Direct Testimony and Exhibits
Kyle D. White

Before the South Dakota Public Utilities Commission
of the State of South Dakota

In the Matter of the Application of
Black Hills Power, Inc., a South Dakota Corporation

For Authority to Increase Rates
In South Dakota

Docket No. EL14-___

March 31, 2014

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Exhibits

I. INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. Kyle D. White, 625 Ninth Street, P.O. Box 1400, Rapid City, South Dakota.

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

A. I am currently employed by Black Hills Service Company ("Service Company"), a wholly-owned subsidiary of Black Hills Corporation ("BHC"), as Vice President of Regulatory Affairs. My areas of responsibility include regulatory affairs for the regulated electric utility subsidiaries of BHC.

Q. FOR WHOM ARE YOU TESTIFYING ON BEHALF OF TODAY?

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

Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND BUSINESS BACKGROUND.

A. I graduated with honors from the University of South Dakota in May of 1982 with a Bachelor of Science degree in Business Administration, majoring in management. In August of 1989, I graduated with a Masters degree in Business Administration, also from the University of South Dakota. I have been employed by BHC in rate, marketing and resource planning related work since July of 1982 and have been in my present position since August of 2012. For much of my career, I was responsible for the preparation of rate studies and other filings for Black Hills Power. In addition to on-the-job training, I have attended numerous

seminars, trade association meetings, and regulatory conferences covering a variety of utility-related subjects.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?

A. Yes.

II. PURPOSE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to provide an overview of BHC's subsidiary structure. I also discuss the class cost of service and the proposed rates. In addition, I discuss the Statement R coal pricing and present the business case for utility-owned generation. Lastly, I support the decision to construct Cheyenne Prairie Generating Station ("CPGS").

III. BLACK HILLS CORPORATION OVERVIEW

Q. PLEASE GIVE A BASIC OVERVIEW OF BHC AND ITS SUBSIDIARIES.

A. BHC is a diversified energy company that is headquartered in Rapid City, South Dakota with a 130 year history. BHC operates as a "holding company" under the Public Utility Holding Company Act of 2005. It operates in the United States with two major business groups: 1) Utilities – which deliver retail electric and natural gas service, and 2) Non-regulated Energy – which is involved in various wholesale energy businesses.

Q. WHAT IS THE RELATIONSHIP BETWEEN BHC AND BLACK HILLS POWER?

A. Black Hills Power is a wholly-owned subsidiary of BHC. Black Hills Power is a component of BHC's Utilities Business Segment. Attached as Exhibit KDW-1, is the organization chart for BHC and its subsidiaries. Also, attached as Exhibit KDW-2, is the listing of subsidiaries and the classification of those subsidiaries into the two major business groups – Utilities and Non-regulated Energy.

Q. WHAT OTHER UTILITIES ARE OWNED BY BHC?

A. As shown on Exhibit KDW-2, Black Hills Power's sister electric utilities include Cheyenne Light, Fuel and Power Company ("Cheyenne Light"), which operates in the City of Cheyenne, Wyoming and portions of Laramie County; and Black Hills/Colorado Electric Utility Company, which operates in the Pueblo area of Colorado. In addition, BHC owns gas distribution utilities operating in Colorado, Nebraska, Iowa, Kansas, and Wyoming. These utilities conduct business under the assumed names of Black Hills Energy and Cheyenne Light.

Q. WHAT ARE THE COMPANIES INCLUDED IN THE NON-REGULATED ENERGY GROUP OF BHC?

A. BHC's Non-regulated Energy businesses include: Wyodak Resources Development Corporation ("Wyodak Resources"), which is engaged in coal production and sales; Black Hills Exploration and Production, Inc., which is engaged in oil and natural gas production; and Black Hills Electric Generation, LLC and its subsidiaries, which are engaged in independent power production.

IV. CLASS COST OF SERVICE

Q. HAVE YOU REVIEWED THE RESULTS OF THE CLASS COST OF SERVICE PREPARED BY MR. GRAY?

A. Yes, I have.

Q. WHAT DID YOU DETERMINE?

A. Material differences now exist in the revenue increases required for each class to pay its allocated cost of service. These increases are larger for some classes than is warranted at this time. This result is different than occurred in Black Hills Power's last application for an increase in base rates which the Commission considered in 2013. The Class Cost of Service Model ("CCOS") is provided as Statement O of Exhibit 4.

