense	\$ 4,106,364
11	Revenue Requirement	\$ 10,023,374
12	Plus: Incremental Data Integrity Improvement Project (DIIP) Expense	 2,807,557
	Revenue Requirement with DIIP Expense	\$ 12,830,931

<u>Return</u>

Return is what the investors in the utility receive for the use of their money in the enterprise. The investment capital is a combination of debt and equity; thus, the return includes both interest on the debt and earnings on the equity. Return is expressed in dollars, while the rate of return is the percentage relationship that the return bears to the total investment. The rate of return includes the weighted cost of long-term debt and the allowed return on common equity. The rate of return is applied to the rate base to determine the earnings required.

Requirement: The SSIR Tariff states that the return is determined by applying a percentage equity to the Company's currently authorized weighted average cost of capital grossed up for taxes, on the projected increase in the jurisdictional component of the month ending net plant in-service balances associated with the Projects for the particular calendar year in which the System Safety and Integrity Rider Charge shall be in effect, exclusive of all plant in-service included in the determination of the revenue requirement approved in the Company's last general rate case.⁵²

⁵⁰ BHE SSIR Tariff, Second Revised Sheet No. 128–129, Definitions, B (January 1, 2022).

⁵¹ NG-112.2, BHE SSIR Application (August 1, 2022), Exhibit 2, Schedules A - SSIR Rate Calculation and C - Revenue Requirement.

⁵² BHE SSIR Tariff, Second Revised Sheet No. 128, Definitions, B (January 1, 2022).

The return is calculated by multiplying rate base, which is comprised of utility plant in service, accumulated deferred income taxes, and accumulated depreciation, by the rate of return. Each component is discussed below.

<u>Rate of Return</u>

The rate of return includes the weighted cost of long-term debt and the allowed return on common equity.

			After Tax	Revenue	Pre Tax
	Capital	Cost	Wtd. Cost of	Conversion	Wtd. Cost of
	Structure	Rate	Capital	Factor	Capital
	(a)	(b)	(c) = (a) x (b)	(d)	(e) = (c) x (d)
Long-Term Debt	50.00%	3.91%	1.96%	1.0000	1.96%
Common Equity	50.00%	9.50%	4.75%	1.3648	6.48%
Authorized Rate of Return	100.00%		6.71%	-	8.44%

Table 8: Weighted Average Cost of Capital Calculation⁵³

Blue Ridge found the Company's computation of the after-tax weighted-average rate of return on Exhibit 2, Schedule J, not unreasonable. The capital structure and cost rates matched those approved in the Company's last base rate case (NG-109). The pre-tax weighted-average rate of return reflects the reduction in Nebraska corporate tax rate signed into law 2022 NE LB 873 on April 13, 2022.

<u>Rate Base</u>

Rate base is the investor-owned property and plant used in supplying utility service to the customer. Each component included in rate base is discussed below.

Utility Plant in Service: System Safety and Integrity Projects

In general, Utility Plant in Service represents the utility company's investment in production, transmission, and distribution facilities in buildings, vehicles, and general equipment needed to operate the utility's business. Specific guidelines are established and followed to provide consistency in classifying expenditures as capital or expense. Under traditional rate-of-return ratemaking, the net investment in utility plant is the major component of rate base.

⁵³ NG-112.2, BHE SSIR Application (August 1, 2022), Exhibit 2, Schedule J - Capital Structure.

						Obsolete					
Description	TIMP		DIMP	Facility Relocate		Infrastructure		Total			
13-Month Average											
Total Company	\$	8,604,939	\$	85,346,279	\$	1,576,649	\$	8,388,622	\$	103,916,489	
Jurisdictional		6,868,010		76,905,161		1,352,226		7,284,541		92,409,938	
% Jurisdiction		79.81%		90.11%		85.77%		86.84%		88.93%	
End of Period											
2021	\$	3,920,318	\$	39,367,677	\$	1,576,649	\$	2,617,107	\$	47,481,750	
2022		4,605,390		41,082,469		-		4,858,305		50,546,164	
2023		515,000		43,753,201		-		5,935,868		50,204,069	
Total Company	\$	9,040,708	\$	124,203,347	\$	1,576,649	\$	13,411,279	\$	148,231,983	
Jurisdictional	\$	7,111,457	\$	111,770,880	\$	1,352,226	\$	11,638,645	\$	131,873,208	
% Jurisdiction		78.66%		89.99%		85.77%		86.78%		88.96%	

Table 9: SSIR Gross Plant in Service Projected Balances as of December 31, 2023⁵⁴

Blue Ridge found the Company's calculation of the 13-month average jurisdictional plant balance as of December 31, 2023, not unreasonable. Exhibit 2, Schedule K, systematically allocates total company plant additions by project criteria and category to jurisdiction and FERC account based on factors derived from the Company's last base rate case, NG-109. Blue Ridge verified the mathematical computations therein and confirmed the jurisdictional totals accurately carried forward to the Company's calculation of the 13-month average on Exhibit 2, Schedule D, and ultimately to the revenue requirement calculation on Schedule C. We found no exceptions.

Accumulated Depreciation

Accumulated depreciation represents the aggregate total past depreciation expenses accrued on plant in service adjusted for retirements and net salvage (including cost of removal). It is a reduction to rate base.

Description	TIMP		DIMP	Facility Relocate		Obsolete Infrastructure		Total	
Gross Plant in Service	\$	6,868,010 \$	76,905,161	\$	1,352,226	\$	7,284,541 \$	92,409,938	
Accumulated Depreciation		(180,849)	(2,109,510)		(49,982)		(133,161)	(2,473,501)	
Net Plant in Service	\$	6,687,162 \$	74,795,651	\$	1,302,244	\$	7,151,381 \$	89,936,438	

Table 10: Accumulated DepreciationProjected 13-Month Average Balances as of December 31, 202355

Blue Ridge found the Company's calculation of the 13-month average accumulated depreciation balance by project criteria as of December 31, 2022, not unreasonable. Exhibit 2, Schedule E, computes monthly depreciation expense, based on a composite annual rate of 2.04 percent, and the accumulated reserve through each measurement period. We reviewed the mathematical calculation for accuracy and verified the underlying depreciation rates used to develop the composite rate applied to gross plant matched those approved in the Company's last

⁵⁵ NG-112.2, BHE SSIR Application (August 1, 2022), Exhibit 2, Schedule E - Accumulated Depreciation.

⁵⁴ NG-112.2, BHE SSIR Application (August 1, 2022), Exhibit 2, Schedules D - Gross Plant and K - Project Listing & Allocation and WP V&V Exh 2-2023 SSIR Model NG112.2-Filed Version, Tab C-Revenue Requirements.

base rate case, NG-109. We found that the Schedule E Consolidated Accumulated Depreciation excluded the balance for Obsolete Infrastructure. While the Schedule E Consolidated Accumulated Depreciation balance is not used elsewhere in the model and there is no effect on revenue requirements, we recommend that the Consolidated formula be corrected.

