

BEFORE THE NEBRASKA PUBLIC SERVICE COMMISSION

IN THE MATTER OF THE)
APPLICATION OF BLACK HILLS)
NEBRASKA GAS, LLC, d/b/a)
BLACK HILLS ENERGY SEEKING) Application No. NG-112.3
APPROVAL OF A 2024 SYSTEM)
SAFETY & INTEGRITY RIDER)

**NOTICE OF FILING OF PUBLIC ADVOCATE’S EXAMINATION OF THE
SSIR RIDER FOR THE 2024 PROGRAM YEAR**

The Public Advocate, Intervenor in the above-referenced proceeding, does hereby give notice of filing his “*Examination of the System Safety & Integrity Rider of Black Hills Nebraska Gas, LLC d/b/a Black Hills Energy for the 2024 Program Year*” prepared by Blue Ridge Consulting Services on behalf of the Public Advocate and dated October 16, 2023, together with those appendices to the Examination that contain no materials that have been designated as “Confidential” by Black Hills Energy. Appendices containing materials designated as “Confidential” by Black Hills Energy are being filed under seal pursuant to the Protective Order entered on the 10th day of August, 2023.

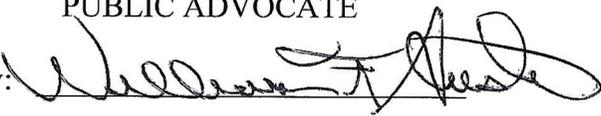
Eight copies of the Examination, plus an electronic copy in PDF and Microsoft Word format, are being submitted herewith in accordance with

291NAC9-004.12. Electronic and/or hard copies are being provided, as appropriate, in accordance with the service list.

Dated this 16~~th~~ day of October 2023.

PUBLIC ADVOCATE

By:



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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of Public Advocate's "Examination of SSIR Rider for the 2024 Program Year was served electronically on this 16~~th~~ day of October 2023.

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**Before the Nebraska Public Service Commission
Docket No. NG-112.3**

**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**

on behalf of the Nebraska Public Advocate

October 16, 2023

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DISCLAIMERS

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

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

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

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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, 2023, 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, 2024, for rate areas one, two, three, and five. The Company proposes the adjusted 2024 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, 2024.

In its August 1, 2023, application, the Company sought approval of the jurisdictional revenue requirements of \$4,700,960 attributable to jurisdictional total capital projects (2024) of \$40,319,400, and the jurisdictional portion of 2024 Data Infrastructure Improvement Program (DIIP) costs recoverable through the SSIR, totaling \$1,716,586. The Company’s application included the 2022 true-up of \$(322,048), resulting in a total requested amount (including jurisdictional revenue requirements approved for projects from 2021 through 2023, to be collected in 2024) of \$16,614,809.

During its review, Blue Ridge recommended, and the Company concurred, that several adjustments should be made in the calculation of the 2023 SSIR Rider Charge. These adjustments included (1) fix the link to the tax rate used in the ADIT calculation, (2) use the Residential and Commercial SSIR rate approved in NG-112.1 in the Customer Bill True-up calculation, and (3) use the SSIR revenue requirements approved in NG-112.1 in the 2022 Revenue Requirement True-up calculation.

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

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Table 1: 2024 Adjusted Revenue Requirement Calculation

Line No.	Description	As Filed	Adjustment	Adjusted	Adjustment
1	Gross Plant - 13 Month Average December 31, 2024	\$ 139,526,083	\$ -	\$ 139,526,083	
2	Accumulated Depreciation - 13 Month Average December 31, 2024	(4,972,183)	-	(4,972,183)	
3	ADIT Pro Rated (net of 190 and 282)	<u>(3,651,418)</u>	<u>53,465</u>	<u>(3,597,953)</u>	Adj #1
4	Total Rate Base	\$ 130,902,482	\$ 53,465	\$ 130,955,947	
5	Weighted Average Cost of Capital	<u>6.71%</u>	<u>0.00%</u>	<u>6.71%</u>	
6	Return on Rate Base	\$ 8,777,011	\$ 3,585	\$ 8,780,596	
7	Income Tax Expense	\$ 2,141,009	\$ 874	\$ 2,141,884	
8	Depreciation Expense	2,865,789	-	2,865,789	
9	Property Tax Expense	<u>795,299</u>	<u>-</u>	<u>795,299</u>	
10	Total Operating Expense	\$ 5,802,097	\$ 874	\$ 5,802,971	
11	Revenue Requirement	\$ 14,579,108	\$ 4,459	\$ 14,583,567	
12	Plus: Incremental Data Integrity Improvement Project (DIIP) Expense	1,716,586	-	1,716,586	
	Revenue Requirement with DIIP Expense	<u>\$ 16,295,694</u>	<u>\$ 4,459</u>	<u>\$ 16,300,153</u>	
13	True-Up				
14	Prior Year Over/(Under) From Total Customer Bills	56,598	514	57,112	Adj #2
15	Prior Year Over/(Under) From Revenue Requirement	584,565	(71,512)	513,053	Adj #3
16	Data Integrity Improvement Project True Up	<u>(322,048)</u>	<u>-</u>	<u>(322,048)</u>	
17	Revenue to be Collected in 2024	<u>\$ 16,614,809</u>	<u>\$ (66,539)</u>	<u>\$ 16,548,270</u>	

Blue Ridge recommends approving the adjusted SSIR revenue requirements and true-ups that result in the following 2024 SSIR Charge.

Table 2: SSIR Rate for 2024

Description	Residential		Commercial		Total	
	As Filed	Adjusted	As Filed	Adjusted	As Filed	Adjusted
Amounts to be Collected in 2024	\$ 12,036,225	\$ 12,007,200	\$ 4,578,584	\$ 4,541,070	\$ 16,614,809	\$ 16,548,270
Forecasted Total Customer Bills (Jurisdictional Only)	3,172,889	3,172,889	400,168	400,168	\$ 400,168	
SSIR Rate for 2024	\$ 3.79	\$ 3.78	\$ 11.44	\$ 11.35	\$ 41.52	

Blue Ridge also had several other recommendations:

- 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 should be identified, and an explanation given as to why the original project could not be completed and an alternate project was used.
- Blue Ridge recommends accepting the Company's proposal to continue to "streamline the reconciliation process, also on a project category basis" as long as it continues to provide a comparison of forecasted vs. actual costs and forecasted vs actual in-service dates for each individual project included.
- Blue Ridge found that the Schedule H ADIT Average Balance Account 282 2024 Consolidated Accumulated Balance excluded the balance for TIMP due to a format error. While the Schedule H Consolidated Accumulated Depreciation balance is not used elsewhere in the

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model and there is no effect on revenue requirements, Blue Ridge recommends that the formatting issue/Consolidated formula be corrected.

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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.

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).

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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.³

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.

³ 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 any⁴

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

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

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

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

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

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

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

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

⁴ BHE SSIR Tariff, Second Revised Sheet No. 127, A, i–iv (January 1, 2023).

⁵ BHE SSIR Tariff, Second Revised Sheet No. 130, Definitions, C (January 1, 2023).

⁶ BHE SSIR Tariff, First 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.⁷

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

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

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

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

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

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

Specifically, the System Safety and Integrity Rider Charge shall be equal to the Eligible System Safety and Integrity Costs, plus or minus the SSIR True-Up Amount, plus or minus the

⁷ BHE SSIR Tariff, Second Revised Sheet Nos. 129.1 and 130, Definitions, C (January 1, 2023).

⁸ BHE SSIR Tariff, Second Revised Sheet No. 128, Definitions, B (January 1, 2023).

⁹ BHE SSIR Tariff, Second Revised Sheet No. 128-129, Definitions, B (January 1, 2023).

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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 class¹⁰

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

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

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

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

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

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

¹⁰ BHE SSIR Tariff, Second Revised, Sheet Nos. 130–131, Section "SSIR Adjustment Calculation," A (January 1, 2023).

¹¹ BHE SSIR Tariff, Second Revised Sheet No. 130, Definitions, D (January 1, 2023).

¹² BHE SSIR Tariff, Second Revised Sheet No. 128, Definitions, Item A (January 1, 2023).

¹³ BHE SSIR Tariff, Second Revised, Sheet No. 131, Section "SSIR Adjustment Calculation," B (January 1, 2023).

