



**Before the Nebraska Public Service Commission
Docket No. NG-112.4**

**Examination of the System Safety and Integrity Rider
of Black Hills Nebraska Gas, LLC
d/b/a Black Hills Energy
for the 2025 Program Year**

on behalf of the Nebraska Public Advocate

October 18, 2024

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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.

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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.

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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.

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EXECUTIVE SUMMARY

On August 1, 2024, 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, 2025, for rate areas one, two, three, and five. The Company proposes the adjusted 2025 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, 2025.

In its August 1, 2024, application, the Company sought approval of the jurisdictional revenue requirements of \$3,674,535 attributable to jurisdictional total capital projects (2025) of \$39,008,880, and the jurisdictional portion of 2025 Data Infrastructure Improvement Program (DIIP) costs recoverable through the SSIR, totaling \$2,023,707. The Company’s application included the 2023 true-up of \$3,096,314, resulting in a total requested amount (including jurisdictional revenue requirements approved for projects from 2021 through 2025, to be collected in 2025) of \$23,608,587.

Blue Ridge reviewed the Company’s SSIR filing and recommends approving the as-filed SSIR revenue requirements and true-ups that result in the following 2025 SSIR Charge.

Table 1: SSIR Rate for 2025

Description	Residential	Commercial
Amount to be Collected in 2025	\$ 16,934,919	\$ 6,673,668
Forecasted Total Customer Bills (Jurisdictional Only)	3,208,068	403,067
	\$ 5.28	\$ 16.56

Blue Ridge has the following recommendation:

1. Blue Ridge recommends approving the Company’s request to modify the SSIR Tariff to allow flexibility to swap amounts by SSIR category to another SSIR category as long as the projects have been reviewed and approved as part of the Application review process. Each such swap should be identified and explained as to why the original project could not be completed and an alternate project was used.

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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 approved the SSIR with certain modifications and conditions. 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 that 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

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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

On December 13, 2022, the Commission approved changes to the SSIR Program. In previous applications Black Hills requested approval of capital spending at an individual project level. The Company requested the Commission approve capital spending at a project category level. Black Hills would still provide the Commission with detailed project descriptions and costs for each project contained within each category; however, if Black Hills were unable to finish a project, the requested budget category adjustment would allow Black Hills to shift funding to an alternate project within the same project category. All alternate projects would be filed with the initial SSIR Application, reviewed by the PA, and approved by the Commission.³

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).

³ NG-112.2 Order Approving 2023 SSIR Charge (December 13, 2022), pages 2-3.

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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 underlying 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 in accordance with the procedural schedule established 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.⁴

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.
- Should circumstances arise which prohibit the Company’s planned spending on a Project, the Company may transfer funds within the same category to another like Project. Such transfer of funds will be communicated to the Public Advocate and Commission via an informational filing subject to the Public Advocate’s review and the Commission’s approval.
- 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, actual or projected in-service dates, and the expected schedule for completion of the previous calendar year’s Projects.

⁴ BHE SSIR Tariff, Third Revised Sheet No. 127, B (January 1, 2023).

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- The calculation of the SSIR True-Up Amount, if any.
- The calculation of the Deferred SSIR Balance, if any.⁵

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.⁶

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 Fourth 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 types⁷:

- 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

⁵ BHE SSIR Tariff, Third Revised Sheet No. 127, A, i–iv (January 1, 2023).

⁶ BHE SSIR Tariff, Second Revised Sheet No. 130, Definitions, C (January 1, 2023).

⁷ BHE SSIR Tariff, Second Revised Sheet No. 129.1, Definitions, C (January 1, 2023).

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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.

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.⁸

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.⁹

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.¹⁰

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.

⁸ BHE SSIR Tariff, Second Revised Sheet Nos. 129.1 and 130, Definitions, C (January 1, 2023).

⁹ BHE SSIR Tariff, Third Revised Sheet No. 128, Definitions, B (January 1, 2023).

¹⁰ BHE SSIR Tariff, Third Revised Sheet No. 128– Fourth Revised Sheet No. 129, Definitions, B (January 1, 2023).

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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 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:

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

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 class¹¹

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.¹²

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.¹³

The calculated rate shall be an adjustment to the Customer Charge applicable to the Company's Jurisdictional Residential, Commercial, and Commercial—EO customers.¹⁴

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.¹⁵

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.

¹¹ BHE SSIR Tariff, Second Revised, Sheet No. 130–Third Revised, Sheet No. 131, Section “SSIR Adjustment Calculation,” A (January 1, 2023).

¹² BHE SSIR Tariff, Second Revised Sheet No. 130, Definitions, D (January 1, 2023).

¹³ BHE SSIR Tariff, Third Revised Sheet No. 128, Definitions, Item A (January 1, 2023).

¹⁴ BHE SSIR Tariff, Third Revised, Sheet No. 131, Section “SSIR Adjustment Calculation,” B (January 1, 2023).

¹⁵ BHE SSIR Tariff, Third Revised, Sheet No. 131, Section “SSIR Adjustment with Changes in Base Rates, (January 1, 2023).

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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”).¹⁶

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.¹⁷

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.¹⁸

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 an annual surveillance filing within ninety (90) 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 previous calendar year’s SSIR project costs, actual or projected in-service dates, and if any remain uncompleted at the time of submittal of the annual surveillance filing, the expected schedule for completion.¹⁹

PROJECT SCOPE

The project scope includes the application filed by Black Hills Energy on August 1, 2024: *Re: In the Matter of the Application of Black Hills Nebraska Gas, LLC d/b/a Black Hills Energy seeking approval of a 2025 System Safety & Integrity Rider Charge*, Docket No. NG-112.4. The Application includes the 2025 proposed projects and the reconciliation calculations for the 2023 projects.

¹⁶ BHE SSIR Tariff, Third Revised, Sheet No. 127, Section “Annual Application and Quarterly Surveillance Filings,” A. (January 1, 2023).

¹⁷ BHE SSIR Tariff, Third Revised, Sheet No. 131, Section “SSIR Adjustment with Changes in Base Rates, (January 1, 2023).

¹⁸ BHE SSIR Tariff, Third Revised, Sheet No. 131, Section “SSIR Adjustment with Changes in Base Rates, (January 1, 2023).

¹⁹BHE SSIR Tariff, Third Revised Sheet No. 128, Item D (January 1, 2023).

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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 2: NG-109 Excluded Reliability Pipeline Looping Projects²⁰

Line No.	Project #	Project Name	Criteria	Project Category / Account Allocator	In Service Date	Total Company 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, as of August 1, 2024
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)
 - 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 2023 Program Year (October 17, 2022)
 - d. Black Hill’s response to Public Advocates Report (October 28, 2022)
 - e. Order Approving 2023 SSIR Charge (December 13, 2022)
7. Application No. NG-112.3 (2024 SSIR Projects)
 - a. Black Hills 2024 SSIR Application with four Exhibits

²⁰ NG-109, Exhibit JLB-5, page 70.

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- b. Exhibit 2-2024 SSIR 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 2024 Program Year (October 16, 2023)
- d. Black Hill's response to Public Advocates Report (October 19, 2023) with revised exhibits
- e. Order Approving 2024 SSIR Charge (December 12, 2023)

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.

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 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.²¹ The Company confirmed that no updates were made in 2024 to policies and procedures for the identification and categorization of

²¹ BHE response to SSIR scope 2022 Data Request PA-18 and SSIR scope 2023 Data Request PA-8.