Accumulated Deferred Income Tax

Income tax includes the total federal, state, and local tax owed to the taxing authorities on the operating income generated by the utility. There are instances when some items of income and/or expense are properly included in the book income of one period but on the income tax return for a different period. These timing differences for plant-related items are typically related to accelerated depreciation allowed for tax purposes that differ from the method used to calculate depreciation for book purposes. The income taxes associated with these timing differences are shown as accumulated deferred income tax (ADIT). Typically, ADIT reduces rate base.

Table 11: Company Proposed ADIT Net Projected 13-Month Average Balances as of
December 31, 202356

							Obsolete	
Acc.	Description	TIMP	DIMP	Fac	ility Relocate	Ir	frastructure	Total
282	Accelerated Depreciation	\$ (130,941) \$	(1,543,165)	\$	(42,482)	\$	(132,791) \$	(1,849,379)
190	Net Operating Losses (NOL)	 4,079	139,457		(6,494)		23,617	160,659
	ADIT, net	\$ (126,862) \$	(1,403,709)	\$	(48,976)	\$	(109,174) \$	(1,688,720)

Blue Ridge found the Company's calculation of the 13-month average ADIT balance, as of December 31, 2023, was affected by the book depreciation expense formula error and did not reflect the changes in the Nebraska tax rate when calculating the Account 190 NOL. Schedule G presents the cumulative ending annual ADIT balances, while Schedule H calculates the 13-month average as of each measurement period. The Company's ADIT calculation reflects the generation of both deferred tax liabilities (DTL) and deferred tax assets (DTA) through December 31, 2023. To support the DTL ADIT (Account 282 Accelerated Depreciation), Schedules E and I in Exhibit 2 compute the Company's book and tax depreciation, respectively. The results of each are carried forward to Schedule F wherein the book-tax difference and annual ADIT activity is determined. We reviewed the calculation and verified the depreciation and tax rate applied therein. We found no exceptions to the depreciation calculation (Account 282).

To support the DTA ADIT (Account 190 Net Operating Losses (NOL)), Schedule N computes the DTA activity that is attributable to forecasted net operating losses (NOL) on the Company's tax return. We reviewed the calculations and found that when calculating the NOL for 2023, 2024, and 2025, the Company did not link the composite tax rate to the updated rate that reflects the reduction in Nebraska tax rate. Blue Ridge recommends, and the Company concurs,⁵⁷ that while the change to the amount to collect in 2023 is miniscule, the NOL DTA calculation be corrected. **[ADJUSTMENT #1]**. The effect of the adjustment is reflected in section 7 of this report, "Recommended Recovery."

 ⁵⁶ NG-112.2, BHE SSIR Application (August 1, 2022), Exhibit 2, Schedule H - ADIT Average Balances.
 ⁵⁷ BHE Response to 2023 Data Request PA-7.

The effect of the adjusted ADIT for the corrected book depreciation expense formula error and the update for the Nebraska tax rate when calculating the Account 190 NOL appears in section 7 of this report—"Recommended Recovery."

<u>Return</u>

Return is what the investors in the utility receive for the use of their money in the enterprise. It is calculated by applying rate of return to rate base.

					O	osolete	
Description	 TIMP	DIMP	Fa	cility Relocate	Infra	structure	Total
Gross Plant in Service	\$ 6,868,010 \$	76,905,161	\$	1,352,226	\$	7,284,541	\$ 92,409,938
Accumulated Depreciation	(180,849)	(2,109,510)		(49,982)		(133,161)	(2,473,501)
ADIT, net	 (126,862)	(1,403,709)		(48,976)		(109,174)	(1,688,720)
Total Rate Base	\$ 6,560,300 \$	73,391,943	\$	1,253,268	\$	7,042,207	\$ 88,247,718
Authorized Rate of Return	 6.71%	6.71%		6.71%		6.71%	6.71%
Return on Rate Base	\$ 439,868 \$	4,920,930	\$	84,032	\$	472,180	\$ 5,917,009

Table 12: Company Proposed Return on Rate Base (After Tax) Calculation⁵⁸

With the exception of the ADIT and depreciation expense, Blue Ridge found the Company's computed return (as shown above) on an after-tax basis not unreasonable. We recomputed the Company's calculation and found no exceptions. The effect of the adjusted return on rate base appears in section 7 of this report—"Recommended Recovery."

Plant-Related Ownership Costs

The SSIR Tariff states that the plant-related ownership costs associated with incremental plant investment, include depreciation, accumulated deferred income taxes, and all taxes, including income taxes and property taxes.⁵⁹

Plant-related ownership costs are calculated from the monthly forecasted incremental increases to plant investment as Projects are placed in-service.

Depreciation

Depreciation is the expense of using property and allocates a portion of the total cost of plant to one accounting period.

Blue Ridge found the Company's calculated depreciation expense for the 12-months ended December 31, 2023, not unreasonable. We confirmed that the 2.04 percent composite depreciation rate matched what was approved in the Company's last base rate case, NG-109, and that it was applied to the end of month gross plant balance on Schedule E with no exceptions. However, we found that the depreciation expense balances pulled forward from Schedule E to Schedule C Revenue Requirement referenced the wrong cells. Blue Ridge recommends, and the Company concurs,⁶⁰ that the cell references be corrected. The correction would reduce depreciation expense by \$151,926 **[Adjustment #2]** as shown in the following table.

⁵⁸ NG-112.2, BHE SSIR Application (August 1, 2022), Exhibit 2, Schedule C – Revenue Requirement.

⁵⁹ BHE SSIR Tariff, Second Revised Sheet No. 128, Definitions, B (January 1, 2022).

⁶⁰ BHE Response to 2023 Data Request PA-6.

					Obsolete	
	TIMP 12/31/23	DIMP 12/31/23	PHMSA 12/31/23	Facility Relocate 12/31/23	Infrastructure 12/31/23	Consolidated 12/31/23
As Filed	\$ 141,506	\$ 1,713,394	\$ -	\$ 27,653	\$ 167,855	\$ 2,050,408
Corrected	140,525	1,579,986	-	27,653	150,317	1,898,481
Differnece	\$ (981)	\$ (133,408)	\$ -	\$ -	\$ (17,538)	\$ (151,926)

Table 13: Depreciation Expense As Filed vs. Corrected December 31, 2023⁶¹

The effect of the adjusted depreciation expense appears in section 7 of this report—"Recommended Recovery."

