BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS

In the Matter of the Application of Black Hills/Kansas Gas Utility Company, LLC, d/b/a Black Hills Energy, for Approval of the Commission to Make Certain Changes in its Rates for Natural Gas Service	**)))))**	**Docket No. 21-BHCG-418-RTS**

DIRECT TESTIMONY OF CHRISTIANNE M. CURRAN

ON BEHALF OF

BLACK HILLS/KANSAS GAS UTILITY
COMPANY, LLC, d/b/a BLACK HILLS ENERGY

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EXHIBITS

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Christianne M. Curran, and my business address is 7001 Mount Rushmore Road, P.O. Box 1400, Rapid City, SD 57702-8752.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Black Hills Service Company, LLC ("BHSC") as the Assistant Treasurer. Black Hills/Kansas Gas Utility Company, LLC, d/b/a Black Hills Energy ("Black Hills") is a wholly owned subsidiary of Black Hills Utility Holdings, Inc. ("BHUH"). BHUH is a wholly owned subsidiary of Black Hills Corporation ("BHC" or "Company"). BHSC is a wholly owned subsidiary of BHC.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING?

A. I am testifying on behalf of Black Hills.

II. STATEMENT OF QUALIFICATIONS

Q. WILL YOU PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND BUSINESS EXPERIENCE?

A. My education, employment history, and professional experience are provided on KSG Direct Exhibit CMC-1.

Q. WHAT ARE YOUR CURRENT JOB RESPONSIBILITIES?

A. I am responsible for corporate liquidity and financing activities, cash management, credit risk management, shareholder services, and overseeing investments and the accounting for benefit plans for BHC and its subsidiaries and affiliates, including Black Hills. My responsibilities also include managing relationships with rating agencies, banking institutions, and actuaries.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE ANY REGULATORY BODIES ON BEHALF OF BLACK HILLS CORPORATION?

A. I have previously testified before Public Utilities Commission of the State of Colorado and submitted testimony for the Wyoming Public Service Commission.

Q. ARE YOU SPONSORING ANY EXHIBITS?

A. Yes, I am sponsoring the following Direct Exhibits:

KSG Direct Exhibit CMC-1	Education, Employment History, and Professional Experience
KSG Direct Exhibit CMC-2	Cumulative Regulatory Asset/(Liability) Balances For Pension and Retiree Healthcare Trackers

Q. HAVE THE TESTIMONY AND EXHIBITS THAT YOU ARE SPONSORING BEEN PREPARED BY YOU OR UNDER YOUR SUPERVISION?

A. Yes.

III. PURPOSE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. In my direct testimony, I will discuss the corporate finance philosophy of BHC, provide support for Black Hills' proposed capital structure, cost of long-term debt and cost of equity, discuss recent debt financing activity, and discuss Black Hills' proposed methodology to be applied in this and future rate proceedings for allocating long-term debt from BHC to its subsidiaries and the related proposal with respect to future security filings. Lastly, I will provide testimony in support of Black Hills' proposals regarding pension and retiree healthcare expenses and the treatment of balances in the accounting tracking mechanisms related to those expenses.

Q. DOES YOUR DIRECT TESTIMONY SUPPORT ANY SPECIFIC SECTIONS THAT ARE PART OF THE FILING IN THIS PROCEEDING?

A. Yes. My testimony supports Section 7 Capitalization and Cost of Capital included in the application, as well as Schedules H-6 and H-7 in KSG Direct Exhibit RRS-2.

Q. WHAT ARE YOUR RECOMMENDATIONS?

A. I recommend that the Kansas Corporation Commission ("Commission") adopt Black Hills' actual capital structure as of the end of the test year ending December 31, 2020 ("Test Year") consisting of 50.34% equity and 49.66% long-term debt, for purposes of establishing the revenue requirement in this proceeding. I further recommend that the Commission adopt Black Hills' proposed return on equity ("ROE") of 10.15% and actual weighted average cost of long-term debt of 3.91% for a weighted-average cost of capital ("WACC") of 7.05%. With respect to the cost of debt, I recommend that the Commission expressly approve for ratemaking purposes Black Hills' proposed new method of allocating long-term debt from BHC to Black Hills. These recommendations are incorporated into Section 7 Schedule 2 Long Term Debt in the application.

Lastly, I recommend the Commission approve Black Hills' proposed levels of pension and retiree healthcare expenses and the proposed mechanisms for returning to customers the accrued regulatory liability related to tracker expense amounts approved by the Commission in Black Hills' last rate proceeding in 2014 in Docket No. 14-BHCG-502-RTS ("2014 Rate Proceeding").

IV. FINANCIAL INTEGRITY OF BLACK HILLS

Q. PLEASE EXPLAIN BLACK HILLS' FINANCE PHILOSOPHY.

A. The finance philosophy of Black Hills is aligned with the overall corporate finance philosophy of BHC, which is to maintain financial integrity and the ability to access capital as needed at all times at a reasonable cost. This philosophy remains constant during times of increased uncertainty and volatility in the capital markets related to unexpected economic events outside of Black Hills' control, such as the current COVID-19 pandemic and Winter Storm Uri. Financial integrity is critical to the ability of Black Hills to satisfy its obligation to provide safe and reliable natural gas delivery services to its customers. BHC defines financial integrity as having the financial stability necessary to weather the peaks and valleys of business cycles, volatility in financial markets and interest rates, and unanticipated changes in operational requirements, all of which may strain an organization's ability to finance expenditures and provide quality service. A strong financial position provides the flexibility necessary to meet the ongoing demand for regulated public utilities to provide safe and reliable service. BHC is conservative in its financial philosophy and takes on risk where appropriate and reasonable. However, even with a conservative corporate finance philosophy, no corporation is insulated from market forces, market instability, credit crunches, and other financing difficulties that cannot reasonably be foreseen or avoided.

