

Stipulation and Agreement Testimony  
Christopher J. Kilpatrick  
Exhibit 43

Before the Public Service Commission  
of the State of Wyoming

Joint Application of  
Cheyenne Light, Fuel and Power Company and Black Hills Power, Inc.  
For a Certificate of Public Convenience  
and Necessity for a Gas-Fired  
Electric Generating Power Plant and  
Related Facilities

Docket No. 20003-113-EA-11

Docket No. 20002-81-EA-11

Record No. 13007

July 18, 2012

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1 **I. INTRODUCTION AND QUALIFICATIONS**

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

3 A. My name is Christopher J. Kilpatrick, 625 Ninth Street, P.O. Box 1400, Rapid  
4 City, South Dakota 57701.

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

6 A. I am currently employed as Director of Resource Planning and Rates for Black  
7 Hills Corporation (“BHC”). Among other assignments, I am responsible for  
8 resource planning, electric rates, and regulatory matters for Cheyenne Light, Fuel  
9 and Power Company (“Cheyenne Light”) and Black Hills Power, Inc. (“Black  
10 Hills Power”). (Cheyenne Light and Black Hills Power may be collectively  
11 referred to as “Applicants”).

12 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND BUSINESS**  
13 **BACKGROUND.**

14 A. I am a graduate of Mount Marty College in Yankton, South Dakota, with a  
15 Bachelor of Arts Degree in Accounting. I am a Certified Public Accountant  
16 (“CPA”), a member of the American Institute of Certified Public Accountants and  
17 the South Dakota CPA Society. My work experience includes working for two  
18 public accounting firms from 1994 through 1999. The first was Wohlenberg,  
19 Ritzman, and Co., located in Yankton, South Dakota, and the second was Ketel  
20 Thorstenson, LLP, located in Rapid City, South Dakota. I began my career with  
21 BHC in January 2000 in the internal audit department. In August of 2003, I  
22 became the controller of Black Hills FiberCom until February 2005 when I  
23 accepted the position of Director of Accounting – Retail Operations. In August

1 2008, I was offered the position of Director of Rates. In 2011, I accepted an  
2 expanded role and I am now responsible for both electric rates and resource  
3 planning.

4 **Q. BRIEFLY DEFINE YOUR DUTIES AND RESPONSIBILITIES.**

5 A. I am responsible for the resource planning and electric rates for BHC’s electric  
6 utility subsidiaries. I review financial information and verify that the financial  
7 reporting for each subsidiary is accurate and in accordance with the rules and  
8 regulations of the Federal Energy Regulatory Commission (“FERC”).  
9 Additionally, I am responsible for integrated resource planning for all the retail  
10 electric utility subsidiaries of BHC, which include Black Hills Power, Black  
11 Hills/Colorado Electric Utility Company, LP (“Black Hills Energy”) and Cheyenne  
12 Light.

13 **Q. DID YOU FILE DIRECT TESTIMONY AND EXHIBITS IN THIS DOCKET**  
14 **ON BEHALF OF CHEYENNE LIGHT AND BLACK HILLS POWER?**

15 A. No, but I was part of the team that worked on the settlement of this matter, and  
16 therefore I am filing testimony in support of the settlement.

17 **II. PURPOSE OF SETTLEMENT AGREEMENT TESTIMONY**

18 **Q. WHAT IS THE PURPOSE OF YOUR SETTLEMENT AGREEMENT**  
19 **TESTIMONY?**

20 A. The purpose of my testimony is to explain and support the Stipulation and  
21 Agreement (“Settlement Agreement”) reached between Cheyenne Light and  
22 Black Hills Power and the Office of Consumer Advocate (“OCA”), (collectively  
23 referred to as the “Parties”) that was filed with the Commission on July 13, 2012.

1 In particular, my testimony provides support and information regarding the  
2 proposed Cheyenne Prairie Generating Station (“CPGS”) Rider tariff.

3 **III. PROPOSED CPGS RIDER**

4 **Q. PLEASE DESCRIBE THE INTENT OF THE PROPOSED CPGS RIDER.**

5 A. The proposed CPGS Rider quarterly filings are intended to result in a graduated  
6 increase in customer rates over the approximate two year construction period of  
7 the CPGS and is intended to eliminate the amount of allowance for funds used  
8 during construction (“AFUDC”) ultimately included in rate base for determining  
9 the Applicants’ revenue requirements in Wyoming.