Q. DO YOU HAVE AN OPINION AS TO WHY THIS HAS OCCURRED?

A. Yes, this is the first class cost of service study since load research data became available from the Company's Advanced Metering Infrastructure (AMI) and the recently installed Meter Data Management System (MDMS). Prior to this study, the Company either borrowed load research data from other utilities and made adjustments to it for perceived differences or utilized old information under the presumption that load characteristics by class had not materially changed. As a result of the availability of nearly census hourly load data for all of Black Hills Power's retail customers, we now have precise data we can use for determining class capacity allocators. However, this data is for one summer peak season only. Additional years of load measurements would help increase the Company's

confidence that the reported load data represents a "typical" or "normal" consumption of customers within each class.

Q. WHAT IS BLACK HILLS POWER'S RATE DESIGN PHILOSOPHY?

A. Black Hills Power's primary principle for rate design is the creation of fair and consistent rates. The rate design is intended to balance the revenue responsibilities of Black Hills Power's customers with the right of the Company to recover the reasonable costs incurred to provide service to its customers.

Black Hills Power recognizes that the process of adopting and applying a specific rate design requires judgment, and is a complex and somewhat iterative process. The Company understands that preparing and proposing a rate design that is consistent with this philosophy involves various overlapping and sometime conflicting considerations.

Q. WHAT ARE THOSE CONSIDERATIONS?

A. The rate design considerations include, but are not limited to, the following:

(1) collection of Black Hills Power's total annual revenue requirement and the allocation of those revenues to each customer class to recover costs from those customers that cause those costs to be incurred;

(2) recognition of the cost to serve, as reflected by a class cost of service study that attributes costs to the different classes of customers based on how those customers cause costs to be incurred;

(3) encouragement of the optimum use of supply sources by promoting desirable and discouraging undesirable load characteristics;

(4) recognition of the value of service considering the nature and level of competition and the degree of price sensitivity in each rate class;

(5) avoidance of undue discrimination between customer classes and individual customers within each class;

(6) history of rates, including trends in the level of charges and stability of the rates;

(7) rate structures and terms and conditions of service which are easy to administer and be understood by customers;

(8) consideration of the rates and practices of other utilities having similar types of load and service conditions; and

(9) redesign of rates and services to reflect industry movement when appropriate.

V. PROPOSED RATES

Q. HOW HAS THE ADDITION OF AMI DATA CHANGED THE ALLOCATION OF COSTS TO THE VARIOUS CUSTOMER CLASSES?

A. Black Hills Power can now utilize more complete customer and system data through its AMI meters and MDMS information systems that was not previously available. Now that Black Hills Power can obtain and analyze this specific customer class data, it can better identify methodologies and class demands to fairly allocate the costs of providing service. In addition, Black Hills Power can determine how the costs to be allocated will impact the different customer classes.

Upon reviewing the more complete data in this case, Black Hills Power determined that a reallocation of certain costs from one customer class to another is necessary. However, because the Company has information from the AMI and MDMS data collection, Black Hills Power recognizes that it must apply gradualism in the reassignment of costs. Accordingly, the proposed allocation of costs moves toward a full cost of service approach yet recognizes that the shift of costs must be done in a transitional manner to avoid significant and sudden impacts to customers.

Q. IS THE COMPANY PROPOSING THAT RATES BE APPROVED FOR EACH CUSTOMER CLASS TO RECOVER ITS ALLOCATED COST OF SERVICE?

A. No. While the cost-based rates would allocate the revenue requirement needed to each customer class to recover each class' current cost causation, the Company does not propose to move rates to fully cost-based rates. Doing so would produce greater customer impacts to certain classes than the Company believes is appropriate and acceptable.

Q. HOW DID THE COMPANY DETERMINE THE PROPOSED CLASS REVENUE RESPONSIBILITY?

A. The primary guide for the proposed class revenue responsibility is the class cost of service study. Moderation, gradualism, and rate stability were also considered by comparing class costs as a percentage increase from the present rate levels, relative to the proposed overall 9.27 percent increase to revenues. While the total

overall revenue increase is 9.27 percent, the results of the class cost of service study shows various rate changes should rates be set to match the study results for each individual customer class.