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SSIR projects or for the development of the SSIR.²² Additionally, the Company provided copies of the 2024 procedures for both the TIMP and the DIMP.²³ The Company also confirmed that no changes had been made to the Damage Prevention procedures from last year.²⁴

The Company states that, as set forth in the SSIR Tariff, eligible projects must meet one of these criteria: (1) compliance with TIMP, (2) compliance with DIMP, (3) compliance with PHMSA regulations, and (4) facility relocations over \$20,000. The Company's Application includes additional language for SSIR Projects eligibility: "Projects to ensure gas is available, delivered and Projects to ensure gas is available, delivered and measured for our customers in all situations. In some cases, these projects will not replace any existing infrastructure, and are required to maintain minimum pressure requirements on our distribution system to prevent loss of customers on a winter peak day. These projects include 'Obsolete Infrastructure Projects,' with examples such as Charts, Meter Install, Odorizer, and Valve projects."²⁵

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
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

Projects are evaluated for inclusion within each SSIR category based on overall programmatic risk mitigated via each project completion. Once projects are programmatically identified, the project's maximum risk score is used to determine the priority of the project within the SSIR category. Other business constraints are also considered, such as availability/location of resources and scope of the project. As unforeseen constraints present themselves, the BHE planning teams determine what impact each constraint has on the project to determine whether it is necessary to adjust the scope/timeline of the project and whether the project is still a prudent investment for the Company to make on behalf of its Nebraska customers.²⁶

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

²² BHE response to SSIR scope 2025 Data Request PA-1.

²³ BHE response to SSIR scope 2025 Data Request PA-4 CONFIDENTIAL and PA-5 CONFIDENTIAL.

²⁴ BHE response to SSIR scope 2025 Data Request PA-6.

²⁵ NG-112.4, BHE SSIR Application (August 1, 2024), 2025 SSIR Projects—Application, page 2.

²⁶ BHE response to SSIR scope 2024 Data Request PA-8.

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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.

Requirement: BHE filed its annual application on or before August 1.²⁷

Blue Ridge found that the Company filed its application on August 1, 2024.

Requirement: The approved SSIR Tariff requires that the Annual Report include 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.²⁸

The Company’s Application includes 29 projects (26 capital projects and three DIIP projects) for 2025. Blue Ridge found that the Company provided project descriptions, scope, and estimated project costs. The Company provided projected in-service dates for the 26 capital projects and the 13 alternative capital projects with its application.

The DIIP projects are multi-year and will be continued from a prior year. Blue Ridge was informed during a prior Technical Session that the DIIP projects are expected to be complete by 2030 with a few million dollars spent each year.²⁹ The forecasted completion was modified to 2034. The Company provided the following information for the percent complete, estimated cost, and in-service dates for the DIIP projects.³⁰

²⁷ BHE SSIR Tariff, Third Revised Sheet No. 127, A, i–iv (January 1, 2023).

²⁸ BHE SSIR Tariff, Third Revised Sheet No. 127, A, i–iv (January 1, 2023).

²⁹ Technical Session held on September 16, 2022.

³⁰ BHE response to SSIR scope 2025 Data Request PA-12.

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Table 3: DIIP Project Status ad Projections³¹

Project	Estimated % Complete	Estimated Cost	In-Service Date	Revised In-Service?
Transmission/Gathering Traceable, Verifiable and Complete (TVC)Records	87%	2024 \$1,652,122 2025 \$250,920	3/31/25	No
Gas Service Card Mapping	NA	NA	12/31/34	Yes*
Distribution Main & Service Centerline Survey	10%	2024 \$100,000 2025 \$1,400,905 2026-2034 \$2,112,000 Annually	Annually through 2034	No
Distribution Attribute Improvement	10%	2024 \$232,458 2025 \$288,000 2026-2034 \$288,000 Annually	Annually through 2034	No
GIS Pressure Systems	0%	TBD**	12/31/35	No
GIS Emergency Response Zone	0%	TBD**	12/31/35	No
GIS Cathodic Protection (CP) Zones	0%	TBD**	12/31/35	No
Bare Pipe Inspection (BPI) and Subject Matter Expert (SM)E Pipeline Attribute Assessment	0%	TBD**	12/31/35	No
Document Management Migration	0%	TBD**	12/31/26	No

*The Gas Service Cards Mapping Project was stopped as a stand-alone effort in 2023 and combined with the Distribution Main and Service Centerline Survey & Distribution Attribute Improvement project. This will result in a more efficient use of project dollars and resources.

**Requests for Proposals will be issued in future years to determine the cost for future projects.

Requirement: Should circumstances arise which prohibit the Company’s planned spending on a project, the Company may transfer funds within the same category to another like project. Such transfer of funds will be communicated to the Public Advocate and Commission via an informational filing subject to the Public Advocate’s review and the Commission’s approval.³²

In addition to the 2025 SSIR Project list, the Company also provides a 2025 Alternate SSIR Project list. The Company provides narratives on the alternate projects. Blue Ridge reviewed the alternate projects during project testing discussed in Section 3, Eligibility of Projects.

Requested Change to Tariff: In the NG-112.3 filing, the Company requested the SSIR Tariff be modified to allow approval to not only swap amounts within categories but to move costs to another SSIR project category so long as the projects have been reviewed and approved as part of the Application review process:

³¹ BHE response to SSIR scope 2025 Data Request PA-12.

³² BHE SSIR Tariff, Third Revised Sheet No. 127, A, i (January 1, 2023).

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In this 2024 SSIR Annual Application, the Company requests the Commission review and approve additional flexibility in the management of SSIR spending, subject to Commission's total approved 2024 SSIR spending amounts. As noted, the requested flexibility provided in the 2023 SSIR Charge Order allows the Company to manage 2024 SSIR project spend within the defined SSIR project categories, per the Company's Tariff, and to streamline the reconciliation process, also on a project category basis.

In this 2024 SSIR Application, the Company seeks approval to swap amounts approved by SSIR category to another SSIR category so long as the projects have been reviewed and approved as part of the 2024 Application review process. In other words, the Company is limited to the identified projects presented herein and to the approximate total amount approved but may swap out a project from one category for a project from a different category.³³

In the current filing, the Company states,

In its 2024 SSIR Charge Order, the Commission further approved the Company's request for approval to swap amounts approved for SSIR Projects at the category level. The Commission's 2024 SSIR Charge Order permits Black Hills Energy to swap an approved SSIR Project in one category to an SSIR Project in another category so long as that Project was reviewed and approved as part of the 2024 SSIR Application review process. In other words, the Company is limited to the identified SSIR Projects presented within the SSIR Application and to the approximate total SSIR Project amount approved by the Commission but may swap out a project from one category for a project from the SSIR Project or SSIR Alternate Project list.³⁴

However, Blue Ridge was unable to locate within a Commission order or an approved Tariff that the Company received approval to swap spend between categories. The Company explained that it "acknowledges that the Commission's approval of cross-category budget flexibility is not specifically repeated within its Orders. However, the request for additional budget flexibility was first included within Black Hills Energy's 2023 SSIR Application, which was approved by the Commission, with some modifications.³⁵ The expanded cross-category budget permission was specifically requested by Black Hills Energy within its SSIR Application. The projects and budgets in Black Hills 2024 SSIR Application were approved by the Commission.³⁶ A review of Black Hills Energy's annual SSIR Application coupled with the express and general authority of the Commission's Order approving the projects and the estimated SSIR project budgets included within Black Hills Energy's 2023 and 2024 SSIR Applications show the progression of the SSIR budget flexibility provided by the Commission."³⁷

Blue Ridge found that while the Commission authorized transferring spend within categories in NG-112.3, Blue Ridge agrees with the Company that the Commission has not specifically approved cross-category budget flexibility and that flexibility is not reflected in the approved SSIR Tariff. Nevertheless, the Commission approved all the projects and estimated budget amounts. Therefore,

³³ NG-112.3, BHE SSIR Application (August 1, 2023), 2024 SSIR Projects—Application, page 7

³⁴ NG-112.4, BHE SSIR Application (August 1, 2024), 2025 SSIR Projects—Application, page 6.

³⁵ [2022-12-13 NG-112.2 Order Approving 2023 SSIR Charge.pdf \(nebraska.gov\)](#).

³⁶ [2023-12-12 NG-112.3 Order Approving 2024 SSIR Charge.pdf \(nebraska.gov\)](#)

³⁷ BHE response to SSIR scope 2025 Data Request PA-2.

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Blue Ridge does not believe the cross-category spending for specifically approved projects is a compliance issue.