We found, similar to our findings for Accumulated Depreciation expense, that the Schedule E total labeled Consolidated Depreciation Expense excluded the depreciation expense for Obsolete Infrastructure. While the Schedule E Consolidated Depreciation Expense balance is not used elsewhere in the model and there is no effect on revenue requirements, Blue Ridge recommends that the Consolidated formula be corrected.

<u>Income Tax</u>

The SSIR Tariff allows for the inclusion of all taxes, including income taxes and property taxes.⁶² Income tax represents the total federal, state, and local tax owed to the taxing authorities on the operating income generated by the utility. The Company revenue requirement uses a composite income tax rate of 26.73 percent, which reflects the reduction in Nebraska corporate tax rate signed into law 2022 NE LB 873 on April 13, 2022. The law gradually reduces the state's corporate income tax rates:

- 7.25% for tax years beginning on or after January 1, 2023, and before January 1, 2024
- 6.50% for tax years beginning on or after January 1, 2024, and before January 1, 2025
- 6.24% for tax years beginning on or after January 1, 2025, and before January 1, 2026
- 6.00% for tax years beginning on or after January 1, 2026, and before January 1, 2027
- 5.84% for tax years beginning on or after January 1, 2027

The following table shows the development of the Company's Composite Income Tax Rate

Table 14: Development of Composite Income Tax Rate for Tax Year 202363

Line	Description	Calculation	Rate
1	State Tax Rate		7.25%
2	Federal Tax Rate		21.00%
3	State Tax Deduction	100% - Line 1	92.75%
4	Federal Effective Rate	Line 2 x Line 3	19.48%
5	Composite Tax Rate	Line 1 + Line 4	26.73%

⁶¹ WP V&V Exh 2-2023 SSIR Model NG112.2-Filed Version, Tab C-Revenue Requirements and Tab E-Accumulated Depreciation.

⁶² BHE SSIR Tariff, Second Revised Sheet No. 128, Definitions, B (January 1, 2022).

⁶³ NG-112.2, BHE SSIR Application (August 1, 2022), Exhibit 2, Schedule F - Tax Expense Calculation.

We verified the calculations to derive taxable income and the composite income tax rate on Schedule F. With the exception of the NOL Offset discussed earlier and the depreciation expense discussed later, Blue Ridge found the Company's computed current and deferred income tax expense for the 12 months ended December 31, 2023, not unreasonable.

Property Taxes

Property tax is the tax assessed on property by the local government. The tax is usually based on the value of property owned multiplied by the annual tax rate.

						Obsolete	
Description	 TIMP	DIMP	Fac	cility Relocate	1	nfrastructure	Total
Gross Plant in Service	\$ 6,868,010 \$	76,905,161		1,352,226	\$	7,284,541	\$ 92,409,938
Property Tax Rate	 0.57%	0.57%		0.57%		0.57%	0.57%
Property Tax Expense	\$ 39,148 \$	438,359	\$	7,708	\$	41,522	\$ 526,737

Table 15: Property Tax Expense Calculation

Blue Ridge found the Company's projected property tax expense not unreasonable. The property tax rate applied in the SSIR Application is 0.57 percent. In last year's review, the Company explained, "This property tax rate was based on Tax Year 2019 Nebraska Department of Revenue Final Appraisals for Black Hills Gas Distribution, LLC (NE Business Unit), Company #380, and for Black Hills Nebraska Gas Utility Company, LLC, Company #390, and the associated property tax bills. At the time of the 2021 SSIR Application NG-109 filing, this was the most recent tax year for which actual data was available. Even though the same calculation using Tax Year 2020 information resulted in a higher rate of .0063 as shown on the attached workpaper, Attachment PA 001-013 Property Tax Rate Calculation, the .0057 property tax rate was used in the current SSIR Application NG-112.1 for consistency." ⁶⁴ The .0057 property tax rate was also used in the current SSIR Application NG-112.2.

The property tax rate is applied to the average gross plant-in-service balance on Schedule C. We reviewed the calculation and identified no issues.

Operation and Maintenance Expenses

The SSIR Tariff allows recovery of the projected jurisdictional component of the operation and maintenance expenses related to the Projects for the particular calendar year in which the System Safety and Integrity Rider Charge shall be in effect.⁶⁵

In addition to the revenue requirement computed on Schedule C, the Company is proposing to include incremental 0&M expense of \$3,258,210 (\$2,807,557 jurisdictional) for 2023 external Data Integrity Improvement Project (DIIP) costs. The 2023 SSIR revenue requirements reflects only the expenses projected in 2023 and does not include the prior years' costs.

The Company stated that since the August 1, 2022, filing of the Application, contractor estimates and dollars allocated to each project have been updated. The total amount of DIIP for 2023 did not

⁶⁴ BHE response to SSIR 2022 PA-13.

⁶⁵ BHE SSIR Tariff, Second Revised Sheet No. 128, Definitions, B (January 1, 2022).

change with the reallocation between projects. The update will not affect the amount to be collected. The Company provided an updated model at the end of discovery.⁶⁶

The following table compares the DIIP costs for 2021 (forecasted and actual), 2022 (forecasted) and 2023 (forecasted and updated forecast).

				2021			202	22		2023		
Description	Fo	recast	4	ctual	Va	riance	Fore	cast	Fo	recast	Updat Foreca	
Transmission/Gathering TVC Records NE	\$	-	\$	-	\$	-	\$ 1,13	9,000	\$ 1,	.023,241	\$ 1,474	,088
Gas Service Card Mapping NE	8	65,048	2	230,421	6	34,627	96	1,000	1,	020,480	849	,531
Distribution Main & Service Centerline Survey NE		-		-		-	1,13	7,000	1,	214,489	934	,592
Distribution Data Attribute Improvement NE		-		-		-	71	9,000		-		-
GIS Pressure Systems NE		-		-		-		-		-		-
GIS Emergency Response Zones NE		-		-		-		-		-		-
GIS CP Zones NE		-		-		-		-		-		-
BPI and SME Pipeline Attribute Assessment NE		-		-		-		-		-		-
Document Management Migration NE		-				-	2	6,000		-		-
Total External Costs	\$8	65 <i>,</i> 048	\$ 2	230,421	\$6	34,627	\$ 3,98	2,000	\$3,	258,210	\$ 3,258	,210

Table 16: DIIP External Costs 2021-202367

Blue Ridge found the inclusion of DIIP costs as O&M expenses consistent with the approved SSIR Tariff.

Betterments

<u>Requirement:</u> The SSIR Tariff states that the return and income taxes and plant-related costs associated with improvements or upgrades to facilities, made at the discretion of the Company to extend service for future growth that is not specifically required by statute or regulation, shall be excluded from Eligible System Safety and Integrity Costs.⁶⁸

As discussed in Testing Step T4, Blue Ridge found that the Company did not include costs for projects that would extend service for future growth.