¹⁴ BHE SSIR Tariff, Second 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”).¹⁵

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

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

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

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

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

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

Specifically, BHE must file 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.¹⁸

PROJECT SCOPE

The project scope includes the application filed by Black Hills Energy on August 1, 2023: *Re: In the Matter of the Application of Black Hills Nebraska Gas, LLC d/b/a Black Hills Energy seeking approval of a 2024 System Safety & Integrity Rider Charge*, Docket No. NG-112.3. The Application includes the 2024 proposed projects and the reconciliation calculations for the 2022 projects.

¹⁵ BHE SSIR Tariff, Second Revised, Sheet No. 127, Section “Annual Application and Quarterly Surveillance Filings,” A. (January 1, 2023).

¹⁶ BHE SSIR Tariff, Second Revised, Sheet No. 131, Section “SSIR Adjustment with Changes in Base Rates, (January 1, 2023).

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

¹⁸BHE SSIR Tariff, Second 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 3: NG-109 Excluded Reliability Pipeline Looping Projects¹⁹

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, 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. 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 and Model

¹⁹ NG-109, Exhibit JLB-5, page 70.

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b. Exhibit 2-2024 SSIR Model

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.²⁰ The Company confirmed that no updates were made in 2023 to policies and procedures for the identification and categorization of SSIR projects or for the development of the SSIR.²¹ Additionally, the Company provided copies of the 2023 procedures for both the TIMP and the DIMP.²²

²⁰ BHE response to SSIR scope 2022 Data Request PA-18 and SSIR scope 2023 Data Request PA-8.

²¹ BHE response to SSIR scope 2024 Data Request PA-6.

²² BHE response to SSIR scope 2024 Data Request PA-1 and PA-3.

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

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

1. Replacement of Bare Steel Distribution
2. Replacement of Transmission pipelines
3. Barricades
4. Cathodic Prevention and Corrosion Prevention
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.²³

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

2. REQUIRED INFORMATION

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

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

Requirement: BHE filed its annual application on or before August 1.²⁴

Blue Ridge found that the Company filed its application on August 1, 2023.

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.²⁵

²³ BHE response to SSIR scope 2024 Data Request PA-8.

²⁴ BHE SSIR Tariff, Second Revised Sheet No. 127, A, i-iv (January 1, 2023).

²⁵ BHE SSIR Tariff, Second Revised Sheet No. 127, A, i-iv (January 1, 2023).

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The Company’s Application includes 38 projects (29 capital projects and nine DIIP projects) for 2023. Blue Ridge found that the Company provided project descriptions, scope, and estimated project costs, for the 30 capital projects and three DIIP projects. The remaining six DIIP projects had no budgeted costs in 2024.

The Company proposes the following 2024 SSIR project budgets by project category.²⁶

Table 4: BHE Proposed 2024 SSIR Project Budgets by Project Category

Project Category	In-Service Date	Total	Jurisdictional	Non Jurisdictional
ARMR	Nov-24–Dec-24	\$ 20,704,342	\$ 19,695,297	\$ 1,009,045
Bare Steel	Jul-23	8,135,309	6,767,845	1,367,464
Cathodic Protection	Sep-24	237,506	194,408	43,098
Obsolete Infrastructure/Charts	Oct-24	382,007	328,924	53,083
Meter Install	Dec-24	4,205,046	3,654,348	550,698
Town Border Stations	Nov-24	2,825,000	2,071,904	753,096
TOG/Shallow/Exposed	Nov-24	8,828,000	7,344,104	1,483,896
MEGA Rule (TIMP)	Sep-24	470,000	262,570	207,430
Total SSIR Capital Expenditures		\$ 45,787,210	\$ 40,319,400	\$ 5,467,810
DIIP		\$ 1,992,122	\$ 1,992,122	\$ -
Total SSIR Recoverable Expenditures		\$ 47,779,332	\$ 42,311,522	\$ 5,467,810

The Company provided projected in-service dates for the 29 capital projects and the eight alternative capital projects with its application. The three DIIP projects did not include in-service dates within the application, but the Company provided additional information upon request.²⁷ In-service dates for these types of projects tend to be variable and are frequently phased into service as specific blocks of work become used and useful. The data related to the project will be readily available for employees to use while work continues on the remainder of the project. The estimated completion dates for the DIIP projects are provided below:

- Transmission/Gathering TVC Records—12/31/24
- Distribution Main & Service Centerline Survey—12/31/24
- Attribute Improvement—12/31/24

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.²⁸ The forecasted completion was modified to 2034. The Company provided the following table for the percent complete, estimated cost, and in-service dates for the DIIP projects.²⁹

²⁶ NG-112.3, BHE SSIR Application (August 1, 2023), SSIR Exhibit 2-2024 SSIR Model NG-112.3_Filed Version.

²⁷ BHE response to SSIR scope 2024 Data Request PA-16.

²⁸ Technical Session held on September 16, 2022.

²⁹ BHE response to SSIR scope 2024 Data Request PA-42.

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Table 5: DIIP Project Status ad Projections

Project	Completion Status	Estimated Costs	In-Service Date	Rev?
Transmission/Gathering Traceable, Verifiable and Complete (TVC) Records	50%	2024 - \$996,061 2025 - \$703,939	2025	No
Gas Service Card Mapping	N/A	N/A	N/A	Yes*
Distribution Main & Service Centerline Survey	10%	2024 \$747,047 2025 \$1,447,249 2026-2034 \$2,112,000 annually	Annually through 2034	No
Distribution Attribute Improvement	10%	2024 \$249,014 2025 \$281,824 2026-2034 \$288,000 annually	Annually through 2034	No
GIS Pressure Systems	0%	TBD**	TBD**	No
GIS Emergency Response Zone	0%	TBD**	TBD**	No
GIS Cathodic Protection (CP) Zones	0%	TBD**	TBD**	No
Bare Pipe Inspection (BPI) and Subject Matter Expert (SME) Pipeline Attribute Assessment	0%	TBD**	TBD**	No
Document Management Migration	0%	TBD**	TBD**	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 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 costs 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.³⁰

In addition to the 2024 SSIR Project list, the Company also provides a 2024 Alternate SSIR Project list. In its application, the Company introduces the 2024 Alternate SSIR Project list:

The 2024 Alternate SSIR Projects list is provided for Commission review and approval in compliance with the Commission’s December 13, 2022 Order Approving 2023 SSIR Charge in Commission Application NG-112.2 (“2023 SSIR Charge Order”). The Commission stated in its 2023 SSIR Charge Order that it is a reasonable plan to increase efficiency of the SSIR program while maintaining appropriate oversight by

³⁰ BHE SSIR Tariff, Second Revised Sheet No. 127, A, i (January 1, 2023).

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including an Alternate Projects list if the Company is unable to finish a project, then the Company is permitted to shift funding to an alternate project within the same project category. The Commission's 2023 SSIR Charge Order further provided that all alternate projects must be filed with the SSIR Application, reviewed by the PA, and approved by the Commission. Accordingly, the Company has provided its 2023 Alternate SSIR Project List as part of this application.³¹

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: The Company requests 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:

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.

In the extremely unlikely event that the Company is unable to swap out projects from its 2024 Application Alternate SSIR Project List for and approved 2024 SSIR Project, then the Company would make a separate Informational filing with the Commission seeking approval to use projects from that list due to the inability to complete one of the 2024 SSIR Application project or SSIR Application Alternate project.³²

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.

Blue Ridge recommends accepting the Company's proposal to continue to "streamline the reconciliation process, also on a project category basis" as long as it continues to provide a comparison of forecasted vs. actual costs and forecasted vs actual in-service dates for each individual project included.

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

³¹ NG-112.3, BHE SSIR Application (August 1, 2023), 2024 SSIR Projects–Application, page 7.

³² NG-112.3, BHE SSIR Application (August 1, 2023), 2024 SSIR Projects–Application, page 7.

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deviations between budgeted and actual costs, actual or projected in-service dates, and the expected schedule for completion of the previous year’s projects.³³

In NG-112.1, the Company’s 2022 budgeted jurisdictional spend was \$44,548,711 for SSIR-eligible capital projects and \$3,982,00 for O&M DIIP projects. Exhibit 3 of the Company’s Application included a budget-to-actual comparison of the 2022 SSIR projects. The budget amount was different from the amounts reflected in the NG-112.1 Application by \$13,402. The difference was isolated to the following project.