Later in the current filing, the Company states,

The 2025 SSIR Application requests continued Commission approval of flexibility and authority for Black Hills Energy when managing the SSIR projects and category budgets. To that end, the Company again asks the Commission to (a) permit Black Hills Energy cross-category use of the total approved 2025 SSIR spending amounts and (b) permit Informational Filings for previously unidentified projects that result in lower costs of completion due to efficiency and proximity in completion of those projects.³⁸

Blue Ridge recommends approving the Company’s request to modify the SSIR Tariff to allow flexibility to swap amounts approved by SSIR category to another SSIR category as long as the projects have been reviewed and approved as part of the Application review process. Each such swap will be identified, and an explanation will be given as to why the original project could not be completed and an alternate project was used.

Requirement: 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, actual or projected in-service dates, and the expected schedule for completion of the previous calendar year’s projects.³⁹

Through NG-112.2, the Nebraska Public Service Commission approved BH Nebraska Gas jurisdictional spend of \$47,382,876 for SSIR-eligible capital projects in 2023, including Data Infrastructure Improvement Program (DIIP) projects. The actual 2023 jurisdictional spend was \$2,552,323 more than proposed.⁴⁰

Table 4: NG-112.2 2023 Forecast vs. Actual Expenditures

	<u>Total</u>	<u>Jurisdictional</u>
<u>Forecast</u>		
Capital Projects	50,204,069	44,575,319
DIIP	3,258,210	2,807,557
	<u>\$ 53,462,279</u>	<u>\$ 47,382,876</u>
<u>Actual</u>		
Capital Projects	\$ 52,813,370	\$ 47,129,436
DIIP	2,805,764	2,805,764
	<u>\$ 55,619,134</u>	<u>\$ 49,935,200</u>
<u>Variance</u>		
Capital Projects	\$ 2,609,301	\$ 2,554,117
DIIP	(452,446)	(1,793)
	<u>\$ 2,156,855</u>	<u>\$ 2,552,323</u>

The Company provided explanations for variances between the forecast and actual spend.

³⁸ NG-112.4, BHE SSIR Application (August 1, 2024), 2025 SSIR Projects—Application, page 7.

³⁹ BHE SSIR Tariff, Third Revised Sheet No. 127, Annual Application and Annual Surveillance Filings A.ii.

⁴⁰ NG-112.4, BHE SSIR Application (August 1, 2025), Exhibit 3 2023 SSIR Project Details.

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- a) **ARMR** Actual At-Risk Meter Relocation SSIR Project Category spend exceeded original projected jurisdictional budget amounts by \$2,605,471. Additional dollars were spent in Albion to make up for the underspend in Lincoln. Challenges with scheduling customers and customer cancelations slowed the work in Lincoln. Additional work was done in Benkelman and Norfolk to complete the ARMR work in those areas.
- b) **Bare Steel** Replacement of Bare Steel Distribution Mains SSIR Project Category jurisdictional spend was \$1,366,978 more than original projected budget amounts. The original scope of both projects in this category was expanded to replace approximately 6,000 more feet of main and 9 services. Additionally, contractor costs were higher than anticipated due in large part to the timing of estimating costs a year in advance of actual contracting and construction.
- c) **Facility Relocations** Required Facility Relocations SSIR Project Category jurisdictional spend totaled \$1,620,115. 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.
- d) **TOG, Exposed and Shallow Main Top of Ground**, Shallow and Exposed Pipe SSIR Project Category jurisdictional spend was \$951,956 less than original projected jurisdictional budget amounts. This variance was the result of project management costs, contractor costs and internal loadings being all lower than estimated. The Span replacement at N 35th & Superior Street has been delayed awaiting a 408-permit approval.
- e) **Obsolete Infrastructure (Meter Install)** Meter Install SSIR Project Category jurisdictional spend was \$1,816,506 less than original projected jurisdictional budget amounts. This variance was the result of the projects being overestimated and challenges completing all meter exchanges due to both internal and external resource constraints mainly due to workforce retention and recruitment/training of qualified workers.⁴¹

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 2023 SSIR projects are not unreasonable.

Exhibit 3 also included the required actual or projected in-service dates and the expected schedule for completion of the previous year’s projects. There were three projects that were not completed as planned in 2023. Exhibit 3 explained the cause for the delay.⁴²

Table 5: 2023 Projects Not Completed

Description	Criteria	In-Service Date		Explanations
		Projected	Actual	
10080234 - Mega Rule - Kearney	TIMP	Nov-23	n/a	This line segment was reclassified during a routine High Consequence Area (HCA) analysis, eliminating the need for MAOP reconfirmation
10080237 - Mega Rule - McCook	TIMP	Nov-23	n/a	This project was moved to an out-year to align with other planned work/A DRS was installed to lower the line pressure, allowing us to reclassify the lateral instead of replacing or pressure testing
10080263 - Span replacement - N 35th & Superior St (SSIR)	TOG/Shallow/Exposed	Nov-23	n/a	Could not complete - waiting on 408 permit approval

There were 22 projects that did not have projected in-service dates. These include 10 Facility Relocations that typically do not have forecasted in-service dates. Eight projects were Alternate Projects. Four were Obsolete Infrastructure, Meter Install, about which the Company explained,

⁴¹ NG-112.4, BHE SSIR Application (August 1, 2024), Exhibit 3 2025 SSIR Project Details, pages 5–6.

⁴² NG-112.4, BHE SSIR Application (August 1, 2024), Exhibit 3 2025 SSIR Project Details.

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“Program underspend was the result of the projects being overestimated, and challenges completing all meter exchanges.”

Blue Ridge found the explanations not unreasonable.

Requirement: The Annual Application shall include the calculation of the SSIR True-Up Amount, if any.⁴³

Blue Ridge found that the Company’s Application includes the calculation of the SSIR True-Up Amount from the 2023 projects and is consistent with the methodology included in the Company’s NG-109 application and the SSIR approved by the Commission.⁴⁴ See further discussion in Section 5 “System Safety and Integrity Rider Charge Calculation” for further information.

Requirement: The Annual Application shall include the Calculation of the Deferred SSIR Balance, if any.⁴⁵

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

Requirement: 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.⁴⁶

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 29 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?
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This task evaluates each of the projects and, to the extent possible, the alternative 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.

Requirement: As stated in the SSIR Tariff, Eligible System Safety and Integrity projects are one or more of the following:

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

⁴³ BHE SSIR Tariff, Third Revised Sheet No. 127, A, iii (January 1, 2023).

⁴⁴ 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.

⁴⁵ BHE SSIR Tariff, Third Revised Sheet No. 127, A, iv (January 1, 2023).

⁴⁶ BHE SSIR Tariff, Second Revised Sheet No. 130, Definitions, C (January 1, 2023).

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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 domain⁴⁷

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.⁴⁸

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; pipeline system constraints; pipeline replacement history; population density; pipeline

⁴⁷ BHE SSIR Tariff, Fourth Revised Sheet Nos. 129 and 129.1, Definitions, C (January 1, 2023).

⁴⁸ BHE SSIR Tariff, Second Revised Sheet Nos. 129 and 129.1, Definitions, C (January 1, 2023).

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maintenance and internal inspection history; pipeline pigability; 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.⁴⁹

Description of Projects

The Company provided a narrative describing the 2025 SSIR projects. The Company identified 12 types of projects, totaling \$45,008,584, 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. Replacement of Bare Steel Distribution Main—one project, totaling \$4,787,640
2. Replacement of Transmission Pipeline—no projects or costs included
3. Barricades—no projects or costs included
4. Cathodic Protection and Corrosion Prevention—four projects, totaling \$357,000
5. Town Boarder Station—six projects, totaling \$1,053,000
6. Top of Ground (TOG), Span, Shallow, and Exposed Pipe Replacement—five projects, totaling \$13,212,944
7. Mega Rule Projects—one project, totaling \$1,235,000
8. Meter Relocations—2,301 meter relocations in four town and cities, totaling \$16,113,000
9. Obsolete Infrastructure—five projects, totaling \$2,492,000
10. Obsolete Pipe Replacement—two projects, totaling \$5,758,000
11. Required Facility Relocation Projects—the Company is aware of potential projects and will provide updates in subsequent filings
12. DIIP—three projects with costs in 2024, totaling \$2,348,540

The Company's Application includes 29 (26 capital and 3 DIIP) projects with costs in 2025. In addition, the Company provided a list of 13 alternative projects by category, totaling \$17,142,045.

