PUBLIC VERSION

EXHIBIT 3
Direct Testimony and Exhibits
IVAN VANCAS

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA

In the Matter of the Application of Black Hills Power, Inc.

To Approve Tariff Revisions Related to Its Cost of Service
Gas Agreement With Black Hills Utility Holdings, Inc.

Docket No. EL 15 –__

September 30, 2015

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Exhibits

I. INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. Ivan Vancas, 625 Ninth Street, P.O. Box 1400, Rapid City, South Dakota 57701.

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

A. I am employed by Black Hills Corporation ("BHC") as Vice President, Operations Services. My areas of responsibility include directing asset optimization, which includes generation dispatch and power marketing, gas supply, and electric transmission, and I also direct electric and gas engineering, customer service, environmental and safety for BHC.

Q. FOR WHOM ARE YOU TESTIFYING?

A. I am testifying on behalf of Black Hills Power, Inc. (the "Company").

Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND BUSINESS BACKGROUND.

A. In 1989, I graduated from Kansas State University with a Bachelor of Science Degree in Electrical Engineering. I joined Black Hills/Colorado Gas Utility Company on July 14, 2008 as Vice President of Colorado and Kansas Gas Operations. On August 31, 2010, I became Vice President of Utility Services for BHC and continued in that role until I accepted my current position, which I have held since June 2012. Prior to working for Black Hills, I worked for Aquila, Inc. and its predecessor companies since 1989, and held various positions in field operations, engineering and management.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?

A. No.

II. PURPOSE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. My testimony introduces each of the witnesses who have provided testimony in support of the Company's application and briefly describes the topics of their respective testimony. In addition, I explain what the Company is requesting in its application, explain the manner in which the Company currently procures natural gas supply for the benefit of its customers, and describe the purpose and reasons for a long-term hedge program like the proposed Cost of Service Gas Program ("COSG Program"). My testimony also addresses how the COSG Program is designed to provide long-term price stability to customers with reasonably anticipated savings for customers over the life of the program. I describe how the COSG Program will operate, including its business structure, and the involvement of Black Hills Utility Holdings, Inc. ("BHUH") and COSGCO (the subsidiary of BHUH that would acquire the gas reserve interests) in the COSG Program. I also discuss the terms of the Cost of Service Gas Agreement (the "COSG Agreement"), a copy of which is attached as Exhibit 3.1 to my testimony. Finally, I discuss certain ring-fencing protections and explain how the COSG Program is consistent with and will provide those protections to the Company's utility operations.

III. INTRODUCTION OF WITNESSES PROVIDING TESTIMONY SUPPORTING THE APPLICATION

Q. PLEASE IDENTIFY THE COMPANY'S OTHER WITNESSES AND PROVIDE A BRIEF DESCRIPTION OF THEIR TESTIMONY.

A. In addition to my testimony, the Company's application is supported by the testimony of the following individuals:

John Benton: Mr. Benton describes the gas exploration and production industry, including common structures for acquiring gas reserves and the types of production costs incurred in gas exploration and production. His testimony also discusses Black Hills Exploration and Production, Inc. ("BHEP"), its history and expertise in acquiring and developing shale and tight gas reserves, and its advisory and other potential roles in the COSG Program.

Julia Ryan (Aether Advisors LLC): Ms. Ryan discusses Aether's review of the Company's gas portfolio strategy, the recommendations Aether has made regarding actions the Company should consider taking to include long-term hedging mechanisms, and explains how the COSG Program, , is consistent with that objective.

Richard ("Chuck") Loomis: Mr. Loomis explains the Company's current diversified portfolio approach to gas supply, and the reasons for its decision to seek approval to hedge up to 50% of the Company's natural gas demand under the COSG Program. Mr. Loomis also explains the long-term natural gas price forecast used by the Company and Aether Advisors, LLC (an expert retained by BHUH) in its assessment of the COSG Program.

T. Aaron Carr: Mr. Carr describes the regulatory oversight of the COSG Program as well as the customer protections incorporated into the COSG Agreement and the COSG Program design, including (i) guidelines for future acquisitions and drilling plans, (ii) reviews of those acquisitions and drilling plans, (iii) the retention of independent accounting and hydrocarbon monitors, and (iv) other COSG Program protections for customers. Finally, Mr. Carr explains a hypothetical model used by the Company as a tool to evaluate the costs and benefits of the COSG Program as compared with the costs and benefits that would result from the continued purchase of gas at the prices in the long-term spot market.

Christopher J. Kilpatrick: Mr. Kilpatrick's testimony addresses accounting and regulatory issues related to the COSG Program, including, how "Hedge Credits" and "Hedge Costs" are forecast and determined; how investment base, expenses, revenues, and return on equity are calculated; how forecast and actual costs will be accounted for, trued-up and adjusted as necessary; and how tariff sheets will be modified in light of the COSG Program.

Mr. Adrien McKenzie discusses the capital structure of the COSG Program and the basis for and reasonableness of the requested return on equity.

IV. SUMMARY OF THE COST PROGRAM AND THE COMPANY'S APPLICATION

Q. CAN YOU PROVIDE A BRIEF SUMMARY OF THE COSG PROGRAM?

A. The COSG Program is designed to be a long-term hedging program to reduce the Company's customers' exposure to the volatility of gas prices, to provide long-term price stability through a physical hedge, and to provide an opportunity for customers to pay less than market prices over the long term. Under the COSG Program, the physical hedge would be created through the acquisition, by COSGCO, of reserves that are producing or would be drilled to produce gas at production cost which, over the life of the wells and on a net present value basis, are anticipated to be below forecast market prices. In other words, the COSG Program would effectively peg a portion of customers' gas costs to today's low gas prices and to stable and predictable production costs during the term of the COSG Agreement.