Table 6: NG-112.1 Budgeted vs. NG-112.3 Exhibit 3 Budgeted

Project Name	Criteria	Project Category/ Account Allocator	NG-112.1 Budget	NG-112.3 Budget	Difference
10077448: Line Heater - Holdrege	TIMP	TOWN BORDER STATIONS	\$ 6,701	\$ 6,701	\$ -
10077448: Line Heater - Holdrege	TIMP	TOWN BORDER STATIONS	\$ 6,701	\$ 20,103	\$ (13,402)
10077448: Line Heater - Holdrege	TIMP	TOWN BORDER STATIONS	\$ 6,701	\$ 6,701	\$ -
			<u>\$ 20,103</u>	<u>\$ 33,505</u>	<u>\$ (13,402)</u>

The Company stated that budget for the above project in the NG 112.3 filing should have been the same as presented in the NG-112.1 filing. The Company stated it would file a Revised Exhibit 3 when it responds to the Public Advocate report.³⁴

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

- Bare Steel—Replacement of Bare Steel Distribution Mains SSIR Project Category jurisdictional spend was \$978,232 more than original projected budget amounts. Challenges caused by narrow alleys, heavy existing underground infrastructure in the area of construction, and poor response times from other utilities’ 3rd party locating company have increased the overall project cost.
- TOG, Exposed and Shallow Main—Top of Ground, Shallow and Exposed Pipe SSIR Project Category jurisdictional spend was \$4,373,110 less than original projected jurisdictional budget amounts. This variance was the result of changes in project scopes that reduced the overall program costs. Scope changes included replacing TOG segments with PE instead of steel, reduced TOG replacement footages because of changes in customer demand, and the discovery of a TOG segment that was already buried and replaced with FBE coated pipe.
- ARMR—Actual At-Risk Meter Relocation SSIR Project Category spend exceeded original projected jurisdictional budget amounts by \$2,997,639. Additional dollars were spent on this program category to make up the underspend in other program categories.
- Obsolete Infrastructure—Obsolete Infrastructure SSIR Project Category jurisdictional spend (Meter Install and PVC) was \$1,057,469 less than original projected jurisdictional budget amounts.
- Facility Relocation—Required Facility Relocations SSIR Project Category jurisdictional spend totaled \$1,352,226. These Projects are included in the SSIR in an Annual SSIR

³³ BHE SSIR Tariff, Second Revised Sheet No. 127, Annual Application and Annual Surveillance Filings (January 1, 2023).

³⁴ BHE response to SSIR scope 2024 Data Request PA-36.

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Application in arrears, as projects of this type have a possibility of change, cancellations, or identification of additional qualified projects.

- DIIP—The Data Infrastructure Improvement Program SSIR Project Category jurisdictional spend was \$345,545 less than original projected budget amounts. Contributing factors of the underspend were a longer than expected RFP and contract process, which led to the project starting in July. Additionally, we experienced contractor performance issues with the phase 2 contractor, impacting project delivery and spend. As a result of these issues, this contractor was ultimately removed from the project.³⁵

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 2022 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 seven projects that were not completed as planned in 2022. Exhibit 3 explained the cause for the delay in four projects. Blue Ridge obtained the reasons for the remaining three projects through discovery.³⁶

Table 7: 2022 Projects Not Completed

Project Name	Criteria	Project Category/ Account Allocator	In-Service Date Filed	In-Service Date Act	Explanations
10075199N: Chart Replacements - McCook	Obsolete Infrastructure	CHARTS	Nov-22	Nov-23	Changed focus to group with Central Region
10077430: Line Heater - Albion	Obsolete Infrastructure	TOWN BORDER STATIONS	Nov-22	Dec-21	Completed in prior year
10077433: ARMR - Albion	Obsolete Infrastructure	ARMR	Nov-22	Dec-23	Rather than paying mobilization costs for the contractor to remobilize from Columbus to O’Neill to complete the minimal scope of work in O’Neill, it was deemed more prudent to keep the crew working in Columbus to finish all remaining at-risk meters
10077436: Chart Replacements - Albion	Obsolete Infrastructure	CHARTS	Nov-22	Nov-23	Changed focus to group with North Region
10077477: Line Heater - Norfolk	TIMP	TOWN BORDER STATIONS	Nov-22	Dec-21	Completed in prior year
10077477: Line Heater - Norfolk	TIMP	TOWN BORDER STATIONS	Nov-22	Dec-21	Completed in prior year
10077499: Line Heater - Sutton	TIMP	TOWN BORDER STATIONS	Nov-22	Nov-23	Pushed to out-year to lineup with planned TBS upgrade

Blue Ridge found the explanations not unreasonable.

Requirement: The Annual Application shall include the calculation of the SSIR True-Up Amount, if any.³⁷

Blue Ridge found that the Company’s Application includes the calculation of the SSIR True-Up Amount from the 2022 projects and is consistent with the methodology included in the Company’s NG-109 application and the SSIR approved by the Commission.³⁸ See further discussion in Section 5. System Safety and Integrity Rider Charge Calculation for further information.

³⁵ NG-112.3, BHE SSIR Application (August 1, 2023), Exhibit 3 2022 SSIR Project Details.

³⁶ BHE response to SSIR scope 2024 Data Request PA-37.

³⁷ BHE SSIR Tariff, Second Revised Sheet No. 127, A, iii (January 1, 2023).

³⁸ 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.

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Requirement: The Annual Application shall include the Calculation of the Deferred SSIR Balance, if any.³⁹

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.⁴⁰

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 32 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 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

³⁹ BHE SSIR Tariff, Second Revised Sheet No. 127, A, iv (January 1, 2023).

⁴⁰ BHE SSIR Tariff, Second Revised Sheet No. 130, Definitions, C (January 1, 2023).

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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 domain⁴¹

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.⁴²

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 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.⁴³

Description of Projects

The Company provided a narrative describing the 2024 SSIR projects. The Company identified 12 types of projects, totaling \$53,462,279, and provided background, classification under the SSIR Tariff, objective criteria analyzed, project description, and the specific projects. The following list includes the 12 types of projects, number of projects, and total cost by type:

1. Replacement of Bare Steel Distribution Main—one project totaling \$8,135,309
2. Replacement of Transmission Pipeline—no projects or costs included
3. Barricades—no projects or costs included

⁴¹ BHE SSIR Tariff, Third Revised Sheet Nos. 129 and 129.1, Definitions, C (January 1, 2023).

⁴² BHE SSIR Tariff, Second Revised Sheet Nos. 129 and 129.1, Definitions, C (January 1, 2023).

⁴³ BHE SSIR Tariff, Second Revised Sheet No. 130, Definitions, C (January 1, 2023).

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4. Cathodic Protection and Corrosion Prevention—four projects totaling \$237,506
5. Town Boarder Station—six projects totaling \$2,825,000
6. Top of Ground (TOG), Span, Shallow, and Exposed Pipe Replacement—five projects totaling \$8,828,000
7. MEGA Rule Projects—two projects totaling \$470,000
8. Meter Relocations—four projects totaling \$20,704,342
9. Obsolete Infrastructure—six projects totaling \$4,587,053
10. Obsolete Pipe Replacement—no projects or costs included.
11. Required Facility Relocation Projects—no project or costs included
12. DIIP—three projects with costs in 2024 totaling \$1,992,122

The Company’s Application includes 32 (29 capital and 3 DIIP) projects with costs in 2024. In addition, the Company provided a list of eight alternative projects by category, totaling \$15,220,483.

A modified excerpt from the Company’s filing listing the 2024 proposed projects by type is provided in the following table.⁴⁴

⁴⁴ WP Exh 2-2024 SSIR Model NG112.3.