Q. HOW DO INVESTORS EVALUATE A COMPANY'S FINANCIAL INTEGRITY?

A. Company witness Mr. Adrien M. McKenzie covers this topic in detail in his direct testimony. Investors generally rely on nationally recognized credit rating services to evaluate a company's financial integrity and to inform them of the company's current financial position. BHC maintains credit ratings with three nationally recognized credit rating services: Moody's Investors Service ("Moody's"), Standard and Poor's ("S&P"), and Fitch Ratings ("Fitch"). BHC remains focused on maintaining solid investment grade credit ratings. As of April 30, 2021, BHC's senior unsecured rating was BBB+ by Fitch and S&P and Baa2 by Moody's, all with a "stable" outlook.

Q. HOW DO RATING AGENCIES EVALUATE COMPANIES?

A. Each individual credit rating service maintains a framework to which all companies must adhere. In general, a company will provide detailed financial, regulatory, and operational information to the rating agencies for their analysis before credit ratings are issued for an entity's securities. Rating agencies utilize both qualitative and quantitative factors in determining their credit ratings. Quantitative measures generally focus on financial performance and strength. Qualitative measures assess regulatory climate, ability to recover costs and earn reasonable returns, and management's integrity, as examples.

The credit ratings given by these agencies provide important information to creditors, investors, vendors and counterparties regarding the creditworthiness and financial risk of BHC and its subsidiaries.

Q. WHAT CRITERIA DO RATING AGENCIES USE IN EVALUATING A UTILITY?

A. As stated above, rating agencies will review a variety of both qualitative and quantitative factors during their credit evaluation process. For a regulated utility, rating agencies will assess the regulatory support received by evaluating the utility's ability to recover costs and earn reasonable returns within a particular regulatory jurisdiction. The rating agencies also consider the level of risk posed by the business. The evaluation of these factors, among many others established by the credit rating agencies, results in an overall assessment of the qualitative business risk for an entity.

As part of the quantitative assessment, the rating agencies review numerous financial metrics for a given entity. These metrics are used to review trends over periods of time for the entity, as well as to provide comparisons among other companies in a given industry, or among various industry averages. These credit metrics include assessment of the adequacy of the capital structure as well as measures of cash flow.

For example, Moody's framework has identified four key areas considered most useful in completing their credit analysis for regulated utility companies.[1] The key areas include: (1) regulatory framework (25%); (2) ability to recover costs and earn reasonable returns (25%); (3) diversification (10%); and (4) financial strength and liquidity (40%). By maintaining credit quality and investment-grade credit ratings, BHC has an opportunity to achieve more favorable credit terms and lower cost of debt, which directly benefits Black Hills' customers.

Q. HOW ARE THE REGULATORY FRAMEWORK AND THE ABILITY TO RECOVER COSTS AND EARN REASONABLE RETURNS EVALUATED BY THE RATING AGENCIES?

A. S&P specifically assesses regulatory risk based on a foundation of four pillars. These pillars focus on: (1) regulatory stability, including the transparency of how rates are set, predictability of ratemaking decisions, and consistency over time; (2) tariff-setting procedures and design that ensure the recoverability of all operating and capital costs, the balancing of interests of all stakeholders, and appropriate incentives; (3) financial stability, including the timeliness of cost recovery, flexibility to recover unexpected costs,

[1] Moody's Investor Service Regulated Electric and Gas Utilities, June 23, 2017.

attractiveness to investors, and capital support during construction to reduce cash flow pressure; and (4) regulatory independence and insulation that support the utility's long-term ability to receive financing backed by law and reduce the risk of political intervention to protect the utility's credit profile.[2]

While these pillars specifically relate to S&P's evaluation criteria, each of these pillars fits into the first two factors used by Moody's, as cited above, which account for 50% of the weighting in its credit assessment. Further, the decisions resulting from ratemaking that impact the risk assessment by the rating agencies also drive the resulting credit metrics reviewed by those agencies. Specifically, capital structure, ROE, and cost recovery mechanisms such as rate riders have a strong impact on a utility's cash flow and credit metrics.

Q. DOES REGULATORY LAG HAVE AN IMPACT ON CREDIT RATINGS?

A. Yes. Utilities require significant capital investment to maintain and provide safe and reliable service. Utilities recover those costs through rates. If a utility is unable to recover those costs on a timely basis due to delays inherent in the regulatory process necessary to review and approve proposed rates, or "regulatory lag," the operating cash flow of the utility may become insufficient, adversely impacting credit metrics. Credit ratings are put under pressure and could cause access to the debt capital markets to become strained. Regulatory lag also creates a gap between the utility's ability to earn a return on its capital investments and the allowed return due to the decrease in investment value over time through depreciation.

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[2] S&P Key Credit Factors for the Regulated Utilities Industry, November 19, 2013.

Q. HOW DO CREDIT RATINGS AFFECT A COMPANY'S ABILITY TO ISSUE DEBT?

A. Credit ratings affect a company's ability to issue debt in a couple of ways. First, the lower the credit rating, the greater the risk premium required from investors. Second, a lower rating limits the number of potential investors interested in a company's debt securities, which reduces the market for the company's debt securities. Both of these circumstances tend to increase the overall cost of debt to a company. As the issuer of long-term debt, BHC, on behalf of its collective subsidiaries, targets a BBB+ or equivalent credit rating to maximize the use of capital on behalf of its customers.

Credit ratings are integral to BHC's access to the short-term debt markets. Access to Commercial Paper ("CP") markets is typically cheaper than borrowing off of a revolving credit facility. Access to short-term debt is important to funding the daily cash needs of utility operations and the initial phases of construction projects.

Q. HOW DO BHC'S CREDIT RATINGS AFFECT BLACK HILLS?

A. Since Black Hills does not directly access the credit markets, its source of financing and liquidity needs are provided through BHC. In general, a strong investment-grade credit rating at BHC will result in lower interest costs for Black Hills, which benefits its customers. Additionally, a strong credit rating affords BHC the financial strength to make investments and meet the needs of the system.

Q. WHAT IS THE FINANCIAL INTEGRITY OF BLACK HILLS?

A. The financial integrity of Black Hills is sound. The goal of Black Hills is to establish and sustain strong stand-alone financial integrity and contribute to maintaining and, if possible, improving, the financial integrity and credit metrics for BHC. If BHC's credit metrics are weak, its ability to obtain short- and long-term financing, favorable financing costs and vendor payment terms, including collateral requirements, will be negatively impacted. While Black Hills does not have its own credit rating, it accesses its capital requirements from BHC. Black Hills' financial integrity is a relevant factor in supporting BHC's investment-grade credit ratings.