Q. PLEASE EXPLAIN WHAT THE COMPANY IS REQUESTING IN ITS APPLICATION.

A. The Company is requesting that the Commission:

1. Approve Black Hills Power's revisions to its Fuel and Purchase Power Adjustment ("FPPA") tariff provision for its electric utility operations to include the costs incurred by Black Hills Power under the COSG

Agreement that has been executed by the Company and BHUH, as further described herein;

2. Approve the COSG Agreement, as may be determined necessary by the Commission to address approval of the revised tariffs; and

3. Grant such waivers, conditions, approvals or other and further relief as the Commission deems necessary or appropriate, consistent with this Application.

V. GENERAL DESCRIPTION OF BHUH AND THE COMPANY'S CURRENT GAS PROCUREMENT STRATEGY

Q. WHAT IS BHUH AND HOW IS IT RELATED TO THE COMPANY'S APPLICATION?

A. BHUH is a wholly owned subsidiary of BHC. BHUH was organized in July 2008 when BHC purchased certain gas and electric utility operating companies from Aquila, Inc. BHUH is the parent corporation of those operating companies, which include (as renamed):

- Black Hills/Colorado Electric Utility Company, LP;
- Black Hills/Colorado Gas Utility Company, LP;
- Black Hills/Iowa Gas Utility Company, LLC;
- Black Hills/Kansas Gas Utility Company, LLC; and
- Black Hills/Nebraska Gas Utility Company, LLC

(collectively, “the BHUH Utilities”). BHUH also provides services and support to three additional affiliated BHC utility companies:

- Black Hills Power, Inc.;
- Cheyenne Light, Fuel and Power Company; and
- Black Hills Northwest Wyoming Gas Utility Company, LLC

(collectively, “the “Affiliated Utilities”). For the sake of simplicity, I will refer to the BHUH Utilities and the Affiliated Utilities simply as “the Utilities.” Under the COSG Program, BHUH would be a party to the COSG Agreement and would be responsible for overseeing COSGCO (which would be a wholly owned, direct subsidiary of BHUH that would acquire the gas reserves), administering the COSG Program, and ensuring that costs and credits are properly allocated to each utility participating in the COSG Program. The responsibility of COSGCO is described later in my testimony.

Q. DOES BHUH CURRENTLY PLAY ANY ROLE IN THE UTILITIES’ GAS PURCHASES AND, IF SO, WHAT ROLE DOES IT PLAY?

A. BHUH currently enters into gas supply and transportation contracts in BHUH’s name to obtain the gas supply necessary to meet the BHUH Utilities’ gas needs. After purchasing gas for the BHUH Utilities, BHUH uses contracted pipeline capacity to transport the gas to each utility at specified locations along the pipeline. The costs involved in this process are allocated to each BHC utility according to that utility’s designated share of the costs. The process is slightly different for the Affiliated Utilities. The Affiliated Utilities each have their own gas supply and transportation contracts that are managed by BHUH as agent. After gas purchases are made by the Affiliated Utilities, that gas is transported over each Affiliated Utility's interstate pipeline capacity to the utility. Any costs BHUH incurs in acting as agent for the Affiliated Utilities are either directly charged or allocated to each Affiliated Utility according to its share of those costs.

Q. WHAT KINDS OF ARRANGEMENTS DOES THE BHUH CURRENTLY USE TO ASSIST BHC's UTILITIES TO MEET THEIR NATURAL GAS NEEDS?

A. As noted, BHUH currently assists the Company in obtaining the necessary natural gas for its electric generation needs. In addition, as explained in more detail in the testimony of Richard C. Loomis, certain utilities of BHC (herein "Entities") acquire natural gas, through or with the assistance of BHUH, from producers and marketers under various arrangements, including spot market purchases, short-term fixed price contracts and storage purchases, and short-term and medium-term financial hedges.[1] The general percentages of the Company's annual gas supply purchased through each of these methods are identified on Exhibit 3.2 to my testimony.

[1] Short-term hedging refers to hedging for the current year and the upcoming gas year (i.e. 1-2 years). Medium-term Hedging refers to hedging for gas years 3-7. The only medium-term hedging engaged in by BHUH relates to certain hedging for its Colorado electric utility.

Q. WHY DOESN'T BHUH, ON BEHALF OF THE UTILITIES, SECURE LONG-TERM FIXED PRICE CONTRACTS OR HEDGES TO AVOID MARKET PRICE INCREASES?

A. Producers are typically not inclined to enter into long-term fixed price contracts as contemplated in the COSG Program due primarily to limitations on upside return, *i.e.* if prices rise in the future they are unable to receive the benefit of those increases. John Benton discusses this and other reasons why producers are not inclined to enter into such contracts.

While long-term financial hedges may be available on a limited basis, they command a forward price premium, and would subject the Company to assuming significant collateral posting requirements and counterparty credit risk.

Q. HAS THE BHUH, ON BEHALF OF THE COMPANY, EXPLORED OPTIONS FOR LONG-TERM FIXED PRICE NATURAL GAS CONTRACTS? IF SO, WHAT WERE THE RESULTS?

A. Yes. As explained in more detail in the testimony of Richard C. Loomis, the Company, through BHUH, has investigated the availability and cost of long-term fixed price natural gas contracts and hedges. [redacted] The reasonably anticipated price for the proposed COSG Program would be lower than this figure.

Q. AREN'T THE CURRENT SPOT MARKET PRICES AT ONE OF THE HISTORIC LOWS? IF SO, WHY SHOULD THE COMPANY TAKE ANY ACTION NOW TO IMPLEMENT A LONG-TERM HEDGING STRATEGY?