A modified excerpt from the Company's filing listing the 2025 proposed SSIR Capital Projects by type is provided in the following table.⁵⁰

⁴⁹ BHE SSIR Tariff, Second Revised Sheet No. 130, Definitions, C (January 1, 2023).

⁵⁰ WP V&V Exhibit 2 – 2025 SSIR Model – Final Version, tab "Projects for Report."

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Table 6: 2025 SSIR Captial Projects Sorted by Criteria and Category

Line No.	Project #	Project Name	Criteria	Project Category / Account Allocator	In Service Date	Total Company Project Amount	Jurisdictional Totals	Non-Jurisdictional Totals
1	10080268	Mega Rule - York SG (Replacement)	TIMP	TIMP	Nov-25	\$ 1,235,000	689,947	545,053
Total TIMP						\$ 1,235,000	\$ 689,947	\$ 545,053
2	10077484	ARMR - Papillion (Plattsmouth) 247	DIMP	ARMR	Nov-25	\$ 1,729,000	1,644,735	84,265
3	10077462	ARMR - Lincoln (Lincoln) 1428	DIMP	ARMR	Dec-25	\$ 8,000,000	7,610,112	389,888
4	10077472	ARMR - McCook (McCook) 456	DIMP	ARMR	Nov-25	\$ 3,192,000	3,036,435	155,565
5	10077490	ARMR - Scotts Bluff (Scottsbluff) 456	DIMP	ARMR	Nov-25	\$ 3,192,000	3,036,435	155,565
						\$ 16,113,000	\$ 15,327,717	\$ 785,283
6	10077482	Bare Steel Papillion (Ashland)	DIMP	Bare Steel	Nov-25	\$ 4,787,640	3,982,885	804,755
						\$ 4,787,640	\$ 3,982,885	\$ 804,755
7	10080300	CP Remote Monitor Unit Installs - K	DIMP	Cathodic Protection	Sep-25	\$ 163,800	134,075	29,725
8	10080302	CP Remote Monitor Unit Installs - S	DIMP	Cathodic Protection	Sep-25	\$ 193,200	158,140	35,060
						\$ 357,000	\$ 292,215	\$ 64,785
9	10077520	PVC - York (SG) (Sutton 3)	DIMP	PVC	Nov-25	\$ 2,639,000	2,195,411	443,589
10	10077503	PVC Sutton (Sutton 14)	DIMP	PVC	Nov-25	\$ 3,119,000	2,594,727	524,273
						\$ 5,758,000	\$ 4,790,138	\$ 967,862
11	10077500	Shallow Main - Sutton (Harvard) 460-0040	DIMP	TOG/Shallow/Exposed	Nov-25	\$ 1,051,944	875,123	176,821
12	10080263	Span Replacement 35th and Superior	DIMP	TOG/Shallow/Exposed	Nov-25	\$ 1,400,000	1,164,675	235,325
13	10077446	TOG - Holdrege (Holdrege 3)	DIMP	TOG/Shallow/Exposed	Nov-25	\$ 4,448,000	3,700,337	747,663
14	10077504	TOG - Sutton (Sundance Rd - 500-1850)	DIMP	TOG/Shallow/Exposed	Nov-25	\$ 177,000	147,248	29,752
15	10077446	TOG - Holdrege (Holdrege 5)	DIMP	TOG/Shallow/Exposed	Nov-25	\$ 6,136,000	5,104,600	1,031,400
						\$ 13,212,944	\$ 10,991,983	\$ 2,220,961
16	10077455	TBS Replacement - Kearney (Arcadia)	DIMP	Town Border Stations	Nov-25	\$ 75,000	55,007	19,993
17	10077455	TBS Replacement - Kearney (Shelton)	DIMP	Town Border Stations	Nov-25	\$ 225,750	165,568	60,182
18	10077455	TBS Replacement - Kearney (Farnam)	DIMP	Town Border Stations	Nov-25	\$ 225,750	165,568	60,182
19	10077493	TBS Replacement - Sidney (Broadwater)	DIMP	Town Border Stations	Nov-25	\$ 225,750	165,568	60,182
20	10077493	TBS Replacement - Sidney (Lodgepole)	DIMP	Town Border Stations	Nov-25	\$ 225,750	165,568	60,182
21	10077452	TBS - Holdrege (Republican City)	DIMP	Town Border Stations	Nov-25	\$ 75,000	55,007	19,993
						\$ 1,053,000	\$ 772,286	\$ 280,714
Total DIMP						\$ 41,281,584	\$ 36,157,224	\$ 5,124,360
22	10075203N	Chart Replacements - Omaha	Obsolete Infrastructure	Charts	Oct-25	\$ 205,000	176,513	28,487
23	10075255N	Chart Replacements - Lincoln	Obsolete Infrastructure	Charts	Oct-25	\$ 205,000	176,513	28,487
24	10075287N	Chart Replacements - Scottsbluff	Obsolete Infrastructure	Charts	Oct-25	\$ 16,400	14,121	2,279
25	10080298N	Chart Replacements - Kearney	Obsolete Infrastructure	Charts	Oct-25	\$ 65,600	56,484	9,116
						\$ 492,000	\$ 423,631	\$ 68,369
26	10063950N	Lincoln AMI	Obsolete Infrastructure	Meter Install	Dec-25	\$ 2,000,000	1,738,078	261,922
						\$ 2,000,000	\$ 1,738,078	\$ 261,922
Total Obsolete Infrastructure						\$ 2,492,000	\$ 2,161,709	\$ 330,291
Grand Total						\$ 45,008,584	\$ 39,008,880	\$ 5,999,704

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The following table summarizes the DIIP projects that the Company plans to include as O&M in the SSIR.⁵¹

Table 7: 2025 DIIP O&M Expense Projects

Line No.	Project Name	Total Company Project Amount
1	Transmission/Gathering TVC Records NE	\$ 347,247
2	Distribution Main & Service Centerline Survey NE	1,400,905
3	Distribution Data Attribute Improvement NE	600,388
		\$ 2,348,540

Alternative Projects

In addition to the 26 capital projects identified, the Company’s Application includes alternate SSIR projects. The 2025 Alternate SSIR Project list costs are not yet included in the 2025 Application project cost total because it is still uncertain as to whether those projects will, in fact, proceed in 2025. However, those Alternate SSIR Projects are identified below.⁵²

Table 8: 2025 SSIR Alternate Project List

Line #	Project	Category	Estimated In-Service Date	Estimate
1	10077446: TOG - Holdrege (Holdrege 1)	TOG	Nov-25	\$6,777,000
2	10072321: ARMR - Alliance (Alliance)	ARMR	Dec-25	\$2,800,000
3	10072327: ARMR - Sutton (Hebron)	ARMR	Dec-25	\$2,310,000
4	10077472: ARMR - McCook (Indianola)	ARMR	Dec-25	\$1,414,000
5	10077472: ARMR - McCook (Bartley)	ARMR	Dec-25	\$938,000
6	10077484: ARMR - Papillion (Blair)	ARMR	Dec-25	\$924,000
7	10077484: ARMR - Papillion (Papillion)	ARMR	Dec-25	\$672,000
8	10077484: ARMR - Papillion (La Vista)	ARMR	Dec-25	\$497,000
9	Benjamin Avenue Span Replacement	SPAN	Nov-25	\$440,045
10	10077445: Bare Steel - Columbus (Osceola)	BARE	Nov-25	\$145,000
11	10077455: TBS Replacement - Kearney (Amherst)	TBS	Nov-25	\$75,000
12	10077476: TBS Replacement - Norfolk (Winside)	TBS	Nov-25	\$75,000
13	10077468: TBS Replacement - McCook (Bartley)	TBS	Nov-25	\$75,000
				\$17,142,045

Blue Ridge reviewed the information provided for the alternate projects using the same criteria used for the 2025 proposed projects.

Project Testing

Each 2025 project and alternative project was evaluated based on objective criteria identified as T1 through T8 below. 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?*

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

⁵¹ WP V&V Exhibit 2 – 2025 SSIR Model – Final Version, tab “Projects for Report.”

