

Direct Testimony  
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. EL09-\_\_\_

September 29, 2009

## Table of Contents

		Page
I.	Introduction And Qualifications	1
II	Purpose Of Testimony	2
III.	Base Load Generation	2
IV.	Additional Changes Included In The Application	7
V.	Rate Increase	9

**I. INTRODUCTION AND QUALIFICATIONS**

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. Kyle D. White, 625 Ninth Street, P.O. Box 1400, Rapid City, South Dakota,  
3 57701.

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

5 A. I am Vice President of Regulatory and Governmental Affairs for Black Hills  
6 Corporation.

7 **Q. FOR WHOM ARE YOU TESTIFYING ON BEHALF TODAY?**

8 A. I am testifying on behalf of Black Hills Power, Inc. (“Black Hills Power” or  
9 “Company”).

10 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND BUSINESS**  
11 **BACKGROUND.**

12 A. I graduated with honors from the University of South Dakota in 1982 with a  
13 Bachelor of Science degree in Business Administration, majoring in management.  
14 In 1989 I graduated with a Masters degree in Business Administration, also from  
15 the University of South Dakota. I have been employed by Black Hills Corporation  
16 in rate-related and marketing-related work since 1982 and have been in my present  
17 position since July 2008. For much of my career, I was responsible for the  
18 preparation of Black Hills Power’s rate studies and filings. In addition to on-the-  
19 job training in utility rate making, I have attended numerous seminars, trade  
20 association meetings, and regulatory conferences covering a variety of subjects  
21 including utility rate-making principles.

1 In addition, I am Vice Chair and a founding board member of both the South  
2 Dakota Energy Infrastructure Authority and the Wyoming Infrastructure Authority  
3 whose purpose is to increase opportunities for generation development by  
4 increasing transmission capabilities within each state.

5 **II. PURPOSE OF TESTIMONY**

6 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

7 A. To review and provide additional support for the key components of the rate  
8 application presented by Black Hills Power.

9 **III. BASE LOAD GENERATION**

10 **Q. WHAT ARE THE KEY COMPONENTS OF THIS RATE APPLICATION?**

11 A. The primary component of this rate application is the inclusion of Wygen III into  
12 rate base. In addition, the Company is proposing some changes and clarifications  
13 to certain tariff sheets identified below.

14 **Q. DO UTILITIES GO THROUGH BUSINESS CYCLES THAT IMPACT  
15 THEIR RATES?**

16 A. Yes. As demand for electricity grows, so too does the need for distribution plant,  
17 transmission plant, peaking generation and base load generation. In fact, Black  
18 Hills Power is just completing one of these cycles. In the summer of 1995 Black  
19 Hills Power completed the 80 MW Neil Simpson Unit #2 power plant. Since then  
20 the utility has added 12,175 customers and its peak demand increased from 279  
21 MW to 430 MW. In order to meet this growth, the utility made improvements to  
22 its transmission system, including an AC-DC-AC Tie, and constructed two 40

1 MW natural gas-fired combustion turbines. We are now completing the cycle  
2 with the expected completion of Wygen III in the first quarter of 2010.

3 **Q. WAS THE DECISION TO CONSTRUCT WYGEN III BASED SOLELY**  
4 **ON THIS IDEA THAT BASE LOAD RESOURCES WERE NEXT UP TO**  
5 **COMPLETE THE BUSINESS CYCLE?**

6 A. No. The process that led to the decision to construct Wygen III was much more  
7 involved and sophisticated than that. As explained in more detail in Jill Tietjen's  
8 testimony, there were several steps that were required before the decision to  
9 construct Wygen III was made.

10 Black Hills Power first completed an Integrated Resource Plan ("IRP") that  
11 evaluated resource alternatives for meeting anticipated customer electricity  
12 requirements over a 20 year planning horizon. The result of the planning effort  
13 was that the construction of mine-mouth coal-fired generation was the best and  
14 most economical solution for Black Hills Power to meet the electricity  
15 requirements of its customers and maintain reliability levels. Accordingly, Black  
16 Hills Power, after due consideration and analysis, approval of a Certificate of  
17 Public Convenience and Necessity (CPCN) from the Public Service Commission  
18 of Wyoming (Wyoming PSC) and the approval of its Board of Directors,  
19 commenced construction of Wygen III in March 2008.

1 **Q. ARE THERE BASELOAD RESOURCE ALTERNATIVES TO COAL-**  
2 **FIRE GENERATION?**

3 A. Yes. Natural gas, nuclear and hydro may all be used to meet baseload power  
4 requirements.

5 **Q. IN YOUR OPINION, WOULD THESE HAVE BEEN GOOD RESOURCES**  
6 **FOR MEETING THE BASELOAD POWER REQUIREMENTS MET BY**  
7 **WYGEN III?**

8 A. No. Only natural gas-fired generation could be constructed within the timeframe  
9 identified in the IRP for the next base load resource. Natural gas-fired generation  
10 has attractive construction time frames and capital costs, but natural gas fuel costs  
11 are higher and more volatile than mine-mouth coal. While there are significant up  
12 front costs associated with Wygen III, customers will benefit from a long-term  
13 generation asset that has a cost that depreciates over the life of the plant. A coal-  
14 fired generation plant was the lowest long-term cost option. The addition of  
15 Wygen III further insulates customers from the volatile energy markets and  
16 Wygen III provides future price stability at a competitive cost. The IRP confirms  
17 that the overall costs to customers will be lower with Wygen III than any other  
18 generation asset addition considered, including long-term purchased power.