While it is true that spot market prices are at one of the historic low points compared to recent history, current prices are insufficient to generate the funds necessary to drill new wells except in the most efficient locations, even in shale gas or tight gas formations. History has also shown that prices are volatile and will likely rise, and could even rise rapidly to levels that are substantially higher than the current prices. In her testimony, Julia Ryan discusses historical and forecast gas prices, noting that, because gas prices are at one of the low points compared to recent history, and are at or near the break-even price, prices in the future are more likely to rise than fall.

In addition, it is worth noting that, short- and mid-term fixed price contracts and financial hedges are not, by themselves, sufficient to blunt the impact of the price increases, because these contracts and hedges tend to track the current market price. As the market price of gas rises, the cost of short- to medium-term fixed-price contracts and financial hedges will similarly rise. By contrast, if natural gas prices increase, the value of the Hedge Credits the customers would receive under the COSG Program (one of the benefits of the program) would increase. Thus, the higher the market price, the greater the benefit of the COSG Program. The COSG

Program is anticipated to provide a lower-cost alternative to these more expensive market options, with greater price stability over the life of the COSG Program.

Q. CAN YOU MORE SPECIFICALLY EXPLAIN THE BENEFIT TO PURSUING THE COSG PROGRAM NOW IN LIGHT OF THE LOW NATURAL GAS SPOT MARKET PRICE?

A. Yes. The cost of acquiring reserves correlates to the market price of natural gas. This is the real advantage of implementing the COSG Program now, because natural gas reserves can be acquired and produced at a more favorable price over a long term as compared to a period when natural gas market prices may be higher. Moreover the reserves would be acquired in a low interest rate environment which may make financing a transaction now far more attractive than in subsequent years. In addition, because of the low market prices and the current excess gas capacity, which has caused a slow-down in drilling and production, COSGCO may be able to obtain favorable production and drilling service contracts for longer-term periods with contractors in need of steady work. Finally, as described more fully in the Aether report, gas prices are likely to rise in the future due to increased domestic demand, LNG exports and the EPA Clean Power Plan, among other influences.

Q. WHAT IS THE BENEFIT OF OWNING RESERVES RATHER THAN RELYING ON FINANCIAL OR PHYSICAL HEDGES?

A. There are a number of benefits to owning reserves compared to other forms of hedging. Specifically,

1. Available financial hedges and fixed price gas contracts are for limited terms and cannot protect customers against longer-term increases in the price of natural gas.
2. The price of gas under the COSG Program can be reasonably anticipated to be lower, on a net present value ("NPV") basis, than the price under a series of short-term hedges that, over time, will follow spot market prices.
3. The buyer, in this case COSGCO, a subsidiary of BHUH, holds title to a physical asset, as opposed to a contractual promise from a counterparty that is at risk of default. Ownership of reserves constitutes the highest security of supply/production.
4. If natural gas prices increase significantly, the value of the "Hedge Credit" to customers under the COSG Program increases.

Q. HAVE OTHER UTILITIES IMPLEMENTED LONG-TERM PHYSICAL HEDGE PROGRAMS?

A. Yes. A number of utilities or utility affiliates have implemented or are currently seeking to implement long-term physical hedge programs. A few examples demonstrate how such programs are being structured. For example, the Utah and

Wyoming public utility commissions approved a long-term physical hedge program for Questar Gas in 1981.[2] Under that program, Wexpro, an exploration and production company affiliate of Questar Gas, drills wells to produce gas for the benefit of Questar Gas' customers. An additional program was approved in 2013 known as Wexpro II, allowing Wexpro to acquire and develop additional properties.[3] The utility commissions in Utah and Wyoming have approved an acquisition under that new program. In addition, in 2011, the Oregon Public Utility Commission approved Northwest Natural Gas Company's ("NW Natural") $250 million joint development agreement with Encana Oil and Gas (USA) Inc.[4] NW Natural acquired reserves in a Wyoming gas field by paying a portion of the costs to drill new wells. Upon the termination of this joint drilling program, Northwest Natural Gas has the opportunity to develop additional gas reserves on the subject property under a joint operating agreement. Similarly, in 2014, Florida Power & Light sought and obtained approval from the Florida Public Service Commission to invest $191 million in a joint venture with PetroQuest Energy, Inc. to develop and operate new natural gas production wells in the Woodford Shale

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[2] *In re the Investigation of the Transfer of Certain Wells, Leases, Lands and Related Buildings and Interests of Mountain Fuel Supply Company and/or Wexpro Company to Celsius Energy Company or Any Other Entity or Person*, Dkt. No. 81-057-04, Report and Order on Stipulation and Agreement (December 31, 1981).

[3] *In the Matter of the Application of Questar Gas Company for Approval to Include Property Under the Wexpro II Agreement*, Dkt. No. 13-057-13, Report and Order (Jan. 17, 2014).

[4] *In the Matter of Northwest Natural Gas Company's Applications for Deferred Accounting Order Regarding Purchase of Natural Gas Reserves and Proposed Purchase of Natural Gas Reserves*, Docket Nos. UM1520 & UG 204, Order (April 28, 2011).