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Table 8: 2024 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	10080234	Mega Rule - Kearney (NE-019 Pressure Test)	TIMP	TIMP	Sep-24	\$ 200,000	111,732	88,268
2	10080234	Mega Rule - Kearney (NE-019 Replacement)	TIMP	TIMP	Sep-24	\$ 50,000	27,933	22,067
3	10080237	Mega Rule - McCook (NE-003 Pressure Test)	TIMP	TIMP	Sep-24	\$ 220,000	122,905	97,095
			Total TIMP			\$ 470,000	\$ 262,570	\$ 207,430
4	10077433	ARMR - Albion (Neligh) 419	DIMP	ARMR	Nov-24	\$ 2,933,000	2,790,057	142,943
5	10077462	ARMR - Lincoln (Lincoln LSE1)1,234	DIMP	ARMR	Dec-24	\$ 10,447,691	9,938,512	509,179
6	10077472	ARMR - McCook (McCook) 529	DIMP	ARMR	Nov-24	\$ 3,706,325	3,525,695	180,630
7	10077490	ARMR - Scotts Bluff (Gering) 516	DIMP	ARMR	Nov-24	\$ 3,617,326	3,441,033	176,293
8	10077442	BareSteel - Beatrice (Auburn)	DIMP	BareSteel	Jul-24	\$ 8,135,309	6,767,845	1,367,464
9	10080299	CP Remote Monitor Unit Installs - A	DIMP	Cathodic Protection	Sep-24	\$ 13,500	11,050	2,450
10	10080300	CP Remote Monitor Unit Installs - K	DIMP	Cathodic Protection	Sep-24	\$ 130,001	106,411	23,590
11	10080301	CP Remote Monitor Unit Installs - Y	DIMP	Cathodic Protection	Sep-24	\$ 24,001	19,646	4,355
12	10080302	CP Remote Monitor Unit Installs - S	DIMP	Cathodic Protection	Sep-24	\$ 70,004	57,301	12,703
13	10064819N	Lincoln - 84th & Old Cheney	DIMP	Town Border Stations	Nov-24	\$ 1,750,000	1,283,479	466,521
14	10077455	TBS Replacement - Kearney (North Loup)	DIMP	Town Border Stations	Nov-24	\$ 215,000	157,685	57,315
15	10077455	TBS Replacement - Kearney (Ansley)	DIMP	Town Border Stations	Nov-24	\$ 215,000	157,685	57,315
16	10077493	TBS Replacement - Sidney (Lewellen)	DIMP	Town Border Stations	Nov-24	\$ 215,000	157,685	57,315
17	10077468	TBS - McCook (Venango)	DIMP	Town Border Stations	Nov-24	\$ 215,000	157,685	57,315
18	10077429	TBS Replacement - Albion (Neligh)	DIMP	Town Border Stations	Nov-24	\$ 215,000	157,685	57,315
19	10077467	TOG - McCook (McCook 2)	DIMP	TOG/Shallow/Exposed	Nov-24	\$ 534,000	444,241	89,759
20	10077434	TOG - Albion (Albion 2)	DIMP	TOG/Shallow/Exposed	Nov-24	\$ 784,000	652,217	131,783
21	10077504	TOG - Sutton (Sutton 4)	DIMP	TOG/Shallow/Exposed	Nov-24	\$ 3,890,000	3,236,131	653,869
22	10077517	TOG - York SG (Sutton 3)	DIMP	TOG/Shallow/Exposed	Nov-24	\$ 2,974,000	2,474,100	499,900
23	10077504	TOG - Sutton (Sutton 28)	DIMP	TOG/Shallow/Exposed	Nov-24	\$ 646,000	537,415	108,585
			Total DIMP			\$ 40,730,157	\$ 36,073,558	\$ 4,656,599
24	10075203N	Chart Replacements - Omaha	Obsolete Infrastructure	Charts	Oct-24	\$ 170,002	146,379	23,623
25	10075255N	Chart Replacements - Lincoln	Obsolete Infrastructure	Charts	Oct-24	\$ 165,003	142,074	22,929
26	10075287N	Chart Replacements - Scottsbluff	Obsolete Infrastructure	Charts	Oct-24	\$ 12,001	10,334	1,667
27	10080298	Chart Replacements - Kearney	Obsolete Infrastructure	Charts	Oct-24	\$ 35,000	30,137	4,863
28	10075284N	LSG ERT Upgrade - York	Obsolete Infrastructure	METER INSTALL	Dec-24	\$ 238,678	207,420	31,258
29	10063950N	Lincoln AMI	Obsolete Infrastructure	Meter Install	Dec-24	\$ 3,966,368	3,446,928	519,440
			Total Obsolete Infrastructure			\$ 4,587,053	\$ 3,983,272	\$ 603,781
			Total 2024 Forecasted Spend			\$ 45,787,210	\$ 40,319,400	\$ 5,467,810

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Alternative Projects

In addition to the 29 capital projects identified, the Company’s Application includes alternate SSIR projects. The 2024 Alternate SSIR Project list costs are not yet included in the 2024 Application project cost total because it is still uncertain as to whether those projects will, in fact, proceed in 2024. However, those Alternate SSIR Projects are identified below.⁴⁵

Table 9: 2024 SSIR Alternate Project List

Project	Category	Estimated In-Service	Cost Estimate
10077503: PVC - Sutton (Sutton 13)	PVC	11/30/24	\$2,692,000
10077503: PVC - Sutton (Sutton 3)	PVC	11/30/24	\$1,838,000
10077446: TOG - Holdrege (Holdrege 1)	TOG	11/30/24	\$6,777,000
10077455: TBS Replacement – Kearney (Arcadia)	TBS	11/30/24	\$215,000
10077493: TBS Replacement – Sidney (Lodgepole)	TBS	11/30/24	\$215,000
10072327: ARMOR - Sutton (Hebron) 330	ARMOR	12/31/24	\$2,310,000
10080263: Span replacement - N 35th & Superior	Span	11/30/24	\$1,173,483
10077503: PVC – Sutton (Sutton 14)	PVC	11/30/24	\$4,333,000

Blue Ridge reviewed the information provided for the alternate projects using the same criteria used for the 2024 proposed projects.

Separate Informational Filing

The Company’s filing also introduces a contingency in the event that no project from the Alternate Project List can be swapped out with a project from the approved 2024 SSIR Project list:

In the extremely unlikely event that the Company is unable to swap out projects from its 2024 Application Alternate SSIR Project List for [an] approved 2024 SSIR Project, then the Company would make a separate Informational filing with the Commission seeking approval to use projects from that list due to the inability to complete one of the 2024 SSIR Application project[s] or SSIR Application Alternate project[s].⁴⁶

Blue Ridge agrees with the characterization that such an occurrence would be extremely unlikely. However, the contingency does allow the Company more flexibility in its project options. As long as the separate and additional Informational filing is presented to the Commission for approval with the same detail as the original and alternate list of projects and the Nebraska Public Advocate is allowed opportunity to review and comment on those additional projects, Blue Ridge finds the contingency not unreasonable.

Project Testing

Each 2024 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.

⁴⁵ NG-112.3, BHE SSIR Application (August 1, 2023), 2024 SSIR Projects–Application, page 8.

⁴⁶ NG-112.3, BHE SSIR Application (August 1, 2023), 2024 SSIR Projects–Application, page 7.

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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 expected to be provided in the October 1, 2024, filing.

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

Blue Ridge reviewed the project descriptions to determine 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 2022. 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.⁴⁷

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

⁴⁷ 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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required due to construction or improvement of a highway, road, street, public way, or other public work by or on behalf of the United States, the State of Nebraska, a political subdivision of the State of Nebraska, or another entity having the power of eminent domain

The SSIR Tariff further states 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 Program

The Company categorized the 32 projects with costs within the 2024 Project List based on qualifications for eligibility:

- DIMP—twenty projects, jurisdictional total \$36,073,558;
- TIMP—three projects, jurisdictional total \$262,570;
- Obsolete Infrastructure—six projects, jurisdictional total \$3,983,272
- DIIP—three projects, Jurisdictional total \$1,992,122

Blue Ridge found that all the projects within the 2024 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 32 projects within the 2024 SSIR Project list are DIIP projects that had projected spending in 2023:

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

The Company's TVC project is underway, so they do not yet have results. If traceable, verifiable, and complete records are discovered during the TVC project, they may negate the need to perform MAOP reconfirmation or material verification projects required by the Megarule. Some BH jurisdictions have found some of the required TVC records in their historical archives while other have not.⁴⁸ The Company's Data Infrastructure Improvement Program has identified a number of data improvement projects for Nebraska Gas that support the needs of the business, ranging from compliance with the PHMSA Megarule to improving the data used by risk models to improving the maps and data used by employees in the field each day. The projects selected for 2024 were deemed highest priority because they mitigate the highest risks associated with

⁴⁸ BHE Response to SSIR 2024 scope Data Request PA-18.

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incomplete or incorrect data or they benefit other downstream programs, such as Megarule (MAOP reconfirmation and material verification) by potentially reducing the costs of those programs.⁴⁹ The three data improvement projects are multi-year projects, where continual progress is made toward completion.⁵⁰ 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 service for future growth that is not specifically required by statute or regulation, shall be excluded from Eligible System Safety and Integrity Costs.⁵¹

The capital projects did not contain any betterments.

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

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

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

Blue Ridge found the Company's project estimates, 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*

⁴⁹ BHE Response to SSIR 2024 scope Data Request PA-15.

⁵⁰ BHE Response to SSIR 2024 scope Data Request PA-17.

⁵¹ BHE SSIR Tariff, Second Revised Sheet No. 128–129, Definitions, B (January 1, 2023).