Q. WHY DID BLACK HILLS POWER CHOOSE GRADUALISM?

A. With the variance in the allocated class percentages as compared to the overall percentage increase, Black Hills Power chose to exercise caution and developed rates that begin the move toward cost based rates while acknowledging the history of the relationship of the rates, including trends in the level of charges and stability and predictability of rates. The Company seeks to avoid undue discrimination between customer classes and similarly situated individual customers within each class. Black Hills Power must also be cognizant of customer reactions to a move to fully cost-based rates.

By employing the practice of gradualism when changing rates, significant rate shifts can be minimized by moving a rate class to its full cost of service rates through smaller step changes over time, as opposed to one large jump to full cost of service. The proposed rates allow the Company to move all classes toward cost based rates in moderation. This moderation is expected to require future reallocations of required revenues to each customer class to appropriately recover utility costs from those customer classes that are shown to cause those costs to be incurred by Black Hills Power.

Q. PLEASE EXPLAIN HOW THE CLASS REVENUE RESPONSIBILITIES WERE DEVELOPED.

A. Due to the newness of the shown inequities between the expected returns between the five customer classes under current rates, the Company proposes to increase the charges for all classes consistent with certain constraints. Under the proposed rate design, no customer class will receive an increase which is less than 75 percent of the overall revenue increase. Also, no customer class will experience an increase greater than 120 percent of the overall increase for all customers. The boundaries for acceptable percentage increases then become approximately 7 percent and 12 percent. This proposed class revenue allocation provides an appropriate and reasoned movement of rates to class cost levels to maintain accurate and equitable pricing while being tempered by moderation. The moderation in this proposal also recognizes the overall level of the proposed increase.

Using the proposed class revenues and applying rate design factors mentioned above, Black Hills Power developed appropriate base rate charges. These charges are necessary to allow Black Hills Power the opportunity to recover, from each class, the currently appropriate class revenue requirement and the total annual revenue requirement as applied for by the Company.

Q. ARE THERE OTHER REASONS WHY NOW IS NOT THE APPROPRIATE TIME TO MOVE TO FULLY COST-BASED RATES?

A. Yes. With the electric utility industry on the verge of fully deploying AMI, there will likely be innovations in how customer groupings are determined, along with an increased utilization of rate designs applicable to load data rich metering. Rates which may see increased application include demand rates, time of use rates and peak control rates. Rather than subjecting customers to the impact of full cost of service rates today and then coming forward in a few years with another major change, Black Hills Power would prefer to wait to see what develops.

Q. DO YOU BELIEVE THAT THE RATES AND CHARGES PROPOSED BY THE COMPANY WILL RESULT IN JUST AND REASONABLE RATES?

A. Yes. With my years of experience in rate making and my understanding of the situation presented today, I believe that the Company's proposal is fair and will result in just and reasonable rates.

VI. PROPOSED CHANGES TO TARIFFS

Q. HAS THE COMPANY MADE CHANGES TO THE APPLICABILITY PROVISIONS OF ITS RESIDENTIAL TARIFFS IN RESPONSE TO INCREASING INTEREST NATIONALLY IN CUSTOMER-OWNED BEHIND THE METER DISTRIBUTED GENERATION?

A. Yes.

Q. PLEASE PROVIDE THE REASONS FOR THIS CHANGE IN APPROACH?

A. Nationally, customers are showing a growing interest in utilizing distributed self-generation for meeting portions of the electricity they require within their homes. Due to traditional approaches for pricing residential electric service, these customers are often receiving more savings incentive for their self-generation than is appropriate for the costs the utility saves by not fully serving them. Additionally, because residential charges frequently have not been set to match costs, the utility also fails to recover the real cost to serve the partially self-generating residential customers. These unbilled costs then must be paid by all other residential customers. Black Hills Power is fortunate that for over three decades it has offered the Residential Demand Service rate which has the appropriate pricing that can be used for this type of application.