In support of BHC's investment-grade credit ratings, Black Hills generally targets an equity-to-capitalization level of approximately 50% and expects to maintain this equity-to-capitalization percentage through ongoing active management of the capital structure for Black Hills.

Q. HOW DOES BHC'S FINANCE PHILOSOPHY AFFECT THE RETURNS THAT EQUITY INVESTORS EXPECT?

A. For a company to attract equity capital, the potential investor must believe that the company has financial stability and will earn a return that exceeds its cost of capital. If a company earns less than its cost of capital, value is destroyed for its investors, and consequently, the ability to raise additional capital for future projects declines. The components of cost of capital include both the cost of long-term debt and the cost of equity. The cost of equity is impacted by a number of factors, including the risk premium investors expect above the long-term U.S. Treasury Rates, the market risk of the company, the industry risk premium, the size of market capitalization, and the financial risk of the company. In consideration of these factors and the analyses and recommendation of Mr. McKenzie, Black Hills is requesting an ROE of 10.15% to support a reasonable return. An ROE of 10.15% will allow Black Hills to continue to meet the return expectations of BHC's investors and to access capital markets. Having the ability to access capital markets allows Black Hills to continue to make prudent investments.

Q. HOW DO BLACK HILLS' CAPITAL STRUCTURE, COST OF DEBT, AND ROE IMPACT ITS FINANCIAL INTEGRITY?

A. These factors have an important impact on the financial integrity of Black Hills which in turn is important to the overall financial health and integrity of BHC. First, authorized ROEs and the capital structure impact the ability to fund capital investments with internally generated funds. Investors expect BHC to be able to internally generate cash from operations to substantially fund its capital investments instead of issuing additional capital in the markets. Second, the capital structure and WACC have an impact on credit metrics. Several financial and credit metrics are driven by cash flow and the ability of BHC to cover interest and debt obligations in the future. A lower equity ratio and ROE reduce cash flow metrics, such as the Funds From Operations ("FFO") to Debt ratio and the FFO to Interest ratio. Finally, the ability of Black Hills to recover its costs in a timely manner and earn its ROE is expected by both investors and rating agencies. These entities take into consideration the quality of the regulatory environment in which we operate to assess business risk and the ability of Black Hills to meet future obligations.

Q. DO THE RATING AGENCIES ONLY CONSIDER THE CAPITAL STRUCTURE OF BHC FOR CONSIDERATION OF CREDIT?

A. No. BHC is the parent holding company of multiple gas and electric utilities, each of which is integral to the whole. BHC, as the parent company, does not generate any cash flow on its own to support credit metric assessments. The financial integrity of Black Hills is important to the overall financial health and integrity of BHC. The creditworthiness of BHC is based on the financial integrity, regulatory environment, and operational performance of all its business units, including Black Hills. Each business unit is responsible for maintaining its financial integrity to support the commitment of BHC to maintain solid investment-grade credit ratings.

An investment-grade credit rating provides the basis for access to the capital markets on reasonable terms and conditions. Regulated operations should contribute their fair share to the creditworthiness and financial integrity of BHC, the corporate entity responsible for raising debt capital on behalf of Black Hills.

V. CAPITAL STRUCTURE

Q. WHAT CAPITAL STRUCTURE IS BLACK HILLS PROPOSING BE ADOPTED FOR PURPOSES OF DEVELOPING THE REVENUE REQUIREMENT IN THIS PROCEEDING?

A. The Company is proposing a 50.34% equity and 49.66% long-term debt capital structure based on the actual capital structure of Black Hills as of December 31, 2020.

Q. WHY IS IT APPROPRIATE TO USE THE ACTUAL CAPITAL STRUCTURE FOR BLACK HILLS AS OF DECEMBER 31, 2020?

A. It is appropriate to use Black Hills' capital structure as of the end of the Test Year December 31, 2020 as this will be the capital structure necessary to support Black Hills' rate base on and after December 31, 2020.

Q. IS THE REQUESTED CAPITAL STRUCTURE REASONABLE FOR BLACK HILLS?

A. Yes. The Company targets 50% equity and believes this is a reasonable capitalization level and appropriate to support its investment grade rating. As a reasonableness check, this capitalization ratio is consistent with the capital structures of other utilities and within the range of capitalizations of comparable gas utilities presented in Mr. McKenzie's direct testimony, as shown in KSG Direct Exhibit AMM-12.

Q. DOES THE PROPOSED CAPITAL STRUCTURE INCLUDE THE IMPACT OF SHORT-TERM DEBT?

A. No, it does not. Short-term debt is used to finance construction work-in-progress ("CWIP") and other short-term operational and working capital needs. Black Hills' short-term debt is typically used to fund operations and maintenance activities as well as CWIP. Black Hills will finance CWIP with short-term debt and then, once the project is completed and placed in service, will finance the asset with a combination of long-term debt and equity.

Furthermore, Black Hills' use of short-term debt is seasonal in nature. Gas utilities tend to have seasonal cash flows where cash inflows are higher than the cash outflows and vice versa. In those months with reduced cash flow, Black Hills will use short-term debt to finance these short-term operational and working capital needs. At times, there is a requirement for Black Hills to borrow to cover short-term cash needs while, at other times, Black Hills will have some excess cash.

Short-term debt is not intended to be used to finance utility plant investments. As a general matter, it would not be prudent to finance long-term assets with short-term variable rates for a utility. Use of variable rate debt as permanent financing for long-lived utility assets not only introduces refinancing risk and interest rate risk, it creates a mismatch of tenor with these long-lived utility assets.

Black Hills' WACC will be used in this rate application to determine an appropriate rate of return on rate base. Black Hills' rate base is made up of long-term assets and is funded with like financing, *i.e.*, long-term debt and equity.

VI. COST OF LONG-TERM DEBT

Q. WHAT IS THE PROPOSED COST OF LONG-TERM DEBT FOR BLACK HILLS?

A. As shown in Section 7 Schedule 2 Long Term Debt of the application, the cost of debt for Black Hills as of the Test Year, is 3.91%. This is also the projected cost of debt as of June 30, 2021.