Gas region in Oklahoma.[5] Unlike Northwest Natural Gas, Florida Power & Light does not have the right to participate in additional drilling on the properties subject to their agreement with PetroQuest. However, in 2015, the Florida Public Service Commission approved guidelines under which Florida Power & Light can invest up to $500 million annually in additional gas reserves.[6] To secure a long-term supply of natural gas at relatively fixed prices, Washington Gas, a Virginia utility, recently entered into a $126 million purchase and sale agreement with Energy Corporation of America ("ECA") to acquire 22 producing natural gas wells in Pennsylvania for 20 years.[7] Finally, in 2012, the Montana Public Service Commission approved NorthWestern Energy's ("NorthWestern") request to include natural gas production properties in rate base and to allow for recovery of expenses associated with the acquisition of the natural gas production properties.[8] In 2013, NorthWestern spent $70.2 million to acquire Devon Energy Production Company's interest in approximately 900 natural gas wells in Montana's Bear Paw Basin.[9]

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[5] *In re Fuel Cost Recovery*, Dkt. No. 150001-E1, Order No. PSC-15-0038-FOF-EI 7 (FPSC Jan. 12, 2015).
[6] *In Re Fuel and Purchase Power Cost Recovery Clause With Generating Performance Incentive Factor (In Re Fuel Cost Recovery)*, Dkt. No. 150001-E1, Doc. No. 03723-15 (FPSC June 18, 2015).
[7] *In re Wash. Gas Light Co.*, Dkt. No. PUE-2015-00055, Doc. No. 150520224 (VSCC May 12, 2015).
[8] *In re NorthWestern Energy's Application to Place the Battle Creek Natural Gas Production Resources in Rate Base and Recover Associated Expenses (In re NorthWestern)*, Dkt. No. D2012.3.25, Order No. 7210b at 17-18, 21 (MPSC Nov. 16, 2012).
[9] *NorthWestern Energy Completes Purchase of Natural Gas Assets in Montana*, PR Newswire (Dec. 2, 2013), *available at* http://www.prnewswire.com/news-releases/northwestern-energy-completes-purchase-of-natural-gas-assets-in-montana-234142471.html.

Q. ARE THERE RISKS IN INVESTING IN RESERVES?

A. Yes. John Benton's testimony describes several risks, including (i) the risk that the volume of gas actually produced is less than the volume of estimated reserves, and (ii) the risk that the actual costs to develop reserves is greater than expected. However, the acquisition guidelines incorporated into the COSG Agreement focus investment in gas reserves that are "proven," which means they have the greatest probability of being recovered (e.g., 90% or more for proved developed producing reserves) and that have predictable and consistent costs per well. In addition, there are environmental risks with investing in reserves, predominantly dealing with compliance with current and evolving rules and regulations. Since BHEP has extensive exploration and production experience, BHEP is qualified to assist COSGCO in evaluating and mitigating these risks.

VI. <u>THE COSG PROGRAM</u>

Q. PLEASE DESCRIBE IN MORE DETAIL THE COSG PROGRAM.

A. To minimize customers' exposure to the volatility of gas market prices, to provide long-term price stability through a physical hedge, and to provide an opportunity for customers to pay less than market prices over the long term, the Company has entered into the COSG Agreement with BHUH. Other BHC utility companies in several states propose to enter into the COSG Agreement with BHUH. Specifically, as proposed, the COSG Program is being submitted for Commission or Board approval in the following states: Colorado, Iowa, Kansas, Nebraska, South Dakota, and Wyoming.

Under the COSG Program, BHUH, through COSGCO, would acquire gas reserves, using non-Company funds. As required by the acquisition criteria in the COSG Agreement, the acquired reserves would consist of fields with proven reserves and an operating history, demonstrating drilling and operating costs. In addition, the acquired reserves would be located in fields with established gathering and processing capabilities and connections to interstate pipelines, or in fields for which production and transportation costs can be reliably estimated to minimize risk. The estimated cost of acquiring, developing, and producing the reserves would be, on a net present value basis, at a cost anticipated to be less than the long-term market price gas forecast, such that the acquisition and development would be reasonably anticipated to save the Company's customers money over the life of the COSG Program.

COSGCO would produce natural gas and associated liquids. However, unless agreed otherwise, the Company would not directly receive the gas produced from the wells. Rather, for tax and other reasons explained below, the gas produced would be sold to third parties, and BHUH would purchase or act as agent in purchasing, from the market, gas needed by the Company just as it does today. Under the COSG Program, when the effective cost of gas is less than the market price of gas, customers will receive the benefit of a "Hedge Credit" that would offset or reduce the gas price paid by customers. By contrast, when the effective cost of gas is more than the market price of gas, the Company would be charged a "Hedge Cost" to make up for the difference.

To provide oversight of the COSG Program, BHUH would retain, subject to Commission approval, a Hydrocarbon Monitor. The Hydrocarbon Monitor would be an independent third party not affiliated in any way with the Company or BHUH and would (i) assess any proposed acquisition or an initial drilling plan and provide a written recommendation regarding whether the proposed acquisition or drilling plan satisfies the criteria in the COSG Agreement; and (ii) assess every five years the future drilling plans and provide a written recommendation regarding whether the those plans satisfy the drilling criterion in the COSG Agreement. In addition, BHUH would retain, again subject to Commission approval, an Accounting Monitor. The Accounting Monitor, also an independent third party not affiliated with the Company or BHUH, would conduct annual assessments of BHUH's calculations under the COSG Program as provided by the COSG Agreement and provide an assurance report of its findings for the Commission. T. Aaron Carr discusses the Monitors in more detail in his direct testimony.

Q. HAVE YOU PREPARED A SUMMARY OF THE FINANCIAL AND OPERATIONAL TERMS OF THE COSG PROGRAM?

A. Yes. Attached as Exhibit 3.3 to my testimony is a summary of the principal financial and operational terms of the COSG Program.