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

Within this audit, Blue Ridge reviewed information related to project estimates for 2024 and the actual project cost for 2022. The 2024 project estimates, including those for the alternative projects, contain sufficient detail as to reasons and basis for project selection. For the 2022 projects, the variance explanations, along with any changes in the forecasted in-service dates, identified any manpower, weather constraints, or other issues that would have caused a project to slip or be over or under budget.

4. REVENUE REQUIREMENT

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

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

The SSIR Tariff states that Eligible System Safety and Integrity Costs means (1) a return, at a percentage equal to the Company's currently authorized weighted average cost of capital grossed up for taxes, on the projected increase in the jurisdictional component of the month ending net plant 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.⁵²

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.⁵³

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

⁵² BHE SSIR Tariff, Second Revised Sheet No. 128, Definitions, B (January 1, 2023).

⁵³ BHE SSIR Tariff, Second Revised Sheet No. 128-129, Definitions, B (January 1, 2023).

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Table 10: Company Proposed Revenue Requirement Calculation (Prior to True-Up Amounts and Adjustments) as of December 31, 2024⁵⁴

Line No.	Description	Amount
1	Gross Plant - 13 Month Average December 31, 2024	\$ 139,526,083
2	Accumulated Depreciation - 13 Month Average December 31, 2024	(4,972,183)
3	ADIT Pro Rated (net of 190 and 282)	<u>(3,651,418)</u>
4	Total Rate Base	\$ 130,902,482
5	Weighted Average Cost of Capital	6.71%
6	Return on Rate Base	<u>\$ 8,777,011</u>
7	Income Tax Expense	\$ 2,141,009
8	Depreciation Expense	2,865,789
9	Property Tax Expense	795,299
10	Total Operating Expense	<u>\$ 5,802,097</u>
11	Revenue Requirement	\$ 14,579,108
12	Plus: Incremental Data Integrity Improvement Project (DIIP) Expense	<u>1,716,586</u>
	Revenue Requirement with DIIP Expense	<u><u>\$ 16,295,694</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 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.⁵⁵

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.

⁵⁴ NG-112.3, BHE SSIR Application (August 1, 2023), Exhibit 2, Schedules A - SSIR Rate Calculation and C - Revenue Requirement.

⁵⁵ BHE SSIR Tariff, Second Revised Sheet No. 128, Definitions, B (January 1, 2023).

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Table 11: Weighted Average Cost of Capital Calculation⁵⁶

Description	Capital Structure	Cost of Capital	Weighted Cost of Capital
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.

Table 12: SSIR Gross Plant in Service Projected Balances as of December 31, 2024⁵⁷

Description	TIMP	DIMP	Facility Relocate	Obsolete Infrastructure	Total
13-Month Average					
Jurisdictional	\$ 11,760,224	\$ 114,563,642	\$ 3,145,541	\$ 10,056,676	\$ 139,526,083
End of Period					
2021	\$ 2,643,192	\$ 39,367,677	\$ 1,576,649	\$ 3,920,318	\$ 47,507,835
2022	2,708,429	37,877,334	2,090,939	7,862,916	50,539,618
2023	5,935,868	41,557,926		2,710,275	50,204,069
2024	4,587,053	40,730,157		470,000	45,787,210
Total Company	\$ 15,874,541	\$ 159,533,094	\$ 3,667,588	\$ 14,963,509	\$ 194,038,732
Jurisdictional	\$ 11,942,003	\$ 143,739,600	\$ 3,145,541	\$ 13,682,939	\$ 172,510,083
% Jurisdictional	75.2%	90.1%	85.8%	91.4%	88.9%

Blue Ridge found the Company's calculation of the 13-month average jurisdictional plant balance as of December 31, 2024, not unreasonable. Exhibit 2, Schedule K, systematically allocates total company plant additions by project criteria and category to jurisdiction and FERC

⁵⁶ NG-112.3, BHE SSIR Application (August 1, 2023), Exhibit 2, Schedule J - Capital Structure.

⁵⁷ NG-112.3, BHE SSIR Application (August 1, 2023), Exhibit 2, Schedules D - Gross Plant and K - Project Listing & Allocation and WP V&V Exh 2-2024 SSIR Model NG112.3-Filed Version, Tab D-Gross Plant.

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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 13: Accumulated Depreciation
Projected 13-Month Average Balances as of December 31, 2024⁵⁸

Description	TIMP	DIMP	Facility Relocate	Obsolete Infrastructure	Total
Gross Plant in Service	\$ 11,760,224	\$ 114,563,642	\$ 3,145,541	\$ 10,056,676	\$ 139,526,083
Accumulated Depreciation	(453,603)	(4,084,807)	(155,394)	(278,379)	(4,972,183)
Net Plant in Service	<u>\$ 11,306,621</u>	<u>\$ 110,478,835</u>	<u>\$ 2,990,147</u>	<u>\$ 9,778,297</u>	<u>\$ 134,553,900</u>

Blue Ridge found the Company’s calculation of the 13-month average accumulated depreciation balance by project criteria as of December 31, 2024, not unreasonable. Exhibit 2, Schedule E, computes monthly depreciation expense, based on a composite annual rate of 2.04 percent, and the accumulated reserve through each measurement period. We reviewed the mathematical calculation for accuracy and verified the underlying depreciation rates used to develop the composite rate applied to gross plant matched those approved in the Company’s last 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.

⁵⁸ NG-112.3, BHE SSIR Application (August 1, 2023), Exhibit 2, Schedule E - Accumulated Depreciation.

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Table 14: Company Proposed ADIT Net Projected 13-Month Average Balances as of
December 31, 2024⁵⁹

Description	TIMP	DIMP	Facility Relocate	Obsolete Infrastructure	Total
Account 282 Accelerated Depreciation	\$ (336,615)	\$ (2,999,505)	\$ (121,467)	\$ (239,281)	\$ (3,696,869)
Account 190 Net Operating Losses (NOL)	(3,476)	55,042	(21,733)	15,619	45,451
ADIT, Net	<u>\$ (340,091)</u>	<u>\$ (2,944,463)</u>	<u>\$ (143,201)</u>	<u>\$ (223,662)</u>	<u>\$ (3,651,418)</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, 2023. To support the DTL ADIT (Account 282 Accelerated Depreciation), Schedules E and I in Exhibit 2 compute the Company's book and tax depreciation, respectively. The results of each are carried forward to Schedule F wherein the book-tax difference and annual ADIT activity is determined.

Blue Ridge found the Company's calculation of the 13-month average Account 282 ADIT balance for 2023 and 2024 on Schedule H was not linked to the updated composite tax rates that reflects the reduction in Nebraska tax rates for those years. Blue Ridge recommends, and the Company concurs,⁶⁰ that the link to the tax rate used in the ADIT calculation be corrected. **[ADJUSTMENT #1]** The effect of the adjustment is reflected in section 7 of this report, "Recommended Recovery."

We found that the Schedule H ADIT Average Balance Account 282 2024 Consolidated Accumulated Balance excluded the balance for TIMP due to a format error. While the Schedule H Consolidated Accumulated Depreciation balance is not used elsewhere in the model and there is no effect on revenue requirements, we recommend that the formatting issue/Consolidated formula be corrected.

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.

⁵⁹ NG-112.3, BHE SSIR Application (August 1, 2023), Exhibit 2, Schedule H - ADIT Average Balances.

⁶⁰ BHE Response to 2024 Data Request PA-38.

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Table 15: Company Proposed Return on Rate Base (After Tax) Calculation⁶¹

Description	TIMP	DIMP	Facility Relocate	Obsolete Infrastructure	Total
Gross Plant in Service	\$ 11,760,224	\$ 114,563,642	\$ 3,145,541	\$ 10,056,676	\$ 139,526,083
Accumulated Depreciation	(453,603)	(4,084,807)	(155,394)	(278,379)	(4,972,183)
ADIT, Net	(340,091)	(2,944,463)	(143,201)	(223,662)	(3,651,418)
Total Rate Base	\$ 10,966,530	\$ 107,534,372	\$ 2,846,946	\$ 9,554,635	\$ 130,902,482
Authorized Rate of Return	6.71%	6.71%	6.71%	6.71%	6.71%
Return on Rate Base	\$ 735,306	\$ 7,210,180	\$ 190,888	\$ 640,638	\$ 8,777,011

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

Plant-Related Ownership Costs

The SSIR Tariff states that the plant-related ownership costs associated with incremental plant investment, include depreciation, accumulated deferred income taxes, and all taxes, including income taxes and property taxes.⁶²

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, 2024, 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.⁶³ 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 25.61 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

⁶¹ NG-112.3, BHE SSIR Application (August 1, 2023), Exhibit 2, Schedule C – Revenue Requirement.