Q. WHY IS IT APPROPRIATE TO USE THE COST OF DEBT AT DECEMBER 31, 2020 FOR BLACK HILLS?

A. The cost of debt as of December 31, 2020 is the cost of debt associated with Black Hills' rate base at the end of the Test Year and best reflects the cost of debt going forward.

This cost of debt also reflects a new methodology for allocating debt from BHC to its subsidiaries. The change in allocation methodology and the reasons for the change are described later in my testimony.

Q. WHY IS IT NECESSARY FOR BHC TO ALLOCATE DEBT TO BLACK HILLS?

A. Black Hills does not issue its own debt securities and, therefore, the debt component of its capital structure is derived based on an allocation of the long-term debt issued by BHC. With minor exceptions, none of BHC's subsidiaries issue their own debt and receive similar allocations.

Q. WHAT METHOD OF ALLOCATING BHC DEBT WAS PREVIOUSLY USED FOR BLACK HILLS?

A. BHC partitioned and allocated specific portions of debt securities issued by BHC based on the subsidiary's need for long-term debt at that time and available unallocated debt at the BHC level. The cost of long-term debt was then determined by taking the sum of the weighted average amount of each individual debt issuance allocated to Black Hills and its respective all-in interest rate (i.e., the composite of the coupon rate, discount, deferred financing costs, loss on reacquired debt, and any swap lock settlements).

Q. WHY DON'T BLACK HILLS AND OTHER BHC SUBSIDIARIES ISSUE THEIR OWN DEBT?

A. It is more efficient and beneficial to customers for long-term debt to be issued and serviced at the BHC parent level than at the various individual subsidiary utility levels. In addition to BHC being the only entity that issues publicly traded stock, BHC issues, acquires, and controls all of the debt securities within the organization. Two BHC subsidiaries have issued their own bonds in the past. Black Hills Power, Inc. ("BHP") and Cheyenne Light, Fuel and Power Company ("CLF&P") have separate legacy bond indentures that date back to 1941 and 1948, respectively, when they were independent corporations that issued their own common stock and issued their own bonds under their respective indentures.

Outside of those debt securities, BHC completes all of its financing at the BHC parent level to take advantage of economies of scale. Due to the size of many of BHC's operational utilities, including Black Hills, it is more cost effective and efficient to issue larger tranches of index-eligible debt at the parent level and make allocations and assignments of this debt to the various subsidiaries. Index-eligible debt is more liquid and provides an investor with the ability to trade the instrument more efficiently in the market, if necessary. This is viewed positively by bond investors. The larger and more liquid the bond instrument is, the more opportunities an investor has to trade the instrument.

The Barclays Investment Grade Index, which is the benchmark index for investment grade debt, requires a minimum tranche size for index inclusion of $300 million. Many investors use this index to benchmark their debt and will not invest in non-index eligible bonds. Fewer investors potentially means less liquidity and higher bond costs for issuers. Because the majority of BHC's subsidiaries, including Black Hills, do not have financing needs that require a minimum of $300 million in debt, BHC bundles its financing needs for many of its subsidiaries and issues index-eligible or larger debt tranches at the parent level and then makes inter-company loan assignments to the subsidiaries. For smaller scale companies (i.e., size of balance sheet), like Black Hills, it is typically more difficult to attract a competitive number of investors that want to invest in smaller bond issuances with less liquidity at competitive pricing. Additionally, the administrative cost of issuing debt is decreased by aggregating and reducing the number of issuances. Hence, it is more cost effective to issue debt at the BHC level and assign the appropriate proportion of long-term debt to the subsidiaries based on their needs.

Q. PLEASE EXPLAIN THE NEW LONG-TERM DEBT ALLOCATION METHODOLOGY.

A. The new allocation methodology is based on the weighted-average cost of all long-term debt issued by BHC other than the indentures secured by the assets of BHP and CLF&P. With the exception of those indentures, none of BHC's subsidiaries issue their own debt securities. As such, each BHC subsidiary must receive an allocation of long-term debt issued by BHC and held at the parent company level. Under the proposed new method, each BHC subsidiary is allocated a portion of this same long-term debt at a weighted average cost. To establish the weighted average cost, the total cost of each note (coupon rate, discount, deferred financing costs, loss on reacquired debt, and any swap lock settlements) is calculated on an annual basis. The annual cost of money from each note is totaled and divided by the total principal of the BHC notes being allocated to determine the weighted average cost. When a subsidiary has a need for long-term debt it will be allocated a portion of the total long-term pool at the weighted average rate. Section 7 Schedule 2 Long Term Debt of the application demonstrates the methodology.

Q. WHY WAS THE DEBT ALLOCATION METHODOLOGY CHANGED?

A. In the past, new debt issuances were often driven by corporate acquisitions, so each debt tranche was attributable to specific business units based on specific purchases of assets or companies that were being acquired. The last major BHC acquisition was SourceGas LLC ("SourceGas") in February 2016. Currently, debt issuances are being driven based on the capital investment needs of all subsidiaries. Under the prior allocation method, when a subsidiary needed long-term debt, it would generally be assigned debt from the most recent issuances or an issuance completed for a specific purpose, such as an acquisition. Depending on prevailing interest rates at the time of issuance, the issuance could have the effect of either increasing or decreasing the overall cost of debt of the subsidiary receiving the allocation. By changing methodologies, each subsidiary will now receive allocated debt at the same interest rate based on the parent company's weighted-average cost of debt.

Q. PLEASE EXPLAIN HOW THE LONG-TERM DEBT REFLECTED IN BLACK HILLS' TEST YEAR CAPITAL STRUCTURE WAS DETERMINED.

A. The components of long-term debt included within the capital structure at the end of the Test Year for Black Hills are shown in Section 7 Schedule 4 of the application. Black Hills' long-term debt is a *pro rata* portion of total debt issued by BHC and reflects the weighted average cost of debt for all BHC-issued debt as of December 31, 2020.