<u>Revenue Requirement Calculation</u>

With the exception of the errors associated with depreciation expense and the NOL offset discussed earlier, Blue Ridge found the Company's calculation of the SSIR revenue requirement, including the incremental DIIP expense projected for 2023, not unreasonable. Blue Ridge performed mathematical checks on the detailed revenue requirement schedules and verified that the amounts rolled forward correctly.

The adjusted revenue requirement table appears in section 7 of this report—"Recommended Recovery."

⁶⁶ BHE Response to 2023 Data Request PA-3(e)(v) and Exh 2 – 2023 SSIR Model NG112.2 – Updated Version 9.26.22.

⁶⁷ NG-112.2, BHE SSIR Application (August 1, 2022), Exhibit 2, Schedule M - DIIP Support.

⁶⁸ BHE SSIR Tariff, Second Revised Sheet No. 128–129, Definitions, B (January 1, 2022).

5. SYSTEM SAFETY AND INTEGRITY RIDER CHARGE CALCULATION

5) Is the System Safety and Integrity Rider Charge calculated in compliance with Commission orders and as specified in the SSIR Tariff?

This task reviews the components and calculations of the System Safety and Integrity Rider Charge to determine whether they comply with Commission orders and as specified in the SSIR Tariff.

Requirement: The System Safety and Integrity Rider Charge shall be equal to the Eligible System Safety and Integrity Costs, plus or minus the SSIR True-Up Amount, plus or minus the Deferred SSIR Balance, multiplied by the customer class allocation basis authorized by the Commission to determine the class cost of service in the Company's most recent general rate case, divided by the applicable number of bills for the particular customer class:

System Safety and Integrity Rider Charge = ((A ± B ± C) * D) / E

Where:

- A = Eligible System and Safety and Integrity Costs
- B = SSIR True-Up Amount
- C = Deferred SSIR Balance
- D = Customer class allocation basis authorized by the Commission to determine the class cost of service in the Company's most recent general rate case
- E = Applicable number of bills for the particular customer class⁶⁹

Blue Ridge found that the Company's methodology to calculate the System Safety and Integrity Rider Charge is in accordance with the SSIR Tariff. The Company's Total SSIR Revenue Requirement, which includes the SSIR Revenue Requirement, and Deferred SSIR Balance and SSIR True-Up Amounts, that are allocated to the customer classes using the jurisdictional utility classes of customer allocations approved in the most recent general rate proceeding. The class-allocated SSIR Revenue Requirement was then allocated using the annual number of bills from the most recent general rate case.⁷⁰

Requirement: The SSIR True-Up Amount shall be equal to the difference, positive or negative, between the Eligible System Safety and Integrity Costs as projected for a particular calendar year and the actual Eligible System Safety and Integrity Costs incurred by the Company for that particular calendar year, plus monthly interest calculated on that difference at a rate equal to the then current rate of interest on pipeline refunds established by the Federal Energy Regulatory Commission.⁷¹

Requirement: The Deferred SSIR Balance shall be equal to the balance, positive or negative, of SSIR revenues at the end of a particular calendar year less the Eligible System Safety and Integrity Costs as projected by the Company for that particular calendar year, plus monthly interest calculated on that balance at a rate equal to the then current rate of interest on pipeline refunds established by the Federal Energy Regulatory Commission.⁷²

⁶⁹ BHE SSIR Tariff, Second Revised, Sheet Nos. 130–131, Section "SSIR Adjustment Calculation," A (January 1, 2022).

⁷⁰ NG-112.2, BHE SSIR Application (August 1, 2022), Exhibit 2, Table A SSIR Rate Calculation and Table B True up Calculation.

⁷¹ BHE SSIR Tariff, Second Revised Sheet No. 130, Definitions, D (January 1, 2022).

⁷² BHE SSIR Tariff, Second Revised Sheet No. 128, Definitions, Item A (January 1, 2022).

Blue Ridge found that the Company's true-up calculations reflected the following three components consistent with the methodology included in the Company's NG-109 application and the SSIR approved by the Commission.⁷³

	R	esidential	C	Commercial	Total
Customer Bill True Up	\$	(163,410)	\$	158,274	\$ (5,136)
Revenue Requirement True up		868,080		315,027	1,183,107
Data Improvement Project True Up		(390,944)		(155,906)	(546,850)
(Over) / Under Recovery	\$	313,727	\$	317,395	\$ 631,121

Table 17: Company Proposed True Up Recovery

The Company Customer Bill True Up reflected Actual Customer Bills Residential of \$2,820,344 and Commercial of \$485,900. During discovery, the Company stated that the Actual Customer Bills should be Residential \$2,564,336 and Commercial \$324,811.⁷⁴ This correction results in an over-collection for Residential of \$4,685 and under-collection for Commercial of \$198,139. Blue Ridge recommends, and the Company concurs, that the approved SSIR revenue requirement amount reflect the corrected Actual Customer Bills. **[ADJUSTMENT #3]**

Blue Ridge found, and the Company concurred, that the Revenue Requirement True Up used the forecasted SSIR revenue requirement from the Company's last rate case (NG-109) application of \$1,549,791, instead of the final approved SSIR revenue requirement of \$1,435,609,⁷⁵ which was used to establish the approved 2021 SSIR rates. The approved revenue requirement reflected the removal of four reliability pipeline looping projects.⁷⁶ Blue Ridge recommends, and the Company concurs, that the approved SSIR revenue requirement amount, which was used to establish the SSIR rates, be used in the true-up calculation. **[ADJUSTMENT #4]**

Blue Ridge found that the Company's true-up for the DIIP expenses, which reflects an underrecovery of \$546,850, not unreasonable.

Blue Ridge also found, and the Company concurred, that the Company's True-Up Calculation did not include the "plus monthly interest" calculated on that difference at a rate equal to the then current rate of interest on pipeline refunds established by the Federal Energy Regulatory Commission. ⁷⁷ Blue Ridge recommends, and the Company concurs, that the interest calculation on the true-up balance reflect the FERC-established current rate of interest. The interest should be applied to all three components of the true-up. **[ADJUSTMENT #5]**

⁷³ NG-109, Hearing Exhibit No. BH-JB- 2 (Mr. Bennett's Direct Testimony Exhibit No. JLB-5-2021 SSIR Application), Exhibit JLB-5, 2021, Exhibit 2, Table B, Order Approving Stipulation and Settlement Agreement (January 26, 2021), page 14 and Joint Stipulation and Agreement of Settlement Between Black Hills Nebraska Gas, LLC D/B/A Black Hills Energy and the Public Advocate of Nebraska (October 28, 2020), page 15.
⁷⁴ BHE response to SSIR 2023 PA-9.

⁷⁵ BHE response to SSIR 2023 PA-10.