19 **Q. ARE THERE BENEFITS TO RATE BASING GENERATION?**

20 A. Yes. By rate basing generation, customers get the benefit of a cap on the rate base  
21 included in rates for the portion of their power supply met with this generation. In  
22 fact, rate base will decline over time as accumulated depreciation grows. This

1 annual reduction to rate base from depreciation also allows the utility to invest in  
2 new plant (rate base) without a need to increase rates.

3 Rate based generation provides the utility more flexibility in how it operates,  
4 which benefits customers. When compared with purchased power, rate based  
5 generation can be life-extended or retired free of any specific term of an  
6 agreement to purchase power. The utility will have control of this asset for its  
7 entire 40-50 year life. Rate based generation can also be dispatched as required  
8 without any required conditions of purchase, like minimum “take or pay” energy  
9 purchase requirements. In addition, rate based generation helps Black Hills Power  
10 maintain good credit ratings with rating agencies which contribute to the overall  
11 health and flexibility of the Company.

12 **Q. IS WYGEN III STILL A NECESSARY ASSET GIVEN THE EFFECT OF**  
13 **RECENT ECONOMIC CONDITIONS ON BLACK HILLS POWER’S**  
14 **SERVICE TERRITORY?**

15 A. Yes. Wygen III is still a necessary asset. Although growth has slowed somewhat  
16 in the short term, residential and commercial accounts continue to grow. While  
17 some major manufacturers and key customers have reduced their load  
18 requirements, there continues to be growth in other areas of the Company’s  
19 service territory including Sanford Lab, Encore Operating and retail loads at  
20 Rushmore Crossing. The current and projected growth mandate new base load  
21 generation to serve customer load and to maintain reliability standards. Therefore,  
22 at the time the decision was made to build Wygen III, it was the correct decision.

1 Given that Wygen III is the best solution to satisfy the need for additional power  
2 supply, the Company believes it remains the best decision for the Company and its  
3 customers.

4 **Q. WHAT ACTIONS HAS BLACK HILLS POWER TAKEN TO MITIGATE**  
5 **THE IMPACT OF THE COST OF WYGEN III TO CUSTOMERS?**

6 A. Black Hills Power has managed the construction of Wygen III in a prudent manner  
7 which is reflected in the fact that construction is expected to be completed on time  
8 and under budget, which will benefit the Company's customers by further  
9 reducing the costs associated with this additional generation. In addition, Black  
10 Hills Power expects to receive 50 percent bonus depreciation on Wygen III which  
11 is being allowed pursuant to the American Recovery and Reinvestment Act of  
12 2009. As described in the testimony of Christopher J. Kilpatrick, this bonus  
13 depreciation has the effect of lowering the net amount relating to Wygen III that  
14 the Company is requesting to add to rate base to approximately \$110 million.

15 **Q. WITH THE CURRENT DISCUSSION ABOUT GLOBAL CLIMATE**  
16 **CHANGE, DO YOU BELIEVE IT WAS STILL THE RIGHT DECISION**  
17 **TO BUILD WYGEN III?**

18 A. Absolutely. As part of the IRP, scenarios involving varying levels of carbon taxes  
19 were modeled and the construction of Wygen III was still supported as a good  
20 decision. Beyond that, building coal-fired generation today makes sense for Black  
21 Hills Power and its customers. Building mine-mouth generation and purchasing  
22 coal from an affiliate assures a cost-effective long-term fuel supply. Therefore,

1 especially for Black Hills Power, common sense supports adding coal-fired  
2 generation through Wygen III.

3 **Q. WHAT HAPPENS IF THERE ARE RESTRICTIONS ON UTILITY**  
4 **EMMISSIONS OF CARBON DIOXIDE IN THE FUTURE?**

5 A. The timing of the construction of Wygen III will be beneficial to customers  
6 because Black Hills Power will have other ways to reduce its carbon footprint.  
7 Conservation and energy efficiency will be more cost-effective for customers at  
8 higher utility rates, causing them to seek out and get involved in conservation and  
9 energy efficiency efforts which will have the effect of reducing the level of their  
10 need for electricity. In addition, Black Hills Power has generation that already has  
11 served customers for between 40 and 60 years that could be retired and replaced  
12 with new technologies as they are developed. I believe that new coal-fired  
13 generation must continue to be added to meet customer demands for electricity  
14 and a strong economy. If economic, Wygen III may also be retro-fitted to capture  
15 and sequester carbon dioxide. The future is uncertain, what is certain is that under  
16 numerous assumptions regarding the future, Wygen III was identified as a cost-  
17 effective resource.