Q. HAS BHC COMPLETED ANY NEW LONG-TERM DEBT ISSUANCES SINCE DECEMBER OF 2020 OR DOES BHC PLAN TO ISSUE NEW DEBT PRIOR TO JUNE 30, 2021?

A. BHC has not issued any new long-term debt since June of 2020 and does not plan to issue new long-term debt prior to June 30, 2021. BHC issued a short-term $800 Million Term Loan on February 24, 2021 maturing on November 24, 2021 to address liquidity needs related to additional gas and other costs from the February 2021 extreme winter weather event. These costs will be included in the Company's cold weather investigation in Docket No. 21-GIMX-303-MIS and the costs of the short-term debt are not included in this rate application. Depending on recovery of the costs related to the February extreme winter weather event, BHC may see the need to issue long-term debt in the latter half of 2021. As of March 31, 2021, BHC had paid down $200 million of the term loan for a remaining balance of $600 million. Black Hills will update the status on this possibility in rebuttal if needed.

VII. RETURN ON EQUITY

Q. WHAT IS THE RETURN ON EQUITY ("ROE") REQUESTED IN THIS RATE APPLICATION?

A. Black Hills requests a return on equity of 10.15%.

Q. WHO IS THE ROE WITNESS IN THIS CASE AND WHAT IS THE RANGE OF THE ROE BEING RECOMMENDED?

A. Mr. McKenzie testifies to the appropriate ROE for this case. He is recommending a cost of equity range of 9.5% to 10.8% with a recommended midpoint ROE of 10.15%.

Q. IS BLACK HILLS PROPOSING TO INCLUDE FLOTATION COSTS IN THIS RATE APPLICATION?

A. No.

Q. DID BLACK HILLS TRACK FLOTATION COSTS AS AGREED UPON IN THE SETTLEMENT OF THE 2014 RATE PROCEEDING?

A. Yes. Black Hills tracked the costs in accordance with the Settlement in the 2014 Rate Proceeding.

VIII. PENSION AND RETIREE HEALTHCARE COSTS

Q. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?

A. In this section of my testimony, I present a general explanation of net periodic cost for pension and retiree healthcare (a/k/a Other Postretirement Employee Benefits or "OPEB") and an overview of the Company's pension and OPEB plans and its continuing obligations for these plans.

Q. PLEASE PROVIDE AN OVERVIEW OF BHC'S PENSION PLAN.

A. BHC has one defined benefit pension plan, the Black Hills Corporation Retirement Plan ("Pension Plan"). The Pension Plan covers certain eligible employees of the Company and employees of BHSC who provide services on behalf of the Company. The benefits for the Pension Plan are based on years of service and calculations of average earnings during a specific time period prior to retirement. The Pension Plan is closed to new employees and frozen for certain employees who did not meet age and service-based criteria.

Q. PLEASE PROVIDE AN OVERVIEW OF BHC'S RETIREE HEALTHCARE (OPEB) PLAN.

A. BHC has one retiree healthcare plan, the Black Hills Corporation Retiree Healthcare Plan ("Healthcare Plan"), for employees who meet certain age and service requirements at retirement. Healthcare Plan benefits are subject to premiums, deductibles, co-payment provisions, and other limitations. Pre-65 retirees as well as a grandfathered group of post-65 retirees receive their retiree healthcare benefits through the Black Hills self-insured retiree healthcare plans. Healthcare coverage for post-65 Medicare-eligible retirees is provided through an individual market healthcare exchange.

Q. GIVEN THAT THE PENSION PLAN IS CLOSED, WHAT ARE BHC'S CONTINUING OBLIGATIONS?

A. Although the pension plan is closed to new entrants, certain active participants continue to accrue benefits which increase the ongoing financial obligation. Additionally, BHC has a continuing obligation to oversee the pension plan to ensure adequate funding will be available for future benefit payments to the program participants at retirement. This ongoing obligation requires BHC to complete pension plan valuations to determine the financial impact to assets, liabilities, expenses, and gains and losses of the plan. BHC engages Aon as its actuary to complete the pension valuation process.

Q. HAS THE COVID-19 PANDEMIC IMPACTED THE PENSION PLAN'S FUNDED STATUS?

A. No. The Pension Plan's funded status has not been impacted by the COVID-19 Pandemic.

Q. WHAT IS BLACK HILLS PROPOSING TO RECOVER IN THIS RATE APPLICATION?

A. Black Hills is seeking to recover an amount equal to the annual net periodic pension and OPEB costs under Accounting Standards Codification ("ASC") 715 Compensation-Retirement Benefits plus administrative costs.

Q. ON WHAT BASIS IS BLACK HILLS REQUESTING TO RECOVER COSTS ASSOCIATED WITH ITS PENSION AND OPEB PLANS IN THIS PROCEEDING?

A. My testimony regarding pension and OPEB annual net periodic costs addresses the net periodic costs that are directly attributable to Black Hills.

Q. PLEASE DESCRIBE THE BASIS AND NATURE OF NET PERIODIC COSTS.

A. Net periodic pension expense reflects ongoing direct and allocated pension-related costs calculated in accordance with ASC 715-30, which is the codification of former Statement of Financial Accounting Standard ("SFAS") 87. Net periodic retiree healthcare expense reflects ongoing direct and allocated OPEB-related costs calculated in accordance with ASC 715-60, which is the codification of former SFAS 106.

Q. PLEASE EXPLAIN THE KEY ASSUMPTIONS USED TO DETERMINE THE COMPANY'S PENSION AND RETIREE HEALTHCARE EXPENSES EACH YEAR.

A. Several assumptions are used by BHC's actuaries when completing pension and retiree healthcare valuations and determining the forecasted financial impact and future annual pension and retiree healthcare expense for BHC. A few of the key assumptions include discount rates which are based on yields for high-quality corporate bonds, expected rates of return on plan assets based on current fixed income and equity capital market assumptions and asset allocation targets, and a mortality table approved and provided intermittently by the Society of Actuaries. Other pension valuation assumptions related to plan participants include, but are not limited to, rate of pay, retirement rates, withdrawal rates, and rate of inflation.