Q. HOW WOULD COSGCO ACQUIRE AND DEVELOP THE RESERVES?

A. As addressed in John Benton's direct testimony, acquisitions would be structured either as direct purchases of gas reserves (like Washington Gas) or under a joint development arrangement (similar to what Northwest Natural Gas and Florida Power and Light did), or a combination of both. Attached as Exhibit 3.4 are diagrams showing two possible structures for how the COSG Program would work depending upon the kind of acquisition available.

Under Alternative A, COSGCO would purchase gas reserves from a third party. BHEP or another third party would operate existing wells and drill new wells on the property and produce the gas for COSGCO.

Under Alternative B, COSGCO would earn an interest in the reserves by funding a portion of the drilling and operating costs for a third party. BHEP or another third party would operate existing wells and drill new wells on the property and produce the gas, again on COSGCO's behalf. If BHEP is not the operator of the wells, it would still be involved as COSGCO's expert to monitor the performance of the third party and protect COSGCO's interests.

Q. HOW MUCH OF THE COMPANY'S GAS WOULD BE HEDGED BY THE COSG PROGRAM?

A. As explained in the testimony of Richard C. Loomis and based on the report and recommendation of Aether Advisors, LLC, the COSG Program would physically hedge up to 50% of the Company's forecasted annual firm gas demand each year.

Q. IS THERE A RISK TO CUSTOMERS FROM DELAYING ACQUISITION OF A HIGHER LEVEL OF RESERVES AND IMPLEMENTING THE COSG PROGRAM AS A SIGNIFICANT COMPONENT OF THE PORTFOLIO?

A. Yes. Importantly, assigning 50% of the portfolio to cost of service gas and including numerous customer protections is a superior approach than establishing a lower initial target percentage of the portfolio, and then trying to increase it later. Under the COSG Program, as market prices rise, customer benefits (savings relative to market prices) increase when a higher percentage of the portfolio is stable-priced cost of service gas. Additionally, as market prices rise, the cost of acquiring incremental reserves increases and competition for drilling rigs and drilling services increases, leading to higher costs and an increased risk that resources and service providers will not be available. In other words, by waiting, the Company could essentially be chasing the market, which would undermine the desired long-term price stability provided by long-term hedging through the COSG Program. This is demonstrated by figure 73 of the Aether Report (Exhibit

5.1 to the direct testimony of Julia Ryan), which shows that, while there is an element of opportunity cost that exists in low price scenarios, enhanced price stability and greater opportunities for cost savings are achieved with a higher percentage of the portfolio being comprised of production from owned reserves. Essentially, Aether's research demonstrates that there is more upside opportunity to provide benefits to customers and relatively little additional downside risk by acquiring reserves now and implementing a cost of service gas program to provide 50% of the portfolio.

Q. WHY UNDER THE COSG PROGRAM WOULDN'T COSGCO SIMPLY SELL ITS GAS TO THE COMPANY?

A. By selling its gas to third parties in the market rather than directly to customers, COSGCO would maximize the tax benefits available for the Company's customers. In addition, depending upon where the acquired reserves are located, delivering the produced gas directly to the utilities participating in the COSG Program may be cost-prohibitive due to transportation and other costs.

Q. WHY IS AN EXPEDITED REVIEW OF ACQUISITIONS AND DRILLING PROGRAMS NECESSARY?

A. As explained in more detail in John Benton's Direct Testimony, participants in the oil and gas industry will not wait 6-12 months for regulatory approval from multiple states as a condition to closing a transaction or entering into service contracts. For example, sellers of oil and gas interests will most often be interested in taking sales proceeds and quickly redeploying them elsewhere. As such, the standard regulatory approval process is in most cases, too lengthy to facilitate taking advantage of oil and gas opportunities. As such, without an expedited approval process, COSGCO would miss opportunities to make the strategic acquisitions or arrangements that may optimize the COSG Program and benefits for the Company's customers.

Q. HOW WOULD CUSTOMERS REALIZE THE ANTICIPATED BENEFITS OF THE COSG PROGRAM?

A. As explained in more detail in the direct testimony of Christopher J. Kilpatrick, COSGCO would sell its gas (and other associated hydrocarbon products) with its return on equity calculated based on its capital investment, operating expenses, and revenue. As proposed, if COSGCO's actual return on equity from the sale of gas and liquids is more than the allowed return on equity under the COSG Program by more than 100 basis points in any given month, the Company would receive a Hedge Credit from BHUH against the amount owing for gas purchases during that month. This credit would then flow through to the Company's customers through the FPPA. On the other hand, if COSGCO's actual return on equity is less than the allowed return on equity by more than 100 basis points, a Hedge Cost would be added by BHUH to the amount owed by the Company for the gas purchases in that month. As explained in the direct testimony of Adrien McKenzie and Christopher J. Kilpatrick, the allowed return on equity would be the average of the annual return on equity for all gas and electric utility rate cases for the calendar year, as reported by Regulatory Research Associates, provided that, if there are less than twenty (20) gas and electric utility rate cases reported for a calendar year, the Allowed ROE will be the average of (i) the average of the annual return on equity for the gas and electric utility rate cases for that calendar year, and (ii) the average of the annual return on equity for all gas and electric utility rate cases for the prior calendar year, as reported by Regulatory Research Associates. These Hedge Credits and Hedge Costs are how customers would effectively receive a portion of their gas at a cost of service price.

Q. WHAT IS THE REASON FOR THE 100 BASIS POINT BAND ABOVE OR BELOW THE ALLOWED ROE?

A. Simply put, if customers save money (Hedge Credit) as a result of the COSG Program, the Company proposes to receive a portion of those savings up to an amount equal to 100 basis points above its allowed return on equity. If, on the other hand, customers pay an effective cost of service gas price that is above the market price (Hedge Cost), BHUH is penalized for the first 100 basis points. This arrangement incents BHUH to maximize the performance of the COSG Program.