⁶² BHE SSIR Tariff, Second Revised Sheet No. 128, Definitions, B (January 1, 2023).

⁶³ BHE SSIR Tariff, Second Revised Sheet No. 128, Definitions, B (January 1, 2023).

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- 4.55% for tax years beginning on or after January 1, 2026, and before January 1, 2027
- 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 16: Development of Composite Income Tax Rate for Tax Year 2024⁶⁴

<u>Line</u>	<u>Description</u>	<u>Calculation</u>	<u>Rate</u>
1	State Tax Rate		5.84%
2	Federal Tax Rate		21.00%
3	State Tax Deduction	100%-Line 1	94.16%
4	Federal Effective Rate	Line 2 x Line 3	19.77%
5	Composite Tax Rate	Line 1 + Line 4	25.61%

We verified the calculations to derive taxable income and the composite income tax rate on Schedule F. With the exception of the ADIT discussed earlier, Blue Ridge found the Company’s computed current and deferred income tax expense for the 12 months ended December 31, 2024, 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 17: Property Tax Expense Calculation

<u>Description</u>	<u>TIMP</u>	<u>DIMP</u>	<u>Facility Relocate</u>	<u>Obsolete Inventory</u>	<u>Total</u>
Gross Plant in Service	\$ 11,760,224	\$ 114,563,642	\$ 3,145,541	\$ 10,056,676	\$ 139,526,083
Property Tax Rate	0.57%	0.57%	0.57%	0.57%	0.57%
Property Tax Expense	<u>\$ 67,033</u>	<u>\$ 653,013</u>	<u>\$ 17,930</u>	<u>\$ 57,323</u>	<u>\$ 795,299</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

⁶⁴ NG-112.3, BHE SSIR Application (August 1, 2023), Exhibit 2, Schedule F - Tax Expense Calculation.

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NG-112.1 for consistency.”⁶⁵ The .0057 property tax rate was also used in the current SSIR Application NG-112.3.

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

Operation and Maintenance Expenses

The SSIR Tariff allows recovery of the projected jurisdictional component of the operation and maintenance expenses related to the projects for the particular calendar year in which the System Safety and Integrity Rider Charge shall be in effect.⁶⁶

In addition to the revenue requirement computed on Schedule C, the Company is proposing to include incremental O&M expense of \$1,992,122 (\$1,716,586 jurisdictional) for 2024 external Data Integrity Improvement Project (DIIP) costs. The 2024 SSIR revenue requirements reflects only the expenses projected in 2024 and does not include the prior years’ costs.

The following table compares the DIIP costs for 2021–2022 (forecasted and actual) and 2023–2024 (forecasted).

Table 18: DIIP External Costs 2021–2024⁶⁷

Description	2021			2022			2023	2024
	Forecast	Actual	Variance	Forecast	Actual	Variance	Forecast	Forecast
Transmission/Gathering TVC Records NE	\$ -	\$ -	\$ -	\$ 1,139,000	\$ 1,577,803	\$ (438,803)	\$ 1,474,088	\$ 996,061
Gas Service Card Mapping NE	865,048	230,421	634,627	961,000	712,836	248,164	849,531	-
Distribution Main & Service Centerline Survey NE	-	-	-	1,137,000	1,345,816	(208,816)	934,592	747,047
Distribution Data Attribute Improvement NE	-	-	-	719,000	-	719,000	-	249,014
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	\$ 1,992,122

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.⁶⁸

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

Revenue Requirement Calculation

With the exception of the errors associated with ADIT discussed earlier, Blue Ridge found the Company’s calculation of the SSIR revenue requirement, including the incremental DIIP expense

⁶⁵ BHE response to SSIR scope 2022 Data Request PA-13.

⁶⁶ BHE SSIR Tariff, Second Revised Sheet No. 128, Definitions, B (January 1, 2023).

⁶⁷ NG-112.3, BHE SSIR Application (August 1, 2023), Exhibit 2, Schedule M - DIIP Support.

⁶⁸ BHE SSIR Tariff, Second Revised Sheet No. 128–129, Definitions, B (January 1, 2023).

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projected for 2024, not unreasonable. Blue Ridge performed mathematical checks on the detailed revenue requirement schedules and verified that the amounts rolled forward correctly.

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

5. SYSTEM SAFETY AND INTEGRITY RIDER CHARGE CALCULATION

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

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

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

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

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 class⁶⁹

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

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

Requirement: The Deferred SSIR Balance shall be equal to the balance, positive or negative, of SSIR revenues at the end of a particular calendar year less the Eligible System Safety and Integrity

⁶⁹ BHE SSIR Tariff, Second Revised, Sheet Nos. 130–131, Section “SSIR Adjustment Calculation,” A (January 1, 2023).

⁷⁰ NG-112.3, BHE SSIR Application (August 1, 2023), Exhibit 2, Table A SSIR Rate Calculation and Table B True up Calculation.

⁷¹ BHE SSIR Tariff, Second Revised Sheet No. 130, Definitions, D (January 1, 2023).

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Costs as projected by the Company for that particular calendar year, plus monthly interest calculated on that balance at a rate equal to the then current rate of interest on pipeline refunds established by the Federal Energy Regulatory Commission.⁷²

The Company’s true-up calculations reflected the following three components consistent with the methodology included in the Company’s NG-109 application and the SSIR approved by the Commission.⁷³

Table 19: Company Proposed True Up Recovery

Description	Residential	Commercial	Total
Customer Bill True Up	\$ 35,598	\$ 21,000	\$ 56,598
Revenue Requirement True up	400,099	184,466	584,565
Data Improvement Project True Up	(230,233)	(91,815)	(322,048)
(Over)/ Under Recovery	\$ 205,464	\$ 113,651	\$ 319,115

Blue Ridge found that Schedule B—True Up Calculation, Customer Bill True Up, line 4, Forecasted Rates, did not reflect the rates approved by the Commission in NG-112.1, Order dated December 14, 2021, of Residential (\$2.07) and Commercial (\$6.25). Blue Ridge recommends, and the Company concurs,⁷⁴ that True Up should be corrected. **[ADJUSTMENT #2]** The effect of the adjustment is reflected in section 7 of this report, “Recommended Recovery.”

Blue Ridge found that Schedule B—True Up Calculation, Revenue Requirement True Up, line 11, Revenue Requirement Forecasted, did not reflect the revenue requirement approved by the Commission in NG-112.1, Order dated December 14, 2021, of \$5,485,677. The Company inadvertently used the Company Revenue Requirements which reflects Blue Ridge’s initial recommendation to exclude ERT Projects that was withdrawn following review of supplemental information provided by the Company and as documented in the November 11, 2021, Supplement to Blue Ridge’s report filed on October 29, 2021, and confirmed in BHE’s response to Blue Ridge’s report dated November 5, 2021. Blue Ridge recommends, and the Company concurs,⁷⁵ that True Up should be corrected. **[ADJUSTMENT #3]** The effect of the adjustment is reflected in section 7 of this report, “Recommended Recovery.”

Blue Ridge found that the Company’s true-up including interest calculated using the August rate of interest on pipeline refunds established by the Federal Energy Regulatory Commission.⁷⁶

Requirement: The calculated rate shall be an adjustment to the Customer Charge applicable to the Company’s Jurisdictional Residential, Commercial, and Commercial—EO customers.⁷⁷

⁷² BHE SSIR Tariff, Second Revised Sheet No. 128, Definitions, Item A (January 1, 2023).

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

⁷⁴ BHE Response to SSIR scope 2024 Data Request PA-41.

⁷⁵ BHE Response to SSIR scope 2024 Data Request PA-41.

⁷⁶ NG-112.3, BHE SSIR Application (August 1, 2023), Exhibit 2, Table B True Up Calculation.

⁷⁷ BHE SSIR Tariff, Second Revised , Sheet No. 131, Section “SSIR Adjustment Calculation,” B (January 1, 2023).

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Blue Ridge found the Company applied the calculated rate change for the 2024 SSIR projects to the monthly Customer Charge applicable to the Company's Jurisdictional Residential, Commercial, and Commercial—EO customers.⁷⁸

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.⁷⁹

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

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

6. AMOUNT AND TIMING OF REQUEST

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

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

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”).⁸⁰

Blue Ridge found that the Application to change the SSIR charge under review was filed on August 1, 2023.