Q. WHAT ARE THE COMPONENTS OF PENSION AND OPEB COSTS UNDER ASC 715?

A Under ASC 715, pension and OPEB costs are made up of several components, including:

1. Service cost - the value of benefits that employees will earn during the current year;
2. Interest cost - increases in the present value of the benefits that plan participants have earned in previous years;
3. Expected return on assets - investment earnings on plan assets that are expected to be earned during the year;
4. Amortization of unrecognized net gains and losses - recognition of costs (or income) from experience that differs from the assumptions (e.g., discount rate changes, investment earnings different than assumed); and

5. Amortization of unrecognized prior service cost - recognition of the cost of benefit changes the plan sponsor provides for service the employees have already performed.

Q. HOW IS THE SERVICE COST COMPONENT CALCULATED?

A. The service cost component recognized in a period is the actuarial present value of benefits attributed by the benefit formula to current participants' service during that period.

Q. HOW IS THE INTEREST COST CALCULATED?

A. The interest cost component recognized in a fiscal year is determined as the increase in the benefit obligation due to the passage of time. Measuring the benefit obligation as a present value requires accrual of an interest cost at a rate equal to the assumed discount rate. Essentially, the interest cost identifies the time value of money by recognizing that anticipated benefit payments are one year closer to being paid from the pension and OPEB plans.

Q. HOW IS EXPECTED RETURN ON ASSETS CALCULATED?

A. The expected return on plan assets is determined based on the expected long-term rate of return on plan assets and the market-related value of plan assets. The market-related value of plan assets can be either fair (market) value or a calculated value that recognizes changes in fair value in a systematic and rational manner over not more than five years. For the pension plan, BHC utilizes fair value for the liability-hedging assets and the five-year smoothing period for market related value of return-seeking assets. For the OPEB plan, BHC utilizes fair value for the market-related value of plan assets.

Liability-hedging assets are assets whose objective is to reduce the volatility related both to the present value of the obligations and to changes in liability discount rates, typically fixed income assets. Return-seeking assets are assets whose objective is to generate returns that exceed the liability discount rate in order to strengthen the plan's funded status.

Q. WHAT ARE THE UNRECOGNIZED NET GAINS AND LOSSES?

A. Gains and losses are changes in the amount of either the benefit obligation or plan assets resulting from experience different from that assumed or from changes in assumptions. ASC 715 does not distinguish between sources of gains and losses. Asset gains and losses are the differences between the actual return on assets during a period and the expected return on assets for that period. Benefit obligation (or liability) gains and losses are the differences between the actual liability at the end of a measurement period and the expected liability at the end of a measurement period. Because gains and losses may reflect refinements in estimates as well as real changes in economic values and because some gains in one period may be offset by losses in another or vice versa, ASC 715 does not require full recognition of gains and losses as a component of net pension or OPEB cost in the period in which they arise.

Q. HOW ARE UNRECOGNIZED NET GAINS AND LOSSES RECOGNIZED IN EXPENSE UNDER ASC 715?

A. As noted above, ASC 715 does not require immediate recognition of gains and losses. Instead, gains and losses may be deferred and recognized in pension and OPEB expense in future periods. At a minimum, amortization of unrecognized net gains and losses must be included as a component of net periodic pension and OPEB cost for a year if, as of the beginning of the year, the unrecognized net gain or loss exceeds a "corridor," which is 10 percent of the greater of the benefit obligation or the market-related value of plan assets. If an amortization is required for a particular period, the amortization amount is equal to the amount of the unrecognized net gain or loss in excess of the corridor divided by the average remaining service period for active employees expected to receive benefits.

Q. WHAT ARE UNRECOGNIZED PRIOR SERVICE COSTS?

A. Plan amendments can change benefits based on services rendered in prior periods. ASC 715 does not generally require the cost of providing such retroactive benefits to be included in net periodic pension or OPEB costs entirely in the year of the amendment, but instead provides for deferral and recognition in future years. A prior service cost is created when a plan amendment affecting prior service periods is adopted and is equal to the incremental change in the benefit obligation. The amount of prior service cost not yet recognized in expense is the Unrecognized Prior Service Cost.

Q. HOW ARE UNRECOGNIZED PRIOR SERVICE COSTS AMORTIZED UNDER ASC 715?

A. Unrecognized prior service costs are generally amortized on a straight-line basis over the average remaining service period for active employees expected to receive benefits. The amortization period and amount of annual amortization are determined when the change in benefit obligation occurs.

IX. <u>ONGOING PENSION AND OPEB EXPENSES</u>

Q. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?

A. In this section of my testimony, I will present Black Hills' levels of net periodic cost for pension and OPEB expense for the Test Year.

Q. WHAT AMOUNTS OF ONGOING PENSION-RELATED AND OPEB-RELATED COSTS IS THE COMPANY PROPOSING TO INCLUDE FOR RECOVERY IN THIS RATE PROCEEDING?

A. As shown on KSG Direct Exhibit RRS-2, Schedule H-6 sponsored by Ms. Schuldt, Black Hills is proposing to recover $351,522 in pension-related costs, consisting of $325,441 in direct and allocated net periodic pension expenses and $26,081 in administrative costs. As shown on this same schedule, the Company is proposing to recover $178,426 in current OPEB-related costs, consisting of $169,508 in direct and allocated net periodic retiree healthcare expenses and $8,918 in administrative costs. These amounts reflect the actual expense in the 2020 Test Year.

Q. WHY DO YOU RECOMMEND USING THE 2020 ACTUAL PENSION AND OPEB EXPENSE FOR PURPOSES OF DETERMINING THE ANNUAL PENSION AND OPEB EXPENSES FOR INCLUSION IN THE REVENUE REQUIREMENT?

A. I recommend using the 2020 actual pension and OPEB expense because these are Black Hills' actual expenses and they represent reliable, documentable, and timely information at the end of the Test Year.

Q. HOW DO THESE AMOUNTS COMPARE TO THE ANNUAL EXPENSE LEVELS APPROVED BY THE COMMISSION FOR BLACK HILLS IN ITS 2014 RATE PROCEEDING?