⁵² NG-112.4, BHE SSIR Application (August 1, 2024), 2025 Alternate SSIR Project List, page 8.

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expected to be provided in the annual surveillance filing that is due within ninety (90) days of the end of the calendar year, or March 31, 2025.

- 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 whether risk rankings were provided and can be evaluated once the projects are complete. We reviewed the Risk Ranking detail used for each project category and its individual projects. The review process has not changed since our last review in 2023.⁵³ As a result, 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. The process used is not unreasonable, and the process is auditable as long as the Company provides justification for project changes within each category.⁵⁴

Blue Ridge concludes that the Company provided risk rankings for projects and alternative projects 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 these criteria:

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

⁵³ BHE response to SSIR scope 2025 Data Requests PA-07.

⁵⁴ BHE response to SSIR scope 2024 Data Requests PA-07, PA-08, PA-09, PA-10, PA-11 PA-13, PA-23, and PA-24,

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subdivision of the State of Nebraska, or another entity having the power of eminent domain

The SSIR Tariff further states these 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 Program⁵⁵

The Company categorized the 29 projects with costs within the 2025 Project List based on qualifications for eligibility:

- DIMP—twenty projects, jurisdictional total \$41,281,584;
- TIMP—one projects, jurisdictional total \$1,235,000;
- Obsolete Infrastructure—five projects, jurisdictional total \$2,492,000
- DIIP—three projects, jurisdictional total \$2,348,540

Blue Ridge found that all the projects within the 2025 SSIR Project list and Alternative Project list align with an approved eligible SSIR category and are consistent with prior SSIR type of projects.

Three of the 29 projects within the 2025 SSIR Project list are DIIP projects:

1. Transmission/Gathering Traceable, Verifiable and Complete (TVC) Records
2. Distribution Attribute Improvement
3. Distribution Main & Service Centerline Survey

The three data improvement projects are multi-year projects, where continual progress is made toward completion.⁵⁶ 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 and made at the discretion of the Company to extend

⁵⁵ BHE SSIR Tariff, Fourth Revised Sheet Nos. 129 and Second Revised Sheet Nos. 129.1 Definitions (January 1, 2023).

⁵⁶ BHE Response to SSIR 2025 scope Data Request PA-12c.

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service for future growth that is not specifically required by statute or regulation, shall be excluded from Eligible System Safety and Integrity Costs.⁵⁷

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?*

Blue Ridge found the Company's project estimates, including those for the alternative projects, 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 O&M expense in accordance with Title 18 of the Code of Federal Regulations (18 CFR)?*

Blue Ridge found that, except for the DIIP projects, the Company properly classified the projects, including the alternative 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)?*

Blue Ridge found that information related to project estimates for 2025, including those for the alternative projects, contain sufficient detail as to reasons and basis for project selection.

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

⁵⁷ BHE SSIR Tariff, Third Revised Sheet No. 128–Fourth Revised Sheet No. 129, Definitions, B (January 1, 2023).

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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.⁵⁸

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.⁵⁹

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

Table 9: Company Proposed Revenue Requirement Calculation (Prior to True-Up Amounts and Adjustments) as of December 31, 2025⁶⁰

No.	Description	Amount
1	Gross Plant - 13 Month Average December 31, 2025	\$ 180,424,018
2	Accumulated Depreciation - 13 Month Average December 31, 2025	(8,857,777)
3	ADIT Pro Rated (net of 190 and 282)	(5,715,967)
4	Total Rate Base	<u>\$ 165,850,274</u>
5	Weighted Average Cost of Capital	6.71%
6	Return on Rate Base	<u>\$ 11,120,261</u>
7	Income Tax Expense	\$ 2,641,110
8	Depreciation Expense	3,698,779
9	Property Tax Expense	1,028,417
10	Total Operating Expense	<u>\$ 7,368,306</u>
11	Revenue Requirement	\$ 18,488,566
12	Plus: Incremental Data Integrity Improvement Project (DIIP) Expense	2,023,707
13	Revenue Requirement with DIIP Expense	<u><u>\$ 20,512,273</u></u>

Return

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

⁵⁸ BHE SSIR Tariff, Third Revised Sheet No. 128, Definitions, B (January 1, 2023).

⁵⁹ BHE SSIR Tariff, Third Revised Sheet No. 128- Third Revised Sheet No. 129, Definitions, B (January 1, 2023).

⁶⁰ NG-112.4, BHE SSIR Application (August 1, 2024), Exhibit 2, Schedules A - SSIR Rate Calculation and C - Revenue Requirement.

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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.⁶¹

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.

Rate of Return

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

Table 10: Weighted Average Cost of Capital Calculation⁶²

<u>Description</u>	<u>Capital Structure</u>	<u>Cost of Capital</u>	<u>Weighted Cost of Capital</u>
Long-Term Debt	50.00%	3.91%	1.96%
Common Equity	50.00%	9.50%	4.75%
	<u>100.00%</u>		<u>6.71%</u>

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).

Rate Base

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.

⁶¹ BHE SSIR Tariff, Third Revised Sheet No. 128, Definitions, B (January 1, 2023).

⁶² NG-112.4, BHE SSIR Application (August 1, 2024), Exhibit 2, Schedule J - Capital Structure.

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Table 11: SSIR Gross Plant in Service Projected Balances as of December 31, 2025⁶³

Description	TIMP	DIMP	Facility Relocate	Obsolete Infrastructure	Total
13-Month Average					
Jurisdictional	\$ 11,407,450	\$ 151,826,979	\$ 4,765,656	\$ 12,423,933	\$ 180,424,018
End of Period					
2021	\$ 3,920,318	\$ 39,367,677	\$ 1,576,649	\$ 2,643,192	\$ 47,507,835
2022	7,862,916	37,877,334	2,090,939	2,708,429	50,539,618
2023	1,815,341	44,874,154	1,888,996	4,234,879	52,813,370
2024	470,000	40,730,157	-	4,587,053	45,787,210
2025	1,235,000	41,281,584	-	2,492,000	45,008,584
Total	\$ 15,303,575	\$ 204,130,906	\$ 5,556,584	\$ 16,665,552	\$ 241,656,617
Jurisdictional	\$ 11,991,251	\$ 182,961,990	\$ 4,765,656	\$ 14,354,183	\$ 214,073,080
% Jurisdictional	78.4%	89.6%	85.8%	86.1%	88.6%

Blue Ridge found the Company's calculation of the 13-month average jurisdictional plant balance as of December 31, 2025, 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.

Table 12: Accumulated Depreciation
 Projected 13-Month Average Balances as of December 31, 2025⁶⁴

Description	TIMP	DIMP	Facility Relocate	Obsolete Infrastructure	Total
Gross Plant in Service	\$ 11,407,450	\$ 151,826,979	\$ 4,765,656	\$ 12,423,933	\$ 180,424,018
Accumulated Depreciation	(675,694)	(7,398,308)	(279,232)	(504,544)	(8,857,777)
Net Plant in Service	<u>\$ 10,731,756</u>	<u>\$ 144,428,671</u>	<u>\$ 4,486,424</u>	<u>\$ 11,919,390</u>	<u>\$ 171,566,241</u>

Blue Ridge found the Company's calculation of the 13-month average accumulated depreciation balance by project criteria as of December 31, 2025, 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

⁶³ NG-112.4, BHE SSIR Application (August 1, 2024), Exhibit 2, Schedules D - Gross Plant and K - Project Listing & Allocation and WP V&V Exh 2-2025 SSIR Model NG112.4-Filed Version, Tab D-Gross Plant.

⁶⁴ NG-112.4, BHE SSIR Application (August 1, 2024), Exhibit 2, Schedule E - Accumulated Depreciation.

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develop the composite rate applied to gross plant matched those approved in the Company's last base rate case, NG-109.

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 13: Company Proposed ADIT Net Projected 13-Month Average Balances as of December 31, 2025⁶⁵

Description	TIMP	DIMP	Facility Relocate	Obsolete Infrastructure	Total
Account 282 Accelerated Depreciation	\$ (433,725)	\$ (4,724,447)	\$ (188,138)	\$ (370,369)	\$ (5,716,679)
Account 190 Net Operating Losses (NOL)	18,701	(3,693)	(10,418)	(3,879)	712
ADIT, Net	<u>\$ (415,024)</u>	<u>\$ (4,728,139)</u>	<u>\$ (198,556)</u>	<u>\$ (374,248)</u>	<u>\$ (5,715,967)</u>

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, 2025. 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.