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.⁸¹

⁷⁸ NG-112.3, BHE SSIR Application (August 1, 2023), Cover Letter and Exhibit 2, Table A SSIR Rate Calculation.

⁷⁹ BHE SSIR Tariff, Second Revised, Sheet No. 131, Section ““SSIR Adjustment with Changes in Base Rates, (January 1, 2023).

⁸⁰ BHE SSIR Tariff, Second Revised, Sheet No. 127, Section “Annual Application and Quarterly Surveillance Filings,” A. (January 1, 2023).

⁸¹ BHE SSIR Tariff, Second 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, 2026.⁸²

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.⁸³

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

7. RECOMMENDED RECOVERY

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

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

Blue Ridge recommended, and the Company concurred, that several adjustments should be made in the calculation of the 2024 SSIR Rider Charge. These adjustments include (1) fix the link to the tax rate used in the ADIT calculation, (2) use the Residential and Commercial SSIR rate approved in NG-112.1 in the Customer Bill True-up calculation, and (3) use the SSIR revenue requirements approved in NG-112.1 in the 2022 Revenue Requirement True-up calculation.

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

⁸² Application No. NG-109, Order Approving Stipulation and Settlement Agreement (January 26, 2021) page 14.

⁸³ BHE SSIR Tariff, Second Revised, Sheet No. 131, Section ""SSIR Adjustment with Changes in Base Rates, (January 1, 2023).

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Table 20: 2024 Adjusted Revenue Requirement Calculation⁸⁴

Line No.	Description	As Filed	Adjustment	Adjusted	Adjustment
1	Gross Plant - 13 Month Average December 31, 2024	\$ 139,526,083	\$ -	\$ 139,526,083	
2	Accumulated Depreciation - 13 Month Average December 31, 2024	(4,972,183)	-	(4,972,183)	
3	ADIT Pro Rated (net of 190 and 282)	(3,651,418)	53,465	(3,597,953)	Adj #1
4	Total Rate Base	\$ 130,902,482	\$ 53,465	\$ 130,955,947	
5	Weighted Average Cost of Capital	6.71%	0.00%	6.71%	
6	Return on Rate Base	\$ 8,777,011	\$ 3,585	\$ 8,780,596	
7	Income Tax Expense	\$ 2,141,009	\$ 874	\$ 2,141,884	
8	Depreciation Expense	2,865,789	-	2,865,789	
9	Property Tax Expense	795,299	-	795,299	
10	Total Operating Expense	\$ 5,802,097	\$ 874	\$ 5,802,971	
11	Revenue Requirement	\$ 14,579,108	\$ 4,459	\$ 14,583,567	
12	Plus: Incremental Data Integrity Improvement Project (DIIP) Expense	1,716,586	-	1,716,586	
	Revenue Requirement with DIIP Expense	\$ 16,295,694	\$ 4,459	\$ 16,300,153	
13	True-Up				
14	Prior Year Over/(Under) From Total Customer Bills	56,598	514	57,112	Adj #2
15	Prior Year Over/(Under) From Revenue Requirement	584,565	(71,512)	513,053	Adj #3
16	Data Integrity Improvement Project True-Up	(322,048)	-	(322,048)	
17	Revenue to be Collected in 2024	\$ 16,614,809	\$ (66,539)	\$ 16,548,270	

The adjusted SSIR revenue requirements and true-up result in the following recommend 2024 SSIR Charge.

Table 21: SSIR Rate for 2024

Description	Residential		Commercial		Total	
	As Filed	Adjusted	As Filed	Adjusted	As Filed	Adjusted
Amounts to be Collected in 2024	\$ 12,036,225	\$ 12,007,200	\$ 4,578,584	\$ 4,541,070	\$ 16,614,809	\$ 16,548,270
Forecasted Total Customer Bills (Jurisdictional Only)	3,172,889	3,172,889	400,168	400,168	\$ 400,168	
SSIR Rate for 2024	\$ 3.79	\$ 3.78	\$ 11.44	\$ 11.35	\$ 41.52	

Table 22: Recommended Fixed Charge Rate by Class

Description	Residential	Commercial
2021 Approved SSIR Charge-\$/Month	\$ 0.62	\$ 1.23
2022 Approved SSIR Charge-\$/Month	\$ 2.07	\$ 6.25
2023 Approved SSIR Charge-\$/Month	\$ 3.12	\$ 9.69
2024 Proposed SSIR Charge-\$/Month	\$ 3.78	\$ 11.35
Total Proposed SSIR Charge-\$/Year	\$ 45.36	\$ 136.20

8. ANNUAL SURVEILLANCE FILINGS

8) Did the Company timely file the annual surveillance filings with the required information in compliance with Commission orders?
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⁸⁴ BHE Response to SSIR scope 2024 Data Request PA-41 and WP Adjustments Exhibit-2024 SSIR Model NG112.3_Filed Version.

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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. 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, expected.⁸⁵

Blue Ridge found that the Company timely filed its 2023 annual surveillance filings on March 1, 2023. The filing is due within ninety (90) days of the end of the calendar year, or March 31, 2023.

⁸⁵BHE SSIR Tariff, Second 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 and Model
 - b. Exhibit 2-2024 SSIR Model

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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
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. 2023 SSIR Issues—DIMP: Please provide a copy of any 2023 PHMSA-filed Gas Distribution Integrity Management Program (DIMP) changes from the prior year.
- PA-2. 2023 SSIR Issues—DIMP: Please provide copies of any 2023 completed or in-progress audits (internal or external) that reviewed the DIMP program.
- PA-3. 2023 SSIR Issues—TIMP: Please provide a copy of any 2023 PHMSA-filed Gas Transmission Integrity Management Program (TIMP) changes from the prior year.
- PA-4. 2023 SSIR Issues—TIMP: Please provide copies of any 2023 completed or in-progress audits (internal or external) completed that reviewed the TIMP program.
- PA-5. 2023 SSIR Issues—Damage Prevention: Please provide any 2023 changes to the Damage Prevention procedure.
- PA-6. 2023 SSIR Issues—Process and Controls: Please provide any 2023 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-7. 2024 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).
- PA-8. 2024 SSIR Issues—SSIR Category View: 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-9. 2024 SSIR Projects—Bare Steel Distribution Main: For the projects listed in the 2024 SSIR Projects section of the application, please provide the project risk score model inputs and specific level of risks identified to be addressed.
- PA-10. 2024 SSIR Projects—Town Border Stations (TBS): For each of the six 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.
- PA-11. 2024 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.
- PA-12. 2024 SSIR Projects—Top of Ground (TOG): Please explain why the Red Willow County McCook 2 project cost per foot was estimated at \$138.70 when the average for the other four projects was \$73.80.
- PA-13. 2024 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.

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- PA-14. 2024 SSIR Projects—Meter Relocations: Please explain why the cost to relocate the meters at Lincoln was estimated approximately \$2,000 higher (\$9,000 vs \$7,000) per meter than the average for the other three locations
- PA-15. 2024 SSIR Projects—Data Infrastructure Improvement Program (DIIP): How did the Company determine which projects should be included in the DIIP for 2024?
- PA-16. 2024 SSIR Projects—Data Infrastructure Improvement Program (DIIP): What are the estimated completion dates (in-service dates) for each project?
- PA-17. 2024 SSIR Projects—Data Infrastructure Improvement Program (DIIP): Are any of the projects a continuation from a prior year?
- PA-18. 2024 SSIR Projects—Data Infrastructure Improvement Program (DIIP): Please provide the estimated cost detail for each project that resulted in the elimination of internal costs that are not included in the SSIR?
- PA-19. 2024 SSIR Projects—Data Infrastructure Improvement Program (DIIP): Are the projects outsourced? If so, please provide the contractor estimates for each project.
- PA-20. 2024 SSIR Projects—Data Infrastructure Improvement Program (DIIP): Will any of the projects eliminate an existing project? If so, what programs will be eliminated?
- PA-21. 2024 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 between entities?
- PA-22. 2024 Alternate Projects: Please explain why these projects were chosen for inclusion as alternate projects.
- PA-23. 2024 Alternate Projects: Please provide the risk ranking detail for each project.
- PA-24. 2024 Alternate Projects: Was the risk ranking for any of these alternate projects, by category, by project, higher than the risk rankings included in the 2024 projects for the same categories? If so, explain why the alternate project was not included in the 2024 projects.
- PA-25. 2022 Projects—Budget vs. Actual: For ERTs, does the Company consider ERTs a minor item of property?
- PA-26. 2022 Projects—Budget vs. Actual: What has the Company done to address the shortage of ERTs, which has caused Meter Install projects to be deferred?
- PA-27. 2022 Projects—Budget vs. Actual: Why was Project 10075105N—TOG Trans-Holdridge pushed out to 2023?
- PA-28. 2022 Projects—Budget vs. Actual: Please explain what caused the contractor costs to change for Project 10075111N—TOG Trans Kearney and for Project 10075257N Scottsbluff 4 Chappel South.
- PA-29. 2022 Projects—Budget vs. Actual: For the following projects, please explain what the reprioritized needs within the Chart Replacement program were.
- a. Project 10075199N – McCook
 - b. Project 10075200N – Holdrege
 - c. Project 10075203N – Omaha
 - d. Project 10075255N – Lincoln
 - e. Project 10075287N – Scottsbluff
- PA-30. 2022 Projects—Budget vs. Actual: Regarding Project 10077430—Line Heater Albion and Project 10077456—Line Heater Kearney, please explain what caused the internal labor shortage and what was the incremental cost increase in using contractors rather than internal resources.
- PA-31. 2022 Projects—Budget vs. Actual: Regarding Project 10774433—ARMR Albion, please explain what “minimal budget causes inefficiency” means.