⁷⁶ NG-109, Order Approving Stipulation and Settlement Agreement (January 26, 2021), page 14 and Joint Stipulation and Agreement of Settlement Between Black Hills Nebraska Gas, LLC D/B/A Black Hills Energy and the Public Advocate of Nebraska (October 28, 2020), page 15.

⁷⁷ BHE response to SSIR 2023 PA-11.

The corrected True Up Calculations are shown below:

	R	esidential	Commercial	Total
Customer Bill True Up	\$	(4,859)	\$ 205,510	\$ 200,651
Revenue Requirement True up		986,866	358,682	\$ 1,345,548
Data Improvement Project True Up		(405,487)	(161,706)	\$ (567,193)
(Over) / Under Recovery	\$	576,520	\$ 402,487	\$ 979,007

Table 18: Corrected True Up Recovery

The adjusted amount to be collected in 2023 appears in section 7 of this report—"Recommended Recovery."

Requirement: The calculated rate shall be an adjustment to the Customer Charge applicable to the Company's Jurisdictional Residential, Commercial, and Commercial—EO customers.⁷⁸

Blue Ridge found the Company applied the calculated rate change for the 2023 SSIR Projects to the monthly Customer Charge applicable to the Company's Jurisdictional Residential, Commercial, and Commercial—EO customers.⁷⁹

<u>Requirement:</u> Whenever the Company implements changes in base rates as a result of a final Commission order in a general rate case setting new rates based on approved revenue requirements, the Company shall simultaneously adjust the SSIR to remove all costs that have been included in base rates.⁸⁰

Blue Ridge found that this task is not applicable. A general rate case has not occurred since the implementation of the SSIR. No adjustment is required to adjust the SSIR to remove all costs that have been included in base rates.

In conclusion, Blue Ridge found that the System Safety and Integrity Rider Charge was not calculated in compliance with Commission orders and as specified in the SSIR Tariff. Blue Ridge recommends adjustments to the Revenue Requirement True Up and the addition of the monthly interest component. The adjusted amount to be collected in 2023 appears in section 7 of this report— "Recommended Recovery."

6. Amount and Timing of Request

6) Is the amount and timing of the System Safety and Integrity Rider Charge request within the limits established by the Commission?

This task compares the amount and timing of BHE's System Safety and Integrity Rider Charge request to the limits established by the Commission.

 ⁷⁸ BHE SSIR Tariff, Second Revised , Sheet No. 131, Section "SSIR Adjustment Calculation," B (January 1, 2022).
 ⁷⁹ NG-112.2, BHE SSIR Application (August 1, 2022), Cover Letter and Exhibit 2, Table A SSIR Rate Calculation.
 ⁸⁰ BHE SSIR Tariff, Second Revised , Sheet No. 131, Section ""SSIR Adjustment with Changes in Base Rates, (January 1, 2022).

Requirement: Each proposed revision in the System Safety and Integrity Rider Charge shall be accomplished by filing an application by August 1 of each year to take effect on the following January 1 (the "Annual Application").⁸¹

Blue Ridge found that the Application to change the SSIR charge under review was filed on August 1, 2022.

Requirement: The Company shall not make effective any revision to the System Safety and Integrity Rider Charge that includes the addition of new SSIR Projects not previously recovered through the SSIR Charge if the Company has not had a general rate proceeding decided or dismissed by issuance of a Commission order within sixty months immediately preceding the date upon which the revision to the System Safety and Integrity Rider Charge otherwise would take effect.⁸²

Blue Ridge found the Company's last base rate case (Docket No. NG-109), decided on January 26, 2021, is within sixty months of the Company's filing examined in this report. Sixty months from January 26, 2021, is January 25, 2026.⁸³

<u>Requirement:</u> The Company shall continue to make annual revisions to the SSIR Charge to reflect appropriate true-ups and adjustments to the calculations, consistent with the other provisions contained in the System Safety and Integrity Rider Tariff, for each year that the Company is allowed to collect the SSIR Charge.⁸⁴

Blue Ridge found that the Company is allowed to collect the SSIR Charge.

7. RECOMMENDED RECOVERY

7) What is the appropriate level of recovery of the System Safety and Integrity Rider Charge?

This task accumulates Blue Ridge's recommended adjustments and provides a revised level of recovery for the Commission's consideration, if necessary.

Blue Ridge recommended, and the Company concurred, that several adjustments should be made in the calculation of the 2023 SSIR Rider Charge. These adjustments included (1) reflect the reduction in the Nebraska tax rate in the ADIT NOL calculation, (2) correct the formula for depreciation expense, (3) use the correct Actual Customer Bills in the 2021 true-up calculation, (4) use the SSIR revenue requirements approved in NG-109 in the 2021 true-up calculation, and (5) include monthly interest for any over/under in the true-up balance.

The following table summarizes the effect of those adjustments on Revenue Requirements and the true-up calculations.

⁸¹ BHE SSIR Tariff, Second Revised, Sheet No. 127, Section "Annual Application and Quarterly Surveillance Filings," A. (January 1, 2022).

⁸² BHE SSIR Tariff, Second Revised, Sheet No. 131, Section ""SSIR Adjustment with Changes in Base Rates, (January 1, 2022).

⁸³ Application No. NG-109, Order Approving Stipulation and Settlement Agreement (January 26, 2021) page 14.

⁸⁴ BHE SSIR Tariff, Second Revised, Sheet No. 131, Section ""SSIR Adjustment with Changes in Base Rates, (January 1, 2022).

Table 19: 2023 Adjusted Revenue Requirement Calculation ⁸⁵

Line No.	Description	As Filed	A	djustment	 Adjusted	Adjustment
1	Gross Plant - 13 Month Average December 31, 2023	\$ 92,409,938	\$	-	\$ 92,409,938	
2	Accumulated Depreciation - 13 Month Average December 31, 2023	(2,473,501)		-	(2,473,501)	
3	ADIT Pro Rated (net of 190 and 282)	(1,688,720)		(246)	(1,688,967)	Adj #1
4	Total Rate Base	 88,247,718		246	 88,247,471	
5	Weighted Average Cost of Capital	6.71%		0.00%	6.71%	
6	Return on Transmission Plant and Transmission CWIP	\$ 5,917,009	\$	(17)	\$ 5,916,993	
7	Income Tax Expense	1,529,220		(4)	1,529,215	
8	Depreciation Expense	2,050,408		(151,926)	1,898,481	Adj #2
9	Property Tax Expense	526,737		-	526,737	
10	Revenue Requirement	\$ 10,023,374	\$	151,947	\$ 9,871,426	
11	DIIP Expense	2,807,557		-	2,807,557	
12	Revenue to be Collected in 2023 before True-Up	\$ 12,830,931	\$	(151,947)	\$ 12,678,984	
13	Customer Bill True Up	(5,136)		205,787	200,651	Adj #3, #5
14	Revenue Requirement True up	1,183,107		162,441	1,345,548	Adj #4, #5
15	Data Improvement project true up	(546,850)		(20,343)	(567,193)	Adj #5
16	Amount to collect in 2023	\$ 13,462,052	\$	195,938	\$ 13,657,990	

The adjusted SSIR revenue requirements and true-up result in the following recommend 2023 SSIR Charge.