Q. WHAT CHANGES HAVE BEEN MADE TO THE RESIDENTIAL TARIFFS?

A. Language has been added to the APPLICABLE section of the Residential Demand Service tariff to specify that residential partial requirements service will only be available under this rate schedule. The Residential Service tariff and the Total-Electric Residential Service will be available for all-requirements service only. Black Hills Power has some residential customers that have generation interconnection agreements related to their service requirements. For these customers the Residential Demand Service schedule includes language whereby

they can remain on the rate schedule applicable at the time when their agreement became effective for the term of the agreement or through September 30, 2024, which ever period is shorter. By making the changes at this time, this grandfathering provision would only apply to about a dozen customers. The result is that Black Hills Power's customers will have appropriate price signals should they consider investing in distributed generation for meeting some of the electricity requirements for their homes.

VII. STATEMENT R COAL PRICING

Q. PLEASE EXPLAIN THE COAL SUPPLY ARRANGEMENT FOR BLACK HILLS POWER'S COAL FIRED POWER PLANTS.

A. Black Hills Power has a Coal Supply Agreement with Wyodak Resources to provide coal to the Company's coal-fired power plants. The pricing for the Coal Supply Agreement is based on what the Company refers to as 'Statement R' pricing because it has historically corresponded to the Statement in the rate case application that details the coal price calculation for coal purchased from the Company's affiliate. Under this methodology, Black Hills Power's coal costs are determined by calculating the amount that allows Wyodak Resources to recover its cost of service related to the coal sales to Black Hills Power, plus a return on investment. That return is the average interest rate for new, long-term A-rated utility bonds issued during the calendar year for which the calculation is being made, plus four hundred basis points. This is a utility type rate of return methodology. This methodology has been presented and accepted by this

Commission previously for Black Hills Power for decades. In addition, this pricing methodology has been accepted by third parties with ownership interests at the Gillette Energy Complex such as the City of Gillette and Montana Dakota Utilities Co.

Q. DO BLACK HILLS POWER'S CUSTOMERS BENEFIT FROM THE EXISTENCE OF THE COAL SUPPLY AGREEMENT?

A. Yes. The coal supply arrangement is beneficial to Black Hills Power's customers for several reasons. All remaining coal-fired power plants are mine-mouth facilities, which eliminate almost all transportation costs. In addition, the Coal Supply Agreement is a long term supply agreement, providing coal for the life of the facilities.

VIII. BUSINESS CASE FOR UTILITY OWNED GENERATION

Q. ARE THERE BENEFITS OF UTILITY OWNED GENERATION?

A. Yes. In the three decades that I have worked in the utility industry, I have seen the results of both long-term power purchase relationships and utility-owned generation. I have come to strongly believe that the best resource acquisition for meeting the majority of customer electricity requirements is to own and control generation. There are several benefits to utility ownership including the following:

- Typically utility owned generation provides more price stability for customers over the long term than power purchase agreements ("PPA") that have shorter terms than the expected useful life of the generation. By

owning and controlling generation, Black Hills Power can protect customers from market forces that may drive prices up when the utility is seeking new supply to replace a PPA that is expiring. Frequently PPA suppliers seek renewal prices that are higher than what the underlying generation assets would allow under cost-based regulation. It can be said that under twenty year PPAs, the customers often pay for the supplier's generation facilities more than once. Also, constructing and owning generation gives Black Hills Power customers the security of supply and the cost benefits of long-lived and depreciating assets. With utility-owned generation, the rate base declines over time while PPAs typically have lower cost at the beginning, but rise over the term of the agreement.

- The utility has an obligation to provide customers with reliable service; therefore, it has no motivation to let demand outpace supply, which increases the cost of generation and ultimately the cost to customers. In other words, utilities are paid for their actual cost of providing the generation while independent power producers generally are providing power at the market price which may be affected by the laws of supply and demand.
- The utility's profits on generation come in the authorized return on equity on the actual capital invested in the generating resource. This return is typically less than that required by a competitive non-regulated entity. Since independent power producers may charge market-based rates under a

tariff on file with the Federal Energy Regulatory Commission ("FERC"), the only limit on the size of that return is the market value for purchased power.

- Utility ownership of capacity provides operational benefits and security and will result in a more financially sound utility, which benefits customers. These benefits include outage management, dispatch, ramp rates, unit commitments and capital additions for increased efficiency and life extension, and also compliance with new regulations. Often PPAs limit the flexibility the utility has in utilizing the resource to meet changing operating conditions.