Q. HOW WOULD THE COST OF CAPITAL BE CALCULATED?

A. As referenced in Christopher J. Kilpatrick's direct testimony, the calculation of cost of capital used to acquire the reserves and to drill new wells would be based on 40% debt, 60% equity structure. The cost of debt will be the weighted average of the following: (i) the cost of long-term debt, if any, of COSGCO, and (ii) for the balance of forty percent (40%) of Investment Base, the weighted average of BHC's cost of long-term debt.

Q. WHY IS THE COMPANY MAKING THIS FILING PRIOR TO AN IDENTIFIED DRILLING PROPERTY BEING ACQUIRED?

A. First, the COSG Program will require significant investment by COSGCO and a long-term commitment by the Company. Second, the COSG Program will involve several BHC utilities. Finally, the COSG Program incorporates proposed tariffs and reserve acquisition criteria, which have not yet been approved by this or any other Commission.

Q. WHEN DO YOU EXPECT AN ACQUISITION TO BE BROUGHT TO THE COMMISSION FOR REVIEW?

A. The Company plans to bring a potential acquisition forward for review by the Commission as soon as this application and the applications of other utilities that are proposed to participate in the COSG Program are approved and a property is identified. BHEP is currently evaluating potential acquisitions.

Q. IF THE COMMISSION APPROVES THIS APPLICATION AND THE VOLUME OF GAS TO BE HEDGED, IS THAT ALL THE APPROVAL THE COMPANY REQUIRES TO FULLY IMPLEMENT THE COSG PROGRAM?

A. No. As stated above, the Company needs to identify reserve interests that meet the criteria incorporated into the COSG Agreement and discussed in T. Aaron Carr's testimony (e.g., at a price that would likely result in NPV savings over the life of the asset). In addition, the Company would then need to submit the proposed acquisition to the Commission under the expedited review process for approval.

Q, IF A RESERVE INTEREST IS IDENTIFIED AND A DEAL NEGOTIATED, UNDER WHAT TIME FRAME DOES THE COMPANY EXPECT AN EXPEDITED REVIEW?

A. Sellers generally cannot wait more than a month or two to consummate a transaction as market prices fluctuate. The Company requests that an expedited review of a potential acquisition be completed within 60 days from the date of filing. In support of the expedited review, the Company would provide the Commission with a report from the independent Hydrocarbon Monitor advising whether the proposed acquisition satisfies the acquisition criteria approved by the Commission in this proceeding.

Q. WILL THE COMPANY PROCEED WITH THE COSG PROGRAM IF THE COMMISSION DOES NOT APPROVE THE REQUESTED RELIEF?

A. If the Company does not receive the requested relief from the Commission, the Company will have to make the decision whether to proceed.

Q. **WILL THE COMPANY PURSUE COSG IF THE COMMISSION ORDERS PARTICIPATION AT A LEVEL OF VOLUMES HEDGED THAT IS LESS THAN THE COMPANY RECOMMENDS?**

A. The Company may or may not pursue the COSG Program depending on the levels of volumes the Commission orders to be hedged. There has to be a level of scale to the COSG Program to minimize administrative and other costs and to facilitate a reasonable COSG price to customers that would make the COSG Program viable.

Q. IF THE COMMISSION DOES NOT APPROVE THE COMPANY'S PROPOSED REVISED TARIFFS NOW, WILL THERE BE AN OPPORTUNITY TO PARTICIPATE IN THE FUTURE OR INCREASE PARTICIPATION LATER?

A. Possibly. As the COSG Program is designed, only those utilities participating in an acquisition and the drilling programs for a reserve interest will be able to receive the benefits derived from that interest. If the participating utilities believe it is prudent for them to allow other utilities to participate in the COSG Program, a utility that does not participate in the COSG Agreement at inception may be permitted by the parties to become a party to the COSG Agreement and participate in subsequent acquisitions and drilling programs. However, it is also possible that an initial acquisition will meet the hedge needs of the participating utilities, and there may not be any future opportunities for a non-participating utility to join into the COSG Program. Moreover, the terms and conditions of future participation may vary significantly.

Q. IS THE COSG PROGRAM CAPABLE OF BEING MODIFIED ON A STATE-BY-STATE BASIS?

A. With other than minimal exceptions, no. As proposed, the COSG Program is a multi-state program that would involve utilities in Colorado, Iowa, Kansas, Nebraska, Wyoming and South Dakota. Because the utilities that participate in the COSG Program from these states would be parties to the same COSG Agreement and the same program, the terms of that arrangement cannot be modified or varied on a state-by-state basis without impacting other utilities and the processes in other states. Where minor variations, such as the percentage of the Company's annual forecast demand that will be hedged, can be made without impacting the rights and obligations of other participants or adding excessive administrative costs to the COSG Program, modifications may be approved to accommodate such variations.

VII. THE COSG AGREEMENT

Q. WHAT IS THE COSG AGREEMENT AND WHY IS IT NECESSARY?

A. The COSG Agreement is the governing document between BHUH and the utilities participating in the COSG Program. It sets forth the parties' respective rights and obligations. The COSG Agreement is necessary for several reasons. First, as proposed, the COSG Program would involve BHUH, COSGCO, and multiple utilities across several states, including the Company. The COSG Agreement defines how the COSG Program will operate between these parties and provides their respective rights and obligations. Second, the COSG Agreement explains how Hedge Credits and Hedge Costs will be calculated and allocated, and provides a means of enforcing the parties' rights and obligations. Third, because the Company believes that independent oversight of the COSG Program is appropriate, the COSG Agreement establishes what is expected of the Hydrocarbon and Accounting Monitors and explains their reporting requirements. Fourth, the COSG Agreement sets out the acquisition and drilling criteria and the other guidelines for the COSG Program, and establishes the procedure for Commission review of acquisitions and drilling programs.