Table 20: SSIR Rate for 2023

	Resid	ential	Comm	nercial	Total		
Description	As Filed	Adjusted	As Filed	Adjusted	As Filed	Adjusted	
Amounts to be Collected in 2023	\$9,655,991	\$ 9,807,589	\$3,806,061	\$ 3,850,402	\$13,462,052	\$ 13,657,990	
Forecasted Total Customer Bills (Jurisdictional Only)	3,146,369	3,146,369	397,291	397,291			
SSIR rate for 2023	\$ 3.07	\$ 3.12	\$ 9.58	\$ 9.69			

Table 21: Recommended Fixed Charge Rate by Class

Description	Re	sidential	Со	mmercial
2021 Approved SSIR Charge-\$/Month	\$	0.62	\$	1.23
2022 Approved SSIR Charge-\$/Month	\$	2.07	\$	6.25
2023 Proposed SSIR Charge-\$/Month	\$	3.12	\$	9.69
Total Proposed SSIR Charge-\$/Year	\$	37.41	\$	116.30

8. ANNUAL SURVEILLANCE FILINGS

8) Did the Company timely file the annual surveillance filings with the required information in compliance with Commission orders?

This task confirms that BHE timely filed the annual surveillance filings with the required information as required by Commission order.

Requirement: Specifically, BHE must file annual surveillance filings within sixty (60) days of the end of the calendar year. The filings shall include calculations of the rate base separated into regular and SSIR components, the realized rates of return on the rate base components and supporting calculations. Additionally, the filing shall include an update regarding the status of the

⁸⁵ WP Exh 2-2023 SSIR Model NG112.2-Updated Version 9.26.22.

current calendar year's SSIR project costs, projected in-service dates, and expected schedule over the remainder of the calendar year. 86

Blue Ridge found that the Company timely filed its 2021 annual surveillance filings on March 1, 2022. The filing is due within sixty (60) days of the end of the calendar year, or March 1, 2022. Blue Ridge reviewed the filing and issued a report to the Public Advocate on April 1, 2022. Blue Ridge had several recommendations⁸⁷ that the Company response addressed.⁸⁸

One open issue has not been resolved regarding the "status of the current calendar year's SSIR Project costs, projected in-service dates, and the expected schedule over the remainder of the calendar year." The approved tariff requirement for "an update regarding the status of the current calendar year's SSIR Project costs, projected in-service dates, and the expected schedule over the remainder of the calendar year" appears to be non-workable.

Blue Ridge recommended that if it is not practical to provide the required current calendar year's SSIR Project costs information with the annual surveillance filing, the tariff should be updated to reflect this reality.

Furthermore, the approved tariff does not require a status of the prior year (2021) SSIR Projects, including actual vs. planned costs and in-service dates. Without a status report of the prior year's SSIR Projects, reviewers cannot confirm that the Company's actual prior year's SSIR activity is consistent with what was approved by the Commission. The Company should provide a list of the prior year's actual vs. planned 2021 SSIR Projects, costs, and in-service dates in the annual surveillance filing.

The Company responded:

During Black Hills Energy's most recent rate review, Application No. NG-109, the surveillance reporting requirement was revised from a quarterly to annual basis. As such, Black Hills Energy agrees and believes the tariff language referenced, related to current year's SSIR information, is no longer relevant and should be revised.

Any status report, demonstrating actual versus planned costs and in-service dates, referenced by the Public Advocate, is identified as part of Black Hills Energy's Annual Application pursuant to the NE Tariff Sheet No. 127.

Black Hills Energy includes with this filing a red-lined tariff page demonstrating proposed language. Black Hills Energy is prepared to file these revisions for the Commission's consideration once reviewed by the Public Advocate.⁸⁹

Blue Ridge recommends approving the following proposed changes to the tariff regarding the annual surveillance filings.

⁸⁶BHE SSIR Tariff, Second Revised Sheet No. 128, Item D (January 1, 2022).

⁸⁷ Blue Ridge's report on Docket No. NG-112.1 Review of 2021 Annual Surveillance Report (April 1, 2022).
⁸⁸ BHE response to Blue Ridge's report on Docket No. NG-112.1 Review of 2021 Annual Surveillance Report (April 15, 2022).

⁸⁹ BHE response to Blue Ridge's report on Docket No. NG-112.1 Review of 2021 Annual Surveillance Report (April 15, 2022).

d/b/a Black Hills Ene Nebraska Natural Ga Filed with the Nebras		<u>Fourth Revised Sheet No. 129</u> Cancels <u>Third Revised Sheet No. 129</u>	Deleted: Third Deleted: Second
Flied with the Nebras	RATE SCHEDULES AND OTH SYSTEM SAFETY AND INTEGR		
ANNUAL APPLICATION AND ANNUAL SURVEILLANCE FILINGS (Continued)	the Public Advocate shall press staff before the Commission. T become effective not later than , the Annual Application. If the Co complies with the requirements enter an order authorizing the (Safety and Integrity Rider Char	earing on the Annual Application at which ent his or her report and shall act as trial The Commission shall issue an order to January 1 of the year following the filing of mmission finds that the Annual Application of this SSIR Tariff, the Commission shall Company to collect the proposed System rge, including any SSIR True-Up Amount e, effective on January 1 of the following	
	of the end of each calendar yea the rate base separated into re- rates of return on the rate bi- calculations. Additionally, the fil status of the <u>previous calendar</u> projected in-service dates, and	nual surveillance filing, within <u>ninety days</u> r. Such filings shall include calculations of gular and SSIR components, the realized ase components, along with supporting ing shall include an update regarding the ar year's SSIR Project costs, <u>actual or</u> if any remain uncompleted at the time of <u>illance filing</u> , the expected schedule <u>for</u>	Deleted: s Deleted: sixty Deleted: current Deleted: over the remainder of the calend
DEFINITIONS	negative, of SSIR revenues at f the Eligible System Safety ar Company for that particular cale on that balance at a rate equa	If be equal to the balance, positive or the end of a particular calendar year less nd Integrity Costs as projected by the ndar year, plus monthly interest calculated al to the then current rate of interest on by the Federal Energy Regulatory	
	percentage equal to the Con average cost of capital grosse in the jurisdictional component balances associated with the P which the System Safety and exclusive of all plant in-service in requirements approved in the C plant-related ownership costs investment, including depreciat and all taxes including income projected jurisdictional compor expenses related to the Project the System Safety and Integrity	egrity Costs" shall mean (1) a return, at a mpany's currently authorized weighted ed up for taxes, on the projected increase of the month ending net plant in-service rojects for the particular calendar year in Integrity Rider Charge shall be in effect, ncluded in the determination of the revenue Company's last general rate case; (2) the associated with such incremental plant ion, accumulated deferred income taxes, a taxes and property taxes; and (3) the nent of the operation and maintenance s for the particular calendar year in which Rider Charge shall be in effect. The ant related costs associated with	
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APPENDICES

Appendix A: Background Information Appendix B: Abbreviations and Acronyms Appendix C: Data Requests and Information Provided Appendix D: Workpapers

APPENDIX A: BACKGROUND INFORMATION REVIEWED

The following background documents were reviewed and are provided within our electronic transmitted appendices.