Blue Ridge found the Company's calculation of the 13-month average Account 282 ADIT balance not unreasonable.

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 on the Company's tax return. We reviewed the calculations and found that not unreasonable.

Return

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.

⁶⁵ NG-112.4, BHE SSIR Application (August 1, 2024), Exhibit 2, Schedule H - ADIT Average Balances.

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Table 14: Company Proposed Return on Rate Base (After Tax) Calculation⁶⁶

Description	TIMP	DIMP	Facility Relocate	Obsolete Infrastructure	Total
Gross Plant in Service	\$ 11,407,450	\$ 151,826,979	\$ 4,765,656	\$ 12,423,933	\$ 180,424,018
Accumulated Depreciation	(675,694)	(7,398,308)	(279,232)	(504,544)	(8,857,777)
ADIT, Net	(415,024)	(4,728,139)	(198,556)	(374,248)	(5,715,967)
Total Rate Base	\$ 10,316,732	\$ 139,700,531	\$ 4,287,868	\$ 11,545,142	\$ 165,850,274
Authorized Rate of Return	6.71%	6.71%	6.71%	6.71%	6.71%
Return on Rate Base	\$ 691,737	\$ 9,366,921	\$ 287,502	\$ 774,102	\$ 11,120,261

Blue Ridge found the Company’s computed return (as shown above) on an after-tax basis not unreasonable.

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.⁶⁷

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, 2025, 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.

Income Tax

The SSIR Tariff allows for the inclusion of all taxes, including income taxes and property taxes.⁶⁸ 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 25.11 percent, which reflects the reduction in Nebraska corporate tax rate signed into law 2023 NE LB 754 on May 31, 2023. 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
- 5.84% for tax years beginning on or after January 1, 2024, and before January 1, 2025
- 5.20% for tax years beginning on or after January 1, 2025, and before January 1, 2026
- 4.55% for tax years beginning on or after January 1, 2026, and before January 1, 2027

⁶⁶ NG-112.4, BHE SSIR Application (August 1, 2024), Exhibit 2, Schedule C – Revenue Requirement.

⁶⁷ BHE SSIR Tariff, Third Revised Sheet No. 128, Definitions, B (January 1, 2023).

⁶⁸ BHE SSIR Tariff, Third Revised Sheet No. 128, Definitions, B (January 1, 2023).

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- 3.99% 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 15: Development of Composite Income Tax Rate for Tax Year 2025⁶⁹

Line #	Description	Calculation	Rate
1	State Tax Rate		5.20%
2	Federal Tax Rate		21.00%
3	State Tax Deduction	100%-Line 1	94.80%
4	Federal Effective Rate	Line 2 x Line 3	19.91%
5	Composite Tax Rate	Line 1 + Line 4	25.11%

Blue Ridge verified the calculations to derive taxable income and the composite income tax rate on Schedule F. Blue Ridge found the Company’s computed current and deferred income tax expense for the 12 months ended December 31, 2025, 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.

Table 16: Property Tax Expense Calculation⁷⁰

Description	TIMP	DIMP	Facility Relocate	Obsolete Infrastructure	Total
Gross Plant in Service	\$ 11,407,450	\$ 151,826,979	\$ 4,765,656	\$ 12,423,933	\$ 180,424,018
Property Tax Rate	0.57%	0.57%	0.57%	0.57%	0.57%
	<u>\$ 65,022</u>	<u>\$ 865,414</u>	<u>\$ 27,164</u>	<u>\$ 70,816</u>	<u>\$ 1,028,417</u>

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 prior 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.”⁷¹ The .0057 property tax rate was also used in the current SSIR Application NG-112.4.

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.

⁶⁹ NG-112.4, BHE SSIR Application (August 1, 2024), Exhibit 2, Schedule F – Tax Expense Calculation.

⁷⁰ NG-112.4, BHE SSIR Application (August 1, 2024), Exhibit 2, Schedule C – Revenue Requirement.

⁷¹ BHE response to SSIR scope 2022 Data Request PA-13.

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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.⁷²

In addition to the revenue requirement computed on Schedule C, the Company is proposing to include incremental O&M expense of \$2,348,540 (\$2,023,707 jurisdictional) for 2025 external Data Integrity Improvement Project (DIIP) costs. The 2025 SSIR revenue requirements reflects only the expenses projected in 2025 and does not include the prior years' costs.

The following table compares the DIIP costs for 2021–2023 (forecasted and actual) and 2024–2025 (forecasted).

Table 17: DIIP External Costs 2021–2025⁷³

Description	2021			2022			2023			2024	2025
	Forecast	Actual	Variance	Forecast	Actual	Variance	Forecast	Actual	Variance	Forecast	Forecast
Transmission/Gathering TVC Records NE	\$ -	\$ -	\$ -	\$ 1,139,000	\$ 1,577,803	\$ (438,803)	\$ 1,474,088	\$ 1,388,697	\$ 85,390	\$ 996,061	\$ 347,247
Gas Service Card Mapping NE	865,048	230,421	634,627	961,000	712,836	248,164	849,531	163,412	686,119	-	-
Distribution Main & Service Centerline Survey NE	-	-	-	1,137,000	1,345,816	(208,816)	934,592	1,704,020	(769,428)	747,047	1,400,905
Distribution Data Attribute Improvement NE	-	-	-	719,000	-	719,000	-	-	-	249,014	600,388
GIS Pressure Systems NE	-	-	-	-	-	-	-	-	-	-	-
GIS Emergency Response Zones NE	-	-	-	-	-	-	-	-	-	-	-
GIS CP Zones NE	-	-	-	-	-	-	-	-	-	-	-
BPI and SME Pipeline Attribute Assessment NE	-	-	-	-	-	-	-	-	-	-	-
Document Management Migration NE	-	-	-	26,000	-	26,000	-	-	-	-	-
Total External Costs Recovered through SSIR	\$ 865,048	\$ 230,421	\$ 634,627	\$ 3,982,000	\$ 3,636,455	\$ 345,545	\$ 3,258,210	\$ 3,256,129	\$ 2,081	\$ 1,992,122	\$ 2,348,540

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

Betterments

Requirement: 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.⁷⁴

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.

Revenue Requirement Calculation

Blue Ridge found the Company's calculation of the SSIR revenue requirement, including the incremental DIIP expense projected for 2025, not unreasonable. Blue Ridge performed mathematical checks on the detailed revenue requirement schedules and verified that the amounts rolled forward correctly.

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?

⁷² BHE SSIR Tariff, Third Revised Sheet No. 128, Definitions, B (January 1, 2023).

⁷³ NG-112.4, BHE SSIR Application (August 1, 2024), Exhibit 2, Schedule M - DIIP Support.

⁷⁴ BHE SSIR Tariff, Third Revised Sheet No. 128– Fourth Revised Sheet No. 129, Definitions, B (January 1, 2023).

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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:

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

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 class⁷⁵

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 customer bills.⁷⁶

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.⁷⁷

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.⁷⁸

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.⁷⁹

⁷⁵ BHE SSIR Tariff, Third Revised, Sheet Nos. 130–131, Section "SSIR Adjustment Calculation," A (January 1, 2023).

⁷⁶ NG-112.4, BHE SSIR Application (August 1, 2024), Exhibit 2, Table A SSIR Rate Calculation and Table B True up Calculation.

⁷⁷ BHE SSIR Tariff, Second Revised Sheet No. 130, Definitions, D (January 1, 2023).

⁷⁸ BHE SSIR Tariff, Third Revised Sheet No. 128, Definitions, Item A (January 1, 2023).