18 **IV. ADDITIONAL CHANGES INCLUDED IN THE APPLICATION**

19 **Q. OTHER THAN THE ADDITION OF WYGEN III TO RATE BASE, ARE**  
20 **THERE ANY OTHER CHANGES TO THE APPLICATION?**

21 A. Yes. Black Hills Power is proposing changes to the Conditional Energy Cost  
22 Adjustment (“CECA”) and to the Steam Plant Fuel Cost Adjustment (“SPFCA”).

1 **Q. PLEASE PROVIDE SOME DETAIL REGARDING THE CHANGES TO**  
2 **THE CECA AND SPFCA.**

3 A. As set forth in detail in the testimony of Christopher J. Kilpatrick, the Company is  
4 proposing that the CECA will have a new base cost amount determined by total  
5 adjusted expense divided by total system energy sales. In addition, a change in the  
6 resource stacking methodology for generation resources is proposed whereby  
7 renewable resources will serve load first and be paid for first by customers. In the  
8 current stacking methodology, the lowest cost resource always went to serve base  
9 load first. Another change to the CECA will assign specific blocks of energy in the  
10 resource stack to ensure it is paid by customers first, possibly ahead of the lowest  
11 cost resource. This will ensure that blocks of energy purchased specifically to  
12 serve Black Hills Power's retail load obligations, such as peak load during the  
13 Sturgis Motorcycle Rally, will be assigned to the source of the cost. Finally, a  
14 clarification has been added to the SPFCA and CECA to ensure that costs related  
15 to governmental impositions on generation plants, such as a carbon tax, can be  
16 recovered through the SPFCA and CECA as those costs relate to fuel.

17 **Q. ARE THERE ANY OTHER MATERIAL CHANGES BEING PROPOSED**  
18 **IN THIS APPLICATION?**

19 A. No. Aside from the addition of Wygen III to rate base and the changes highlighted  
20 above, there are no material changes proposed in this Application.

1 **V. RATE INCREASE**

2 **Q. WHAT IS THE REQUESTED REVENUE INCREASE?**

3 A. Black Hills Power is seeking to increase its electric base rates in South Dakota to  
4 recover approximately \$32,000,000 million annually in additional electric  
5 revenues. Black Hills Power is requesting that the increase become effective upon  
6 the in service date for Wygen III which is expected to be April 1, 2010, but no  
7 earlier than March 1, 2010.

8 **Q. THIS IS ONLY THE SECOND INCREASE IN BASE ELECTRIC RATES**  
9 **REQUESTED BY THE COMPANY IN 15 YEARS. RATHER THAN**  
10 **ASKING FOR THE RATE INCREASE SUPPORTED BY THIS**  
11 **APPLICATION, WHY DIDN'T THE COMPANY ASK FOR MORE**  
12 **FREQUENT, SMALLER RATE INCREASES?**

13 A. There are two reasons. First, for much of those 15 years the Company was subject  
14 to rate freezes. Second, and more importantly, the traditional regulatory model  
15 only allows prices to increase when costs have been demonstrated to have  
16 increased. The rate making model simply states:

17 
$$\text{Revenues} = \text{Expenses} + \text{Return on Investment.}$$

18 During much of the last 15 years Black Hills Power has been able to meet its  
19 obligation to customers for providing safe and reliable electric service by  
20 balancing expenses and new investment in plant with sales growth. With the  
21 required addition of Wygen III and other changes to our business, we are no  
22 longer able to maintain that balance without this rate increase.

1 **Q. IS IT COMMON FOR UTILITIES TO PERIODICALLY NEED LARGER**  
2 **RATE INCREASES IN ORDER TO RECOVER THE COSTS OF**  
3 **MEETING THEIR UTILITY SERVICE OBLIGATIONS?**

4 A. Yes, and quite often a new base load power plant or purchased power agreement is  
5 the primary reason for the increased revenue requirement. For Black Hills Power,  
6 a large share of the requested rate increase is for ownership and operating costs  
7 related to Wygen III.

8 **Q. ARE YOU CONCERNED THAT CUSTOMERS MAY HAVE AN**  
9 **UNFAVORABLE REACTION TO THE PERCENTAGE INCREASE**  
10 **REQUESTED?**

11 A. Yes, we are always concerned about our customers' satisfaction with the services  
12 we provide. We pride ourselves on being the kind of company people like to do  
13 business with. The rate increase is necessary for the company to recover its costs  
14 incurred in meeting its electric service obligations.

15 Electricity is an amazing product. It is the core ingredient in achieving an ever  
16 increasing quality of life for many of our customers. It provides essential services  
17 like heating and cooling, cooking, refrigeration and lighting. The benefit of these  
18 electric services is often taken for granted when contrasted with digital cellular  
19 phones, high-definition cable television and high-speed internet connections. Our  
20 typical residential customer gets the electricity for all this and more for just \$2 to  
21 \$3 per day. Even with the proposed rate increase, in real terms our customers will  
22 be paying about what they did in 1995 when we finished the last utility

1 construction cycle. Our employees come to work every day with the mission of  
2 “Improving life with energy.” Commission approval of the requested rate increase  
3 is important to support Black Hills Power’s efforts to meet our obligation to  
4 customers and their expectations of us.

5 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

6 A. Yes, it does.