A. These proposed amounts are considerably lower. In Black Hills' 2014 Rate Proceeding, approved pension expense was $1,267,730 and approved OPEB expense was $276,855. The primary causes for reduction in pension and OPEB expense are discussed in Section X of my testimony.

X. PENSION AND OPEB TRACKERS

Q. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?

A. The purpose of this section of my testimony is to discuss the need for tracking mechanisms which handle potential differences between approved expense levels and actual expense and to support the Company's proposal to continue the trackers, the regulatory liability/asset balance related to the pension and OPEB trackers and the Company's proposal for returning/recovering the regulatory liability/asset balances to/from customers.

Q. PLEASE PROVIDE A REVIEW OF THE BACKGROUND ON BLACK HILLS' ACCOUNTING TRACKING MECHANISMS FOR PENSION AND OPEB EXPENSE.

A. A tracker is an internal accounting process that accounts for the difference between the amount included for an expense category in an approved revenue requirement against actual expenses in the following years. There is no change in revenue related to tracked expense categories between rate proceedings because the approved expense is recorded as the expense for each year. Black Hills has been utilizing a tracking mechanism since 2015, based on the approved expense amounts from the 2014 Rate Proceeding.

Q. WHY IS IT APPROPRIATE FOR THE COMPANY TO HAVE ACCOUNTING TRACKING MECHANISMS FOR ONGOING PENSION AND RETIREE HEALTHCARE EXPENSES?

A. Both pension and OPEB expenses are subject to substantial changes year over year. Tracking mechanisms protect customers from potential swings due to this feature, which is inherent to pension and OPEB plans. For these reasons, the Company is proposing to continue its Pension and OPEB trackers.

Q. HAS A DIFFERENCE IN APPROVED EXPENSES AND ACTUAL EXPENSES FOR THE PENSION AND/OR OPEB PLANS CREATED THE EXISTENCE OF ANY REGULATORY LIABILITIES OR ASSETS?

A. Yes, the differences related to both pension and OPEB expense has created regulatory liabilities for Black Hills as shown in KSG Direct Exhibit CMC-2. As of the end the Test Year, December 31, 2020, Black Hills had a regulatory retiree healthcare liability balance of $539,200 and a regulatory pension liability balance of $4,506,507. An estimate of the liability balances at June 30, 2021 of $564,741 for the regulatory retiree healthcare balance and $5,135,530 for the regulatory pension balance is used later in testimony for the plan to return these liability balances to customers. Black Hills will plan to update these balances for rebuttal testimony to ensure the case captures the most current balance.

Q. WHAT HAS CAUSED BLACK HILLS' PENSION EXPENSE TO DECREASE OVER TIME AND ITS TRACKER BALANCE TO BE IN A LIABILITY POSITION?

A. As previously mentioned, pension expense can vary substantially year over year due to many factors. Certain assumptions change year to year which can impact expense like the discount rate, which would increase interest cost as it increases for example. Since the 2014 Rate Proceeding, total pension expense has trended downward overall. The following factors explain many of the reasons for that overall decrease in pension expense since 2014 which resulted in a projected liability balance of $5,135,530 on the pension tracker at June 30, 2021.

- **Reduction of Participants in a Closed Plan Over Time**: The first factor that contributed to the reduction in pension expense is related to yearly demographic updates. The approved expense reflects a "snapshot" in time of the plan participants in the base years of 2013 and 2014. As the plan is closed and frozen to new participants, the headcount is expected to decrease every year. As described above in the explanation of the service cost portion of net periodic cost, service cost is directly related to the number of participants and the benefits earned each year. Decreases in the number of participants every year will cause decreases in service cost.
- **Change in Expense Methodology:** A second factor in this expense decrease is related to the adoption of a new method used to estimate service and interest cost components of net periodic expense in 2016. Black Hills adopted the "full yield curve expense model" for valuing expense in 2016 and future years. This new method uses the spot yield curve approach to estimate the service and interest costs by applying the specific spot-rates along the yield curve used to determine the benefit obligations to relevant cash flows. Prior to 2016, the service and interest costs were determined using a single weighted-average discount rate based on hypothetical AA Above Median yield curves used to measure the benefit obligation at the beginning of the period. This provides a more precise measure of interest and service costs by improving the correlation between the projected benefit cash flows and the discrete spot yield curve rates. Since its adoption in 2016, the approach has reduced

customers' yearly expense through the use of lower interest cost discount rates compared to the previous model approach and is an accepted actuarial approach.

- **Increase in Funded Status Over Time and Higher Return on Assets Than Expected:** The third factor is related to improvements in Black Hills' pension plan funded status. In addition to returns on plan assets, Black Hills has made contributions in excess of the plan's expenses. The primary benefit of contributing in excess of expense is to reduce the risks associated with not being well funded. Along with contributions in excess of expense that serve to increase total asset balances, actual plan asset returns have surpassed expected returns. Expected return on assets is a direct reduction to annual pension costs.
- **Increase in Amortization Periods:** The merger of the SourceGas pension plan into the BHC Retirement Plan resulted in longer amortization periods for the actuarial gain/loss component of net periodic cost. These gains and losses are driven by actual experience differing from actuarial assumptions. For example, actual mortality rates of participants may differ in a year compared to the assumptions in the mortality tables used by actuaries. Amortization periods of these gains and losses are established by accounting rules based on the average remaining service life or remaining years of work until retirement in this case. Because the SourceGas pension was not a frozen plan, the plan included younger participants than were in the incumbent Black Hills plan resulting in a longer remaining working life overall. Thus, the longer amortization periods, helped drive lower annual expense.

- **Administrative Expense Change:** Total administrative expense for the pension plan has decreased over time for two main reasons. First, after the acquisition of SourceGas in 2016, efficiencies allowed for total administrative expense to be allocated across more business units reducing the impact to any one business unit. Secondly, in 2017, BHC changed from paying all administrative expense by the Company to having the pension trust pay allowed expenses from its assets. These expenses ultimately reduce overall return on assets but as mentioned in the bullet above, this did not prevent the plan from earning more than expected since 2013.

Q. WHAT HAS CAUSED BLACK HILLS' OPEB EXPENSE TO DECREASE OVER TIME AND ITS TRACKER BALANCE TO BE IN A LIABILITY POSITION?