Q. WHO WOULD BE THE PARTIES TO THE COSG AGREEMENT?

A. The parties to the COSG Agreement would be BHUH and each of the utilities that participate in the COSG Program.

Q. WHERE ARE THE ACQUISITION CRITERIA AND FIVE-YEAR DRILLING CRITERION IN THE COSG AGREEMENT?

A. The acquisition criteria are set forth in Exhibit A of the COSG Agreement. The five-year drilling plan criterion is set forth in Exhibit B of the COSG Agreement. These criteria are discussed in more detail in T. Aaron Carr's direct testimony.

Q. WHAT IS THE TERM OF THE COSG AGREEMENT?

A. As set forth in Section 6.1 of the COSG Agreement, the term of the COSG Agreement would commence upon the effective date of the COSG Agreement and would run until the wells on the acquired properties have been plugged and abandoned, and the properties reclaimed. As explained in the testimony of John Benton, the typical life of a tight gas well is at least 20 years.

Q. IF THE COMMISSION WANTED THE COMPANY TO TERMINATE ITS PARTICIPATION IN THE COSG AGREEMENT, CAN IT DO SO AND, IF SO, WHEN CAN IT DO SO?

A. Section 6.2 of the COSG Agreement provides that, if a utility is ordered by its public utility commission or board to terminate its rights and obligations under the COSG Agreement before the end of the term of the agreement, the terminating utility will give notice of that direction to BHUH. After receiving the termination notice, and to facilitate the termination and disposition of the terminating utility's interest in the COSG Program, BHUH will cause COSGCO to sell an interest in the Properties (excluding any Property in which the terminating utility did not participate) that is functionally equivalent to the terminating utility's then-current percentage share of the COSG Program. Before the sale can occur, however, the remaining utilities must approve the interest to be sold and the terminating utility must approve the sale price. Following the sale, the Investment Base, as set forth in the COSG Agreement, will be adjusted to reflect the sale. The termination will be effective at the end of the calendar month in which the sale closes so long as any other amounts due under the COSG Agreement are paid. Pursuant to Section 6.4 of the COSG Agreement, if the sale proceeds are greater than the terminating utility's share of Investment Base, then COSGCO will retain from the sale proceeds an amount equal to the terminating utility's share and the excess proceeds will be passed on to the terminating utilities' customers. In contrast, if the proceeds are less than the terminating utility's share of Investment Base, then COSGCO will retain the proceeds from the sale and the terminating utility will also pay BHUH an amount equal to the shortfall, which such amount being incorporated into the terminating utility's fuel purchase cost adjustment as a cost of gas.

Q. CAN THE COMMISSION ORDER THE COMPANY TO LOWER ITS LEVEL OF PARTICIPATION IN THE COSG PROGRAM AT A FUTURE DATE?

A. Yes. Section 4.4 of the COSG Agreement provides that the Commission can decide that the Company will not participate in any five-year drilling plan. As explained in John Benton's testimony, wells from shale or tight gas resources have a decline curve that requires drilling of additional wells each year to maintain a level volume of production from a particular property.

VIII. COMPLIANCE WITH RING-FENCING PROTECTIONS[10]

Q. PLEASE IDENTIFY ANY PERTINENT[11] RING-FENCING PROTECTIONS AND EXPLAIN HOW THE COSG PROGRAM COMPLIES WITH THOSE PROTECTIONS.

A. When BHC acquired the gas and electric utilities of Aquila in 2008, which were located in Colorado, Iowa, Kansas and Nebraska, BHC, BHUH and the utilities being acquired committed to comply with certain ring-fencing protections. Additionally, in the acquisition of the Energy West system and MGTC system in Wyoming in the past year, similar ring-fencing protections were also committed to. While each state worded the protections in slightly different ways, those protections can be organized into various categories. Below is a summary of the protections in each category, as well as an explanation of how the COSG Program complies with each protection:

[10] The ring-fencing protections at issue derive out of acquisitions unrelated to South Dakota and, as such, have no relevance to the Company's operations in this state. However, because those protections are imposed in other states, the Company has included a discussion of them to help the Commission understand the limitations and protections within which the COSG Program would operate.

[11] While there are other ring-fencing or ring-fencing-like protections, they relate to matters that are not related to the concepts proposed in the COSG Program.

Accounting Protections

- *All shared administrative expenses shall be properly allocated to each BHUH Utility subsidiary*: Under the COSG Program, all administrative expenses are part of the calculation of Hedge Credits and Hedge Costs, which will be allocated to the respective utilities participating in the program according to each utility's percentage participation in the program. As such, each utility will only bear its share of administrative costs
- *Separate money pools must be maintained for utility and non-utility entities under BHC's then-current structure and agreements*: The COSG Program does not alter BHC's existing structures and agreements or money pools.
- *Separate books, records, systems of accounts, financial statements and bank accounts shall be maintained for each utility, except where utility funds are pooled*: Each BHUH utility maintains its own books, records, system of accounts, financial statements and bank accounts. The COSG Program will not change this in any way.

Organizational Protections

- *Non-utility operations of BHC entities must remain in subsidiaries that are separate and independent from the operations of the BHUH Utilities or their subsidiaries*: Under the COSG Program, COSGCO will be established as an entity that, while under BHUH, will be separate and independent from the BHUH utilities and their subsidiaries. All other non-utility operations will also remain separate and independent from the BHUH utilities.