⁷⁹ 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

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Table 18: Company Proposed True Up Recovery

<u>Description</u>	<u>Residential</u>	<u>Commercial</u>	<u>Total</u>
Customer Bill True Up	\$ 79,865	\$ 35,898	\$ 115,763
Revenue Requirement True up	2,053,647	928,853	2,982,500
Data Improvement Project True Up	(1,393)	(556)	(1,949)
(Over) / Under Recovery	<u>\$ 2,132,119</u>	<u>\$ 964,195</u>	<u>\$ 3,096,314</u>

The Customer Bill True Up reflects a reduction in the actual customer bills from what was forecasted in NG-112.2 of 23,562 for Residential Customers.

Table 19: 2023 Forecasted vs. Actual Customer Bills Used in True Up

	<u>Residential</u>	<u>Commercial</u>
Forecasted Total Customer Bills	3,146,369	397,291
Actual Customer Bills	3,122,807	393,881
Difference between Actual and Forecast	<u>(23,562)</u>	<u>(3,410)</u>

The Company explained that it used the residential customer forecast produced for the Company’s five-year financial plan (Plan). The forecast was produced utilizing the actual five-year annual growth (2018–2023), which is 0.823%, and the average residential customer count forecasted for the end of 2024. At the time of forecasting, BHNEG was expecting an average customer count of 265,157 at the end of 2024.⁸⁰

The Tariff states the true ups should include “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.”⁸¹ [Emphasis added.] Consistent with prior SSIR filings, the Company used the FERC August rate multiplied by 12 months. The FERC August 2024 monthly rate of interest was .0072 times 12 months or 8.64%.⁸² However, the updated FERC interest rate dropped to .0070 in September 2024.⁸³ The reduction in interest rate would *reduce* the total True Ups by \$6,840.⁸⁴ The reduction in the true up would not impact the residential SSIR rate. Therefore, Blue Ridge is not recommending a rate adjustment regarding the interest rate.

The significant contributing factors to the underrecovery requiring a \$3.1 million true-up was the Company’s actual 2023 SSIR Project spend being higher than was originally planned and the reduction in actual customer bills. The Company forecasted 2023 SSIR Project spend was \$50,204,069, and the actual spend was \$52,813,370 (for a variance of \$2,609,301). A significant portion of the variance is related to non-forecasted facility relocations of \$1,888,996.

(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.

⁸⁰ BHE response to SSIR scope 2025 Data Request PA-15.

⁸¹ BHE SSIR Tariff, Second Revised Sheet No. 130, Definitions, D (January 1, 2023).

⁸² NG-112.4, BHE SSIR Application (August 1, 2024), Exhibit 2, Table B True Up Calculation.

⁸³ <https://www.ferc.gov/interest-calculation-rates-and-methodology>.

⁸⁴ FERC September interest rate .0070 x 12 months = 8.40%.

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Requirement: The calculated rate shall be an adjustment to the Customer Charge applicable to the Company’s Jurisdictional Residential, Commercial, and Commercial—EO customers.⁸⁵

Blue Ridge found the Company applied the calculated rate change for the 2025 SSIR projects to the monthly Customer Charge applicable to the Company’s Jurisdictional Residential, Commercial, and Commercial—EO customers.⁸⁶

Requirement: 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.⁸⁷

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 calculated in compliance with Commission orders and as specified in the SSIR Tariff.

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.

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”).⁸⁸

Blue Ridge found that the Application to change the SSIR charge under review was filed on August 1, 2024.

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.⁸⁹

⁸⁵ BHE SSIR Tariff, Third Revised , Sheet No. 131, Section “SSIR Adjustment Calculation,” B (January 1, 2023).

⁸⁶ NG-112.4, BHE SSIR Application (August 1, 2024), Cover Letter and Exhibit 2, Table A SSIR Rate Calculation.

⁸⁷ BHE SSIR Tariff, Third Revised , Sheet No. 131, Section “SSIR Adjustment with Changes in Base Rates, (January 1, 2023).

⁸⁸ BHE SSIR Tariff, Third Revised, Sheet No. 127, Section “Annual Application and Quarterly Surveillance Filings,” A. (January 1, 2023).

⁸⁹ BHE SSIR Tariff, Third Revised, Sheet No. 131, Section “SSIR Adjustment with Changes in Base Rates, (January 1, 2023).

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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, 2026.⁹⁰

Requirement: 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.⁹¹

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 reviewed the Company's SSIR filing and recommends approving the as-filed SSIR revenue requirements and true-ups that result in the following 2025 SSIR Charge.

Table 20: SSIR Rate for 2025

Description	Residential	Commercial
Amount to be Collected in 2025	\$ 16,934,919	\$ 6,673,668
Forecasted Total Customer Bills (Jurisdictional Only)	3,208,068	403,067
	\$ 5.28	\$ 16.56

Blue Ridge has the following recommendation:

1. Blue Ridge recommends approving the Company's request to modify the SSIR Tariff to allow flexibility to swap amounts by SSIR category to another SSIR category as long as the projects have been reviewed and approved as part of the Application review process. Each such swap should be identified and explained as to why the original project could not be completed and an alternate project was used.

⁹⁰ Application No. NG-109, Order Approving Stipulation and Settlement Agreement (January 26, 2021) page 14.

⁹¹ BHE SSIR Tariff, Third Revised, Sheet No. 131, Section ""SSIR Adjustment with Changes in Base Rates, (January 1, 2023).

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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 ninety (90) days of the end of the calendar year. Such filings 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 shall include an update regarding the status of the previous calendar year's SSIR Project costs, actual or projected in-service dates, and, if any remain uncompleted at the time of submittal of the annual surveillance filing, the expected schedule for completion.⁹²

Blue Ridge found that the Company timely filed its annual surveillance filings on March 29, 2024. The filing is due within ninety (90) days of the end of the calendar year, or March 31, 2024.

⁹²BHE SSIR Tariff, Third Revised Sheet No. 128, Item D (January 1, 2023).

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APPENDICES

Appendix A: Background Information

Appendix B: Abbreviations and Acronyms

Appendix C: Data Requests and Information Provided

Appendix D: Workpapers

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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 September 1, 2023, 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)
 - 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 2023 Program Year (October 17, 2022)
 - d. Black Hill’s response to Public Advocates Report (October 28, 2022)
 - e. Order Approving 2023 SSIR Charge (December 13, 2022)
7. Application No. NG-112.3 (2024 SSIR Projects)
 - a. Black Hills 2024 SSIR Application with four Exhibits
 - b. Exhibit 2-2024 SSIR 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 2024 Program Year (October 16, 2023)

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- d. Black Hill's response to Public Advocates Report (October 19, 2023) with revised exhibits
- e. Order Approving 2024 SSIR Charge (December 12, 2023)

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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
CP	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
NEPA	Nebraska Public Advocate
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

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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. Process and Controls: Please provide any 2024 updates to the policies and procedures (and/or flow charts) for the following items:
- a. The identification and categorization of SSIR projects
 - b. 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-2. Alternative Projects and Transfers. Reference NG-112.4 SSIR Application, page 6. The Company states in its 2025 SSIR application:

In its 2024 SSIR Charge Order, the Commission further approved the Company's request for approval to swap amounts approved for SSIR Projects at the category level. The Commission's 2024 SSIR Charge Order permits Black Hills Energy to **swap an approved SSIR Project in one category to an SSIR Project in another category** so long as that Project was reviewed and approved as part of the 2024 SSIR Application review process [emphasis added].

Where in the Commission Order in NG-112.3 was approval granted to swap SSIR projects from one category to another category?

- PA-3. Alternative Projects and Transfers. The SSIR Tariff, Third Revised Sheet No. 127, item A.i. states

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. Should circumstances arise which prohibit the Company's planned spending on a Project, **the Company may transfer funds within the same category to another like Project**. Such transfer of funds will be communicated to the Public Advocate and Commission via an informational filing subject to the Public Advocate's review and the Commission's approval [emphasis added].

Where in the approved SSIR Tariff is the Company authorized to swap SSIR projects from one category to another category?

- PA-4. DIMP

- a. 2025 SSIR Issues—DIMP: Please provide a copy of the latest DIMP, if different from what was used to forecast 2024 projects.
- b. 2025 SSIR Issues—DIMP: Please provide a copy of or describe any 2024 PHMSA-filed Gas Distribution Integrity Management Program (DIMP) changes used to forecast the 2025 SSIR Projects.
- c. 2025 SSIR Issues—DIMP: Please provide copies of or describe any 2024 completed or in-progress audits (internal or external) that reviewed the DIMP program.