A. Since 2014, annual OPEB expense has also trended lower but not as dramatically as pension expense. Many of the assumptions that may change year over year for OPEB can also increase or decrease OPEB. Overall expenses decreased causing a regulatory liability on the OPEB tracker. The following factors explain many of the reasons for that overall decrease in OPEB expense since 2014 which resulted in a projected liability balance of $564,741 on the OPEB tracker at June 30, 2021.

- **Change in Expense Methodology:** As with the pension, OPEB expense was impacted by the adoption of the "full yield curve expense model" for valuing expense in 2016 and future years.

- **Increase to Assumed Long-term Return on Assets:** A second factor is that the assumed long-term return on assets increased after 2015. This assumption, which includes an assumption for inflation, is evaluated annually based on long-term expectations for investments. Over the period from 2015 to 2020, the expected return on assets ranged from between 0.35% and 1.00% higher than in 2013 and 2014, the years used to determine return on assets for the expense adopted in the 2014 Rate Proceeding. Since expected return on assets is direct reduction of annual expense, annual expense has trended lower.

- **<u>Reduction in Prior Service Cost Amortization</u>**: A third factor driving reduced expenses is a reduction in prior service cost amortizations. Plan changes affecting past service cost results in prior service costs that are amortized in separate layers for each change. One of these prior service cost layers was fully amortized in 2019, resulting in a further reduction of expense.
- **<u>Administrative Expense:</u>** Finally, administrative expense decreased after the acquisition of SourceGas due to the increase in number of business units to spread cost over.

Q. IS THE COMPANY INCLUDING A PROPOSAL IN THIS PROCEEDING TO RETURN THIS REGULATORY LIABILITY FOR PENSION AND OPEB EXPENSE UNDER THE ACCOUNTING TRACKING MECHANISMS APPROVED IN THE 2014 RATE PROCEEDING?

A. Yes.

Q. **WHAT IS THAT PROPOSAL**?

A. Black Hills proposes returning these liabilities amortizing evenly over five years. As shown in KSG Direct Exhibit CMC-2, the projected pension regulatory liability through June 30, 2021, is projected to be $5,135,530, which would return $1,027,106 to customers in each of the five years. The projected OPEB regulatory liability through June 30, 2021, is $564,741, which would return $112,948 to customers in each of the five years. Company witness Ms. Schuldt discusses the basis for this amortization over five years in her testimony.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

AFFIDAVIT OF CHRISTIANNE M. CURRAN

State of South Dakota)
) ss
County of Pennington)

I, CHRISTIANNE M. CURRAN, being first duly sworn on oath, depose and state that I am the same Christianne M. Curran identified in the foregoing Direct Testimony; that I have caused the foregoing Direct Testimony to be prepared and am familiar with the contents thereof; and that the foregoing Direct Testimony is true and correct to the best of my knowledge, information, and belief as of the date of this Affidavit.

Christianne M. Curran

Subscribed and sworn to before me,
A Notary Public, in and for said County
and State, this 28th day of April 2021

Lynn E. Brown Lynn E. Brown
Notary Public

My Commission expires: 6-29-2024

SEAL
LYNN E. BROWN
NOTARY PUBLIC
State of South Dakota

Education, Employment History and Professional Experience

Christianne M. Curran

I graduated from Emory University with a bachelor's degree in International Studies and earned an MSM (MBA) from Georgia Institute of Technology with a focus in finance and accounting. I hold the Chartered Financial Analyst® designation.

I have over 20 years of experience in finance with over 10 years in the utility industry. I joined Black Hills Corporation in 2017 in my current role as Assistant Treasurer. Prior to joining Black Hills, I was employed in various finance roles in the telecom, utility, and consumer products industry. Since 2003, I have held management and technical roles in Treasury with responsibilities that have included the issuance and management of short-term and long-term debt and equity, capital structure management, cash flow and liquidity management, and bank and credit rating agency relationship management as well as management of benefit plan assets and actuarial services.

Black Hills/Kansas Gas Utility Company, LLC **KSG DIRECT EXHIBIT CMC-2**
Docket No. 21-BHCG- -RTS

Cumulative Regulatory Asset/(Liability) Balances for Pension and Retiree Healthcare Trackers

	Retiree Healthcare Plan Tracker Regulatory Asset/(Liability) Summary				Pension Plan Tracker Regulatory Asset/(Liability) Summary			
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Balances as of	Actual Expense	Tracker Amount Allowed	Expense in Excess of (Less than) Amount in Tracker	Cumulative Regulatory Asset/ (Liability)	Actual Expense	Tracker Amount Allowed	Expense in Excess of (Less than) Amount in Tracker	Cumulative Regulatory Asset/ (Liability)
12/31/2015	$ 238,116	$ 276,855	$ (38,739)	$ (38,739)	$ 1,409,845	$ 1,267,730	$ 142,115	$ 142,115
12/31/2016	$ 172,776	$ 276,855	$ (104,079)	$ (142,817)	$ 638,099	$ 1,267,730	$ (629,631)	$ (487,516)
12/31/2017	$ 189,959	$ 276,855	$ (86,896)	$ (229,713)	$ 130,836	$ 1,267,730	$ (1,136,894)	$ (1,624,410)
12/31/2018	$ 185,503	$ 276,855	$ (91,352)	$ (321,065)	$ 419,396	$ 1,267,730	$ (848,334)	$ (2,472,745)
12/31/2019	$ 157,149	$ 276,855	$ (119,706)	$ (440,771)	$ 150,176	$ 1,267,730	$ (1,117,554)	$ (3,590,299)
12/31/2020	$ 178,426	$ 276,855	$ (98,429)	$ (539,200)	$ 351,522	$ 1,267,730	$ (916,208)	$ (4,506,507)
6/30/2021	$ 112,886	$ 138,428	$ (25,541)	$ (564,741)	$ 4,842	$ 633,865	$ (629,023)	$ (5,135,530)

Note: Actual expense for January 1, 2021 through June 30, 2021 is based on 2021 net periodic expense provided by Aon, the actuaries for both Plans, and an estimate for admistrative expense.