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- PA-32. 2022 Projects—Budget vs. Actual: Regarding Project 10077444—ARMR Columbus, please respond to these questions:
- a. What were the challenges working in the DT area?
 - b. Were any of those challenges considered when the project was scoped out?
- PA-33. 2022 Projects—Budget vs. Actual: For the following projects, please explain what caused the change in scope.
- a. Project 10077520—PVC York
 - b. Project 10075218N—Sutton Aurora 2 mile
 - c. Project 10075227N—Sutton Hansen 2 mile
 - d. Project 10075217N—Sutton Henderson 7 mile
- PA-34. 2022 Projects—Budget vs. Actual: For the following MEGA rule projects, please explain what caused the additional labor.
- a. Project 10077782—MAOP Bartley
 - b. Project 10077783—MAOP Lexington
 - c. Project 10077784—MAOP Fullerton
 - d. Project 10077785—MAOP Ord
- PA-35. Process and Controls: Reference Docket NG-112.2, 2023 SSIR, Response to PA-8, dated 8/26/23. Please provide any additions, updates, and modifications made to the policies and procedures provided in the referenced response regarding the development of the SSIR.
- PA-36. 2022 SSIR Project Detail: Reference Exhibit 3 and NG-112.1 2022 SSIR Model, Exhibit 2, Table K-Project Listing. The amount budgeted in NG-112.1 for 2022 SSIR capital projects was \$44,548,711. The budgeted amount on Exhibit 3 of the Application is \$44,562,113 for a difference of \$13,402. It appears that the difference is in the following project. Please explain the difference between the amount budgeted in the NG-112.1 filing and the amount reflected on Exhibit 3 in the current application.

NG-112.3 Exhibit 3

2022 Budget versus Actual

Ln	FP	Description	Criteria	Project Category	2022 SSIR-Forecast			
					In-Service Date Filed	Total Filed	Juris Filed	Non-Juris Filed
28	FP.10077448	10077448: Line Heater - Holdrege	TIMP	TOWN BORDER STATIONS	Nov-22	\$ 9,137	\$ 6,701	\$ 2,436
29	FP.10077448	10077448: Line Heater - Holdrege	TIMP	TOWN BORDER STATIONS	Nov-22	\$ 27,412	\$ 20,103	\$ 7,309
30	FP.10077448	10077448: Line Heater - Holdrege	TIMP	TOWN BORDER STATIONS	Nov-22	\$ 9,137	\$ 6,701	\$ 2,436
						\$ 45,687	\$ 33,505	\$ 12,182

NG 112.1 Exhibit 2, Table K

Line No.	Project #	Project Name	Criteria	Project Category/ Account Allocator	In Service Date	Total	Jurisdictional	Non-
						Company Project	Totals	Jurisdictional Totals
108	FP.10077448	10077448: Line Heater - Holdrege	TIMP	TOWN BORDER STATIONS	Nov-22	\$ 9,137	\$ 6,701	\$ 2,436
109	FP.10077448	10077448: Line Heater - Holdrege	TIMP	TOWN BORDER STATIONS	Nov-22	\$ 9,137	\$ 6,701	\$ 2,436
110	FP.10077448	10077448: Line Heater - Holdrege	TIMP	TOWN BORDER STATIONS	Nov-22	\$ 9,137	\$ 6,701	\$ 2,436
						\$ 27,412	\$ 20,103	\$ 7,309
Difference						\$	\$ 13,402	

- PA-37. 2022 SSIR Project Detail: Reference Exhibit 3. There were ten 2022 projects that were planned but not completed in 2022. Explanations were provided for four projects. Please provide an explanation for the remaining six projects.

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Project Name	Criteria	Project Category/ Account Allocator	In-Service Date Filed	In-Service Date Act	Explanations
10075199N: Chart Replacements - McCook	Obsolete Infrastructure	CHARTS	Nov-22	Nov-23	Reprioritized needs within program
10077430: Line Heater - Albion	Obsolete Infrastructure	TOWN BORDER STATIONS	Nov-22	Dec-21	Completed in prior year
10077433: ARMIR - Albion	Obsolete Infrastructure	ARMIR	Nov-22	Dec-23	
10077436: Chart Replacements - Albion	Obsolete Infrastructure	CHARTS	Nov-22	Nov-23	Reprioritized needs within program
10077477: Line Heater - Norfolk	TIMP	TOWN BORDER STATIONS	Nov-22	Dec-21	
10077477: Line Heater - Norfolk	TIMP	TOWN BORDER STATIONS	Nov-22	Dec-21	Completed in prior year
10077499: Line Heater - Sutton	TIMP	TOWN BORDER STATIONS	Nov-22	Nov-23	
10077520: PVC - York (SG)	DIMP	PVC	Nov-22	Nov-23	
10077520: PVC - York (SG)	DIMP	PVC	Nov-22	Nov-23	
10077520: PVC - York (SG)	DIMP	PVC	Nov-22	Nov-23	

- PA-38. Average ADIT: Reference SSIR Application, Exhibit 2, Schedule H ADIT Average Balance. Please explain why rows 44 and 59 Account 282 ADIT reflects the 2022 Tax Rate instead of the updated tax rate that includes the Nebraska tax rate reductions in 2023 and 2024.
- PA-39. True Up: Reference SSIR Application, Exhibit 2, Schedule A—True Up Calculation, line 2, Actual Customer Bills. Please provide the supporting documentation for the actual Company bills for 2022.
- PA-40. True Up: Reference SSIR Application, Exhibit 2, Schedule A—True Up Calculation, line 4. Please provide the source for the forecasted rates used for Residential (\$2.06) and Commercial (\$6.15). Please explain why this amount is different from what was approved by the Commission in NG-112.1, Order dated December 14, 2021, Residential—\$2.07 and Commercial—\$6.25.
- PA-41. True Up: Reference SSIR Application, Exhibit 2, Schedule A—True Up Calculation, line 11. The Revenue Requirement (Forecasted) amount of \$5,419,560 is different from the \$5,485,677 used to develop the approved rates of Residential (\$2.07) and Commercial (\$6.25). It appears that the Company Revenue Requirements reflects Blue Ridge’s initial recommendation to exclude ERT Projects that was withdrawn following review of supplemental information provided by the Company and as documented in the November 11, 2021, Supplement to Blue Ridge’s report filed on October 29, 2021, and confirmed in BHE’s response to Blue Ridge’s report dated November 5, 2021. Please confirm that the correct amount in the True Up should be \$5,485,677.
- PA-42. Docket No. NG-112.3, 2024 SSIR Projects—Application, pages 31–33, Data Infrastructure Improvement Program (DIIP).

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:

- a. What is the status/percent completion of each project?

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- b. For each project that is not yet complete, please provide the following information.
 - i. Estimated cost for each year
 - ii. Most recent estimated in-service dates
 - iii. 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.)
 - iv. For any estimated project in-service date that has been revised, explanation of the reason(s) for the change

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APPENDIX D: WORKPAPERS

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

- Interest Calculation/ Rates and Methodology | Federal Energy Regulatory Commission.pdf
- LB754.pdf
- WP Adjustments Exhibit 2-2024 SSIR Model NG-112.3_Filed Version.xlsx
- WP Exhibit 3_final 2022 Bud v Act.xlsx
- WP V&V Exhibit 2-2024 SSIR Model NG-112.3_Filed Version.xlsx