- 1. State Natural Gas Regulation Act §§ 66-1810, 66-1825 and 66-1838
- 2. Nebraska Administrative Code Title 291, Chapter 9 Nebraska Public Service Commission
- 3. Application No. NG-109 [Last Base Rate Case and 2021 SSIR Projects]
 - a. Hearing Exhibit No. BH-JB- 2 (Mr. Bennett's Direct Testimony Exhibit No. JLB-5-2021 SSIR Application)
 - b. Excerpt from Direct Testimony of Kevin M. Jarosz, page 29 DIIP Descriptions
 - c. Excerpt from Direct Testimony of Marc I. Lewis, pages 36-40 DIIP
 - d. Public Advocate Answer Testimony of Charles Fijnvandraat, page 10 [excluded four reliability pipeline looping projects
 - e. Joint Stipulation and Agreement of Settlement Between Black Hills Nebraska Gas, LLC d/b/a Black Hills Energy and the Public Advocate of Nebraska (October 28, 2020)
 - f. BHE Compliance Filing (January 15, 2021)
 - g. Order Approving Stipulation and Settlement Agreement (January 26, 2021)
- 4. Black Hills Nebraska Gas, LLC d/b/a Black Hills Energy, Nebraska Natural Gas Tariff, downloaded on August 1, 2022, from the Nebraska Public Service Commission web page
- 5. Application NG 112.1 (2022 SSIR Projects)
 - a. BHE-1 Black Hills 2022 SSIR Application
 - b. BHE-2 Black Hills 2022 SSIR Application Model
 - c. Select Data Responses
 - d. Public Advocates report on the Examination of the System Safety and Integrity Rider of Black Hills Nebraska Gas, LLC d/b/a Black Hills Energy for the 2022 Program Year (October 29, 2021)
 - e. BHE-3 2022 Black Hill's response to Public Advocates Report
 - f. Blue Ridge's 11/3/2021 Supplement to Report Filed on 10/29/2021, ERT Issue Update
 - g. Order Approving 2022 SSIR Charge (December 14, 2021)
- 6. Application No. NG-112.2 (2023 SSIR Projects)
 - a. Black Hills 2023 SSIR Application and Model
 - b. Updated Exhibit 2-2023 SSIR Model (September 25, 2022)

APPENDIX B: ABBREVIATIONS AND ACRONYMS

The following abbreviations and acronyms may be used in this report.

ADIT	Accumulated Deferred Income Taxes
AFUDC	Allowance for Funds Used during Construction
ARDA	Accumulated Reserve for Depreciation, Depletion, and Amortization
ARMR	At-Risk Meter Relocation
ARO	Asset Retirement Obligation
ACVG	Alternating Current Voltage Gradient
CFR	Code of Federal Regulations
CGS	Choice Gas Service
CIAC	Contributions in Aid of Construction
CIS	Close Interval-Survey
СР	Cathodic Protection
CWIP	Construction Work In Progress
DIIP	Data Infrastructure Improvement Program
DIMP	Distribution Integrity Management Program
DTA	Deferred Tax Asset
DTL	Deferred Tax Liability
ERT	Electronic Reading Transmitters
FDM	Field Deployment Manager (Itron's installation management program)
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
HDD	Hydraulic Directional Drill
ICCP	Impressed Current Cathodic Protection
IR	Information Request
ISR	Infrastructure System Replacement
KMIGT	Kinder Morgan Interstate Gas Transmission LLC
MAOP	Maximum Allowable Operating Pressure
NOL	Net Operating Loss
PHMSA	Pipeline and Hazardous Materials Safety Administration
PSI	Per Square Inch
P/W	Painted and Wrapped
SSIR	System Safety and Integrity Rider
TBS	Town Border Stations
TIMP	Transmission Integrity Management Program
TOG	Top of Ground
UPIS	Utility Plant in Service

APPENDIX C: DATA REQUESTS AND INFORMATION PROVIDED

The following is a list of the data requests submitted. BHE provided responses electronically. The responses are included within our electronic transmitted appendices.

- PA-1. 2021: Company SSIR filing, part II—2021 SSIR Project Reconciliation:
 - a. Bare Steel:
 - i. What was the particular source of the uncertainty and complexity that resulted in lack of interest on the part of contractors in bidding on and completing the work?
 - ii. Please explain the shared risk in the contract worked out with the contractor.
 - b. Town Border Stations:
 - i. What were the specific labor-resource constraints that caused the project to exceed budget?
 - c. TOG, Exposed, and Shallow Main:
 - i. Why was Project 10070722 postponed?
 - ii. Considering the significant "less than budget spend" for Exposed and Shallow Main, was the engineering firm penalized in any way for providing inaccurate scopes of work? If not, why not?
- PA-2. 2022: In reference to 2022 SSIR issues:
 - a. DIMP:
 - i. Please provide a copy of any 2022 PHMSA-filed Gas Distribution Integrity Management Program (DIMP) changes from the prior year.
 - ii. Please provide copies of any 2022 completed or in-progress audits (internal or external) that reviewed this program.
 - b. TIMP:
 - i. Please provide a copy of any 2022 PHMSA-filed Gas Transmission Integrity Management Program (TIMP) changes from the prior year.
 - ii. Please provide copies of any 2022 completed or in-progress audits (internal or external) completed that reviewed this program.
 - c. Please provide any 2022 changes to the Damage Prevention procedure.
 - d. Process and Controls: Please provide any 2022 updates to the policies and procedures (and/or flow charts) for the following items:
 - i. The identification and categorization of SSIR projects
 - ii. The development of the SSIR (Include sources for all components, how components are gathered and entered, and approval requirements—who provides approvals, for what items, and when approvals are needed in the process.)
- PA-3. 2023: In reference to the section 2023 SSIR Projects—Application, section III:
 - a. Bare Steel Distribution Main:
 - i. For each of the two individual projects listed in this application section, please provide the individual work sheets that calculated the risk model score.
 - b. Town Border Stations (TBS).
 - i. For each of the six individual projects listed in this application section, please provide the individual work sheets that calculated the risk model score.
 - c. Top of Ground (TOG):