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- PA-5. TIMP
- a. 2025 SSIR Issues—TIMP: please provide a copy of the latest TIMP, if different from what was used to forecast 2024 projects.
 - b. 2025 SSIR Issues—TIMP: Please provide a copy of or describe any 2024 PHMSA-filed Gas Transmission Integrity Management Program (TIMP) changes used to forecast 2025 SSIR Projects.
 - c. 2025 SSIR Issues—TIMP: Please provide copies of or describe any 2024 completed or in-progress audits (internal or external) that reviewed the TIMP program.
- PA-6. Damage Prevention
- a. 2025 SSIR Issues—Damage Prevention: Please provide any 2024 changes to the Damage Prevention procedure.
- PA-7. Risk Ranking Scores
- a. 2025 SSIR Issues—Risk Ranking Scores: Please describe any 2024 changes in how risk modeling assigns risk scores by each of the three risk models (TIMP, DIMP, and ARMR) 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).
 - b. 2025 SSIR Issues—SSIR Category: Please describe how individual projects are selected within each SSIR category. In particular, please explain how the risk score and budget are determined initially and what criteria will be used to possibly adjust through the construction period to accommodate execution delays.
- PA-8. Alternatives
- a. 2025 SSIR Alternative Projects—General: Please explain why these projects were chosen for inclusion as alternative projects.
 - b. 2025 SSIR Alternative Projects—ARMR: For the seven ARMR alternative projects, please provide the details as to how the Company arrived at an average cost of \$7,000 to relocate a meter.
 - c. 2025 SSIR Alternative Projects—Osceola Nebraska Bare Main Replacement: Please provide the project risk score model inputs that support the risk ranking of 1478.9 and the specific level of risk identified to be addressed.
 - d. 2025 SSIR Alternative Projects—Town Border Stations (TBS): For each of the six individual projects listed in the application, please provide the project risk score model inputs and specific level of risks identified to be addressed.
- PA-9. Bare Steel
- a. 2025 SSIR Projects—Ashland Nebraska Bare Steel Distribution Main: Please provide the project risk score model inputs and specific level of risks identified to be addressed.
- PA-10. TOG
- a. 2025 SSIR Projects— Top of Ground (TOG): For each of the five individual projects listed in this section of the application, please provide the project risk score model inputs and specific level of risks identified to be addressed.
 - b. 2025 SSIR Projects—Top of Ground (TOG) Lincoln Nebraska—Span Replacement 35th & Superior: Please explain why the cost for this project is \$777.77 a foot and the other four projects range from \$49 to \$57 a foot.

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PA-11. Meter Relocations

- a. 2025 SSIR Projects—Meter Relocations: For each of the four locations identified in this section of the application, please provide the project risk score model inputs and specific level of risks identified to be addressed.
- b. 2025 SSIR Projects—Meter Relocation: Please describe, across the four projects involving 2,301 meter relocations, how the budget estimate, of ~\$7000/meter relocated was determined.

PA-12. DIIP

- a. 2025 SSIR Projects—Data Infrastructure Improvement Program (DIIP): How did the Company determine which projects should be included in the DIIP for 2025?
- b. 2025 SSIR Projects—Data Infrastructure Improvement Program (DIIP): What are the estimated completion dates (in-service dates) for each project?
- c. 2025 SSIR Projects—Data Infrastructure Improvement Program (DIIP): Are any of the projects a continuation from a prior year?
- d. 2025 SSIR Projects—Data Infrastructure Improvement Program (DIIP): Are the projects outsourced? If so, please provide the contractor estimates for each project.
- e. 2025 SSIR Projects—Data Infrastructure Improvement Program (DIIP): Will any of the projects eliminate an existing project? If so, what programs will be eliminated?
- f. 2025 SSIR Projects—Data Infrastructure Improvement Program (DIIP): 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 among entities?
- g. 2025 SSIR Projects—Data Infrastructure Improvement Program (DIIP):
- h. Projects:
 - *Transmission/Gathering Traceable, Verifiable and Complete (TVC) Records*
 - *Gas Service Card Mapping*
 - *Distribution Main & Service Centerline Survey*
 - *Distribution Attribute Improvement*
 - *GIS Pressure Systems*
 - *GIS Emergency Response Zone*
 - *GIS Cathodic Protection (CP) Zones*
 - *Bare Pipe Inspection (BPI) and Subject Matter Expert (SME) Pipeline Attribute Assessment*
 - *Document Management Migration*

For each of the above-listed projects, please respond to these requests:

- i. What is the status/percent completion of each project as of December 31, 2024?
- ii. For each project that is not yet complete, please provide the following information.
 1. Estimated cost for each year
 2. Most recent estimated in-service dates
 3. Indication of whether the estimated project in-service date is a revision to a previously estimated in-service date (And, if so, provide all the previous dates by project.)
 4. For any estimated project in-service date that has been revised, explanation of the reason(s) for the change

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PA-13. Obsolete

- b. 2025 SSIR Projects—Obsolete Infrastructure-Electronic Reading Transmitters (ERT) Upgrades: Please explain how the Company determined that the estimated average cost of replacing 40ERTs with 100G ERTs is \$2,000,000, which averages \$50,000 per replacement.
- c. 2025 SSIR Projects—Obsolete Pipe Replacement: For the two PVC distribution main projects, please provide the project risk score model inputs.
- d. 2025 SSIR Projects—TIMP: For the specific project “Adams County, Nebraska—4” Kenesaw Lateral, what size diameter pipe will replace the existing 4” transmission main. Please provide the reason(s) why that size diameter pipe was selected.

PA-14. Customer Bills: Reference Table B True-Up Calculation, Actual Customer Bills. Please provide support for the actual 2023 customer bills from the Company Records. Also, please explain the reduction in customer bills from what was forecasted in 2023.

PA-15. Customer Growth Adjustment: Reference Table Bill Count and Table B True-Up Calculation. In previous SSIRs, the residential customer count was based on the prior year’s number of customers with a 0.8% growth factor, which, this year, would have resulted in a residential customer count of 266,636, customer bills 3,199,632. Instead of the calculated customer growth used in prior SSIR filings, the Company used a higher customer count of 267,339, customer bills 3,208,068. If actual customer bills were less than the calculated count using 0.8% (see Table B – True-Up Calculation), why is the Company forecasting an increase greater than the 0.8% used in prior SSIR applications?

	Year	Residential	Commercial
Forecasted Total Customer Bills	2023	3,146,369	397,291
Actual Customer Bills	2023	3,122,807	393,881
Difference between Actual and Forecast		<u>(23,562)</u>	<u>(3,410)</u>
Customer Count included in Filing	2025	267,339	33,589
Customer Bills Included in Filing	2025	3,208,068	403,067
Calculated Customer Count (.08% growth)	2025	266,636	33,589
Calculated Customer Bills	2025	3,199,632	403,067

PA-16. Revenue Requirement True Up, Allocation of Revenue Requirements to Customer Class: Reference Table B True-Up Calculation. Please explain why the 2025 forecasted Customer Class Split is used to allocate the 2023 Actual Revenue Requirement instead of using the Customer Class Split from NG-112.2.

	Residential	Commercial	Source
2025 Customer Class Allocation used in 2023 True Up	72.24%	27.76%	B-True Up Calculation, Line 9
2023 Customer Class Allocation	73.18%	26.82%	Exh 2 - 2023 SSIR Model NG112.2 - Updated Version 10.28.22

Docket No. NG-112.4
Examination of the System Safety and Integrity Rider for the 2025 Program Year
of Black Hills Energy

APPENDIX D: WORKPAPERS

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

- NEPA NG-112.4 Tables for Report.xlsx
- WP FERC Interest Calculation_ Rates and Methodology _ Federal Energy Regulatory Commission.pdf
- WP Plan vs Actual 2023 Exhibit 3 - 2023 - Final Version.xlsx
- WP V&V R0 Exhibit 2 - 2025 SSIR Model - Final Version.xlsx