- *BHUH and its utilities will hold their assets in their own names and maintain adequate capital for their business purposes*: BHUH and the utilities participating in the COSG Program will hold their own contractual rights under the COSG Agreement.

Credit and Financing Protections

- *BHUH and its utility subsidiaries will not provide or extend credit to, issue long-term debt, or pledge utility assets to support BHC or any of its non-utility subsidiaries or affiliates*: Under the COSG Program, the BHUH Utilities will not provide or extend credit to, issue long-term debt to, or pledge any assets to support BHC or any non-utility subsidiary or affiliate. In fact, the COSG Agreement contains a specific covenant preventing any utility from pledging assets as part of the program. *See* COSG Agreement, Section 7.1.
- *BHUH and its utility subsidiaries will not guarantee any new debt obligations, notes, debentures, or any other security of BHC or its non-utility operations, nor will BHUH or its utility subsidiaries' assets be used as collateral for BHC's non-utility operations*: The

COSG Agreement specifically prohibits BHUH and its utility subsidiaries from guaranteeing any new debt obligations, notes, debentures, or any other security of BHC or its non-utility operations. In addition, the COSG Agreement prohibits BHUH or utility assets from being used as collateral. *See* COSG Agreement, Section 7.2.

- *New stand-alone or project financing for non-utility business activities (asset acquisitions, project development, credit arrangements) will be without recourse to BHUH or its utilities*: Under the COSG Agreement, any new stand-alone project financing for non-utility business activities is required to be without recourse to BHUH or its utilities. *See* COSG Agreement, Section 7.3. Further, as noted above, every acquisition under the COSG Program will be presented to the Commission for review and approval.
- *Non-utility subsidiaries will not lend money directly to BHUH or its utility subsidiaries, and non-utility subsidiaries will not carry inter-company accounts payable balances with any BHUH Utility that is above the normal level of business transactions*: Under the COSG Program, neither COSGCO nor BHEP would lend money to BHUH or the BHUH Utilities. Moreover, no non-utility subsidiaries will carry inter-company accounts payable balances with any BHUH

Utility. BHUH will calculate all Hedge Credits and Hedge Costs, not COSGCO.

<u>Fairness and Reasonableness of Transactions</u>

- *Any services BHUH and its utilities provide to any non-utility subsidiaries or affiliates would be charged at tariff rates, if applicable, or at the actual cost or market rate, whichever is higher*: Under the COSG Program, BHUH Utilities will not provide any utility-type services to COSGCO except at tariff rates. In addition, all other services BHUH will provide under the COSG Program will be charged on a cost basis. Any services provided by BHUH to COSGCO will be, in effect, services that would benefit the utilities.
- *Any services provided to BHUH or its utilities by non-utility subsidiaries or affiliates of BHC shall be reasonably necessary and appropriate for the utility business and would be charged at rates not higher than market rates*: COSGCO will not provide services to BHUH or the BHUH Utilities under the COSG Program. Rather, Hedge Credits and Hedge Costs will be calculated by BHUH based on market gas prices and COSGCO's actual costs, including a return on investment capital.
- *BHUH and its affiliates will not enter into transactions with an affiliate unless the transaction is in the ordinary course of business*

upon fair and reasonable terms that are consistent with market terms for similar transactions entered into by unaffiliated parties: As noted in the direct testimony of T. Aaron Carr, any acquisition of reserves from BHEP under the COSG Program would have to be a fair market transaction in the ordinary course of business. Any other transactions between BHUH (or the BHUH utilities) with an affiliate will be in the ordinary course of business and upon fair and reasonable terms.

- *Except where costs are charged in accordance with respective cost allocation commission manuals, a non-utility subsidiary or sister utility that receives a material benefit from a cost incurred by BHUH or its utilities will be charged a portion of those costs to compensate BHUH or its respective utilities*: Under the COSG Program, no BHUH indirect costs will be allocated to COSGCO. Only direct costs will be charged on a cost basis. Those costs will be part of the ROE calculation. In addition, no non-utility subsidiary or sister utility will receive a material benefit from a cost incurred by BHUH or the BHUH Utilities.

- *BHC will operate its utility businesses in accordance with prudent utility standards and practices, and will not engage in any practice, with respect to the allocation, assignment or distribution of capital,*

> *shared expenses or other costs, that is unduly discriminatory or preferential. All costs and expenses are shared in proportion to participation*: No part of the COSG Program will constitute discriminatory or preferential allocation, assignment, or distribution of capital, shared expenses or other costs.

Q. IN CONCLUSION, CAN YOU PLEASE STATE AGAIN WHAT THE COMPANY IS REQUESTING IN ITS APPLICATION.

A. The primary benefit of the COSG Agreement is long-term price stability because it narrows the range in gas supply costs. Because the current environment allows market participants to purchase gas reserve interests at favorable prices and drill to make those reserves productive, the COSG Agreement would allow the Company to establish a long-term physical hedge against the market instability and volatility described above. A secondary benefit is the reasonably anticipated potential savings for customers over the life of the reserves.

In addition, the Company is requesting that the Commission:

1. Approve Black Hills Power's revisions to its FPPA tariff provision for its electric utility operations to include the costs incurred by the Company under the COSG Agreement that has been executed by the Company and BHUH, as further described herein;
2. Approve the COSG Agreement, as may be determined necessary by the Commission to address approval of the revised tariffs; and

3. Grant such waivers, conditions, approvals or other and further relief as the Commission deems necessary or appropriate, consistent with this Application.

IX. CONCLUSION

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.