- i. For each of the seven individual projects listed in this application section, please provide the individual work sheets that calculated the risk model score.
- d. Meter Relocations:
 - i. For each of the seven locations identified in this application section, please provide the individual work sheets that calculated the risk model score.
- e. Data Infrastructure Improvement Program (DIIP):
 - i. How did the Company determine which projects should be included in the DIIP for 2023?
 - ii. What are the estimated completion dates (in-service dates) for each project?
 - iii. Are any of the projects a continuation from a prior year?
 - iv. Please provide the estimated cost detail for each project that resulted in the elimination of internal costs that are not included in the SSIR?
 - v. Are the projects outsourced? If so, please provide the contractor estimates for each project.
 - vi. Will any of the projects eliminate an existing project? If so, what programs will be eliminated?
 - vii. Will the projects be used by more than BHE—Nebraska? If so, what other entities will use them, and how are the project costs split between entities?
- PA-4. Risk Ranking Scores
 - a. Portfolio view:
 - i. Please describe any 2023 changes in how risk modeling assigns risk scores and how project risk scores calculated from one SSIR category are compared to other SSIR categories (e.g., risk scores for Top of Ground vs. Town Border Stations vs. Bare Steel Replacement).
 - ii. Please also describe how the budget and risk score cut lines are determined initially and what criteria will be used to possibly adjust through the construction period to accommodate execution delays.
 - b. SSIR Category view: Please describe how individual projects are selected within each SSIR category. In particular, please explain how the risk score and budget cut line of those projects selected are determined initially and what criteria will be used to possibly adjust through the construction period to accommodate execution delays.
- PA-5. 2023 Projects: The Company proposes to aggregate the 2023 spending by category rather than individual projects within each category.
 - a. Will the Company provide a project scope for each individual project within a category along with a risk ranking as applicable?
 - b. How does the Company plan on providing variance analysis where actuals are either less than or greater than budget?
 - c. Why does the Company use a November 30, 2023, in-service date for all projects rather than an estimate based on when the work is anticipated to be performed?
 - d. Given that 51% of the 2021 TBS projects were completed and in service after the estimated in-service date of August 1, 2021 (which was the blanket estimated inservice date used for all projects), why does the Company think the use of the same in-service date for all projects is reasonable?
 - e. If the Company switches from project X to project Y, how will the Company demonstrate that the substitute project has the next highest risk ranking?

- f. Please describe how the Company obtains goods and services at the most competitive price.
 - i. How has the demand for gas contractors in Nebraska and surrounding states affected the overall cost to complete capital work?
 - ii. What steps has the Company taken to address the demand constraints for gas contractors?
 - iii. Please describe what process and initiatives are in place now and anticipated to manage contractor costs going forward.
 - iv. What measures is the Company taking to secure supplies?
 - v. What percent of the SSIR capital construction plan is outsourced to contractors, and what percent was done in-house for each of the years 2019, 2020, and 2021?
- PA-6. Depreciation Expense: Reference Exhibit 2, C-Revenue Requirements and E-Accumulated Depreciation. Please review the depreciation expense carried forward to Schedule C Revenue Requirements, line 28. It appears that the formulas are linked to incorrect cells on Schedule E (rows 38–50 vs. rows 36–47). Please confirm that the corrected amount would reduce revenue requirements by \$151,926, as shown in the following table. If this is not correct, please explain.

				Obsolete					
	TIMP	DIMP	PHMSA	Faci	lity Relocate	In	frastructure	С	onsolidated
	 12/31/23	12/31/23	12/31/23		12/31/23		12/31/23		12/31/23
As Filed	\$ 141,506	\$ 1,713,394	\$ -	\$	27,653	\$	167,855	\$	2,050,408
Corrected	 140,525	1,579,986	-		27,653		150,317		1,898,481
Differnece	\$ (981)	\$ (133,408)	\$ -	\$	-	\$	(17,538)	\$	(151,926)

- PA-7. NOL Calculation: Reference Exhibit 2, N-NOL Calc worksheet. When calculating the NOL offset, please explain why it is appropriate to use the combined tax rate of 27.17% instead of 26.73%, which reflects the reduction in the 2023 Nebraska corporate tax rate signed into law 2022 NE LB 873 on April 13, 2022.
- PA-8. Process and Controls: Reference Docket NG-112.1, 2022 SSIR, Response to PA-18, dated 9/28/2021. Please provide any additions, updates, and modifications made to the policies and procedures provided in the referenced response regarding the development of the SSIR.
- PA-9. True Up Calculation, Actual Customer Bills: Reference Exhibit 2 2023 SSIR Model NG112.2-Filed Version, Tab B-True up Calculation. Please provide support for the line 2 Actual Customer Bills (Mar to Dec).
- PA-10. True-up Calculation, Revenue Requirement (Forecasted): Reference Exhibit 2 2023 SSIR Model NG112.2-Filed Version, Tab B-True up Calculation. Line 10 shows a forecasted revenue requirement of \$1,549,791, which agrees with BHE's application in NG-109 (Exhibit JLB-5). However, the parties in NG-109 agreed to remove four reliability pipeline looping projects (NG-109 Settlement, p. 15), which modified the SSIR revenue requirements.

- a. Please confirm that the approved forecasted SSIR revenue requirements should be \$1,435,609, as reflected in NG-112.1, Exhibit 2, Table C.
- b. Also, please confirm that the \$1,435,609 resulted in the approved SSIR Charge \$/month Residential \$0.65 and Commercial \$1.30.
- PA-11. True-up Calculation, Interest: Reference Exhibit 2 2023 SSIR Model NG112.2-Filed Version, Tab B-True up Calculation and Tariff First Revised Sheet No.130, Definitions D. SSIR True-Up Amount. The Tariff requires monthly interest on the true-up balance based on the current interest on pipeline refunds established by FERC. Where is the interest calculation reflected in the Company's request? If it is not reflected, please provide. Also please provide the support for the rate used.

APPENDIX D: WORKPAPERS

Workpapers that support Blue Ridge's analysis are listed below. Copies are provided within our electronic transmitted appendices.

- EY Tax News Update Nebraska enacts individual and corporate income tax rate cuts
- WP Exh 2 2023 SSIR Model NG112.2 Updated Version 9.26.22.xlsx
- WP Exh 3 2021 SSIR Project Details.xlsx
- WP V&V Exh 2 2023 SSIR Model NG112.2 Filed Version R1.xlsx