IX. SUPPORT FOR THE DECISION TO CONSTRUCT CPGS

Q. PLEASE PROVIDE A SUMMARY OF THE DECISION TO CONSTRUCT CPGS.

A. In 2011, Cheyenne Light recognized that it would need new electric resources to offset load growth and the expiration of long-term PPAs. As a consequence, Cheyenne Light completed an integrated resource plan ("IRP") that identified a capacity deficit of 93 MW in 2014 and exceeding 150 MW by the end of the 20-year plan. Consistent with the IRP, Cheyenne Light filed an Application for a Certificate of Public Convenience and Necessity on August 1, 2011 with the Wyoming Public Service Commission to construct three combustion turbine generators ("CTG") on a site in Cheyenne, Wyoming.

At the same time, Black Hills Power began work on an IRP to identify the future needs of its customers. The future resource needs of Black Hills Power were driven primarily by the impact of environmental regulatory requirements on its existing generating facilities. Based on regulatory requirements and economics, the Black Hills Power IRP identified that the Ben French, Neil Simpson I, and Osage coal-fired units owned by Black Hills Power will be retired in 2014. In addition, certain PPAs of Black Hills Power will terminate over the 20-year IRP planning horizon.

The preferred plan identified in the Black Hills Power IRP included the conversion of a CTG to combined cycle ("CC") operation, in the 2014 time frame. As a result of the preferred plan in Black Hills Power's IRP, consideration was given to whether siting a CC resource in Cheyenne would present an opportunity for both Black Hills Power and Cheyenne Light.

To assess the benefits and risks of a jointly-owned CC unit, Black Hills Power and Cheyenne Light undertook additional analysis and modeling to determine the financial impact on the completed resource plans. The result of the analysis indicated that a jointly-owned CC unit, one CTG owned by Cheyenne Light, and additional firm market purchases resulted in lower present value of revenue requirements than the resource scenario identified in Cheyenne Light's original IRP.

Q. WHY DOES BLACK HILLS POWER BELIEVE A CC IS THE APPROPRIATE GENERATION RESOURCE FOR ITS CUSTOMERS?

A. Black Hills Power believes that the increased initial capital cost per kW of a CC, as compared to CTGs, will be offset by the benefits associated with a more fuel efficient CC. The advantages of a CC include operation at a lower heat rate, lower environmental emissions, and reduced exposure to future environmental mandates or taxes. In addition, Black Hills Power believes that it is in the best interest of customers to build and own generation rather than relying on PPAs. Therefore, Black Hills Power believes that the construction of the jointly owned CC will provide reliable electricity to its customers for years to come and mitigate the risk of economy energy not being available in the market.

Q. WHY DID BLACK HILLS POWER ELECT TO CONSTRUCT A NEW GENERATION FACILITY IN CHEYENNE WYOMING?

A. The Cheyenne, Wyoming location was chosen for CPGS because it provides an adequate and efficient water supply, an abundant natural gas supply, and access to available electric transmission.

Q. HAS THE SOUTH DAKOTA PUBLIC UTILITIES COMMISSION ("COMMISSION") HAD AN OPPORTUNITY TO CONSIDER ANY FILINGS RELATED TO CPGS?

A. Yes. Pursuant to S.D.C.L. §§ 49-34A-73 to 78, Black Hills Power filed an Application for the Phase In of Rates Regarding CPGS Construction Financing Costs with the Commission on December 17, 2012, Docket EL12-062. On

September 19, 2013, the Commission approved the phase in plan rate for CPGS through a Decision and Order Granting Joint Motions for Approval of Settlement Agreement and Settlement Stipulation.

Q. DID BLACK HILLS POWER OBTAIN A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR CPGS FROM THE WYOMING PUBLIC SERVICE COMMISSION?

A. Yes. Black Hills Power and Cheyenne Light filed a Joint Application for a Certificate of Public Convenience and Necessity ("CPCN") on November 1, 2011, which was approved by the Wyoming Public Service Commission by a Memorandum Decision dated January 8, 2013, in Docket Nos. 20002-81-EA-11 and 20003-113-EA-11 (Record No. 13007).

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.