10 **Q. PLEASE EXPLAIN THE GENERAL PROCESS TO DETERMINE THE**  
11 **PROPOSED CPGS RIDER.**

12 A. Attachment 1 to the Settlement Agreement is an initial draft of the proposed  
13 CPGS Rider tariff and sets forth the general process used to determine the  
14 quarterly revenue requirement and tariff rate that will be paid by each customer  
15 class. Generally, there are three steps involved in determining the CPGS Rider.  
16 The first step is to determine the quarterly revenue requirement. The second step  
17 is to assign the quarterly revenue requirement to customer classes based on a  
18 demand allocator. The third and final step is to determine the quarterly CPGS  
19 Rider rate on a per kilowatt hour basis.

20 **Q. PLEASE DESCRIBE IN DETAIL THE FIRST STEP IN THE PROCESS**  
21 **TO DETERMINE THE PROPOSED CPGS RIDER.**

22 A. As noted above, the first step is to determine the quarterly revenue requirement.  
23 In summary, this is determined by establishing, on a monthly basis, the rate of

1 return on expected construction costs, including the effect of the respective  
2 federal and franchise taxes. The monthly revenue requirements are then summed  
3 for the quarterly revenue requirement. The determination of the monthly revenue  
4 requirements for Cheyenne Light is illustrated on Page 1 of Attachment 2 to the  
5 Settlement Agreement, and is computed as follows:

6 • The monthly revenue requirement is determined by starting with the  
7 Forecasted Monthly Cumulative Construction Costs (line 2) as of the end  
8 of the month. As provided in the illustrative example, the December 2012  
9 Forecasted Monthly Cumulative Construction Costs are \$16,085,346,  
10 which is the sum of November 2012 construction costs of \$14,367,070  
11 and December 2012 construction costs of \$1,718,276.

12 • The Forecasted Monthly Cumulative Construction Costs (line 2) are  
13 multiplied by the monthly CPGS Rider Rate of Return (line 3) to  
14 determine the Monthly Return on Costs (line 4).

15 The CPGS Rider Rate of Return (line 3) is updated each quarter. This rate  
16 of return is based on the capital structure and return on equity that were  
17 approved as part of the last approved rate cases. For illustrative purposes,  
18 the Cheyenne Light CPGS Rider Rate of Return is calculated as follows:

19  $(54\% \times 9.6\%) + (46\% \times 2\%) = 6.10\%$ . The 2% debt cost included in this  
20 calculation is for illustrative purposes only and represents Black Hills  
21 Corporation's rate for its short term revolving credit agreement dated  
22 February 1, 2012. This debt cost of 2% will be adjusted in each quarterly  
23 filing to reflect the forecasted Libor-based interest rate plus 25 basis points

1 to account for BHC's effective borrowing costs. (Libor, also known as the  
2 London Interbank Offered Rate, is an average interest rate index  
3 commonly used in the United States).

- 4 • Next, the Equity Return Tax Gross-Up (line 8) is determined by  
5 multiplying the Forecasted Monthly Cumulative Construction Costs (line  
6 3) by the monthly CPGS Rider Equity Return (line 5), which is the return  
7 on equity approved in the last approved rate cases. The Federal Tax  
8 Gross-up Factor (line 7) of 1.53846, or  $1/(1-.35)$ , is then used to determine  
9 the Equity Return Tax Gross Up (line 8). The CPGS Rider Return on  
10 Equity (line 6) is subtracted from Equity Return Tax Gross Up (line 8) to  
11 isolate the federal tax effect. This amount is then added to CPGS Return  
12 on Costs (line 4) to the Monthly Revenue Requirement (line 9).
- 13 • An additional 1% Franchise Tax (line 10) is added to the Monthly  
14 Revenue Requirement (line 9) to determine the Monthly CPGS Revenue  
15 Requirement (line 11). The 1% franchise tax is required since these  
16 additional revenues will be subject to city franchise taxes.

17 **Q. PLEASE DESCRIBE THE FINAL COMPUTATIONS FOR THE SECOND**  
18 **AND THIRD STEPS OF THE PROCESS.**

19 A. The second step in establishing the CPGS Rider is to assign the quarterly revenue  
20 requirement to customer classes, since this is a generating station asset and will be  
21 allocated in a similar manner in the next rate cases. This is accomplished through  
22 the use of the demand allocator that was used in the last Commission approved  
23 Wyoming rate cases of Cheyenne Light and Black Hills Power.

1 The third and final step is as follows: the allocated quarterly revenue requirement  
2 for each customer class, net of over or under recovery recorded to the Balancing  
3 Account, is divided by the forecasted kWh sales for each customer class to  
4 determine the quarterly CPGS Rider rate.

5 The calculations for the second and third steps are illustrated for Cheyenne Light  
6 on lines 14 to 24 on page 1 of Attachment 2 to the Settlement Agreement.

7 **Q. PLEASE DESCRIBE THE BALANCING ACCOUNT.**

8 A. A Balancing Account will be used to track under or over recovery of the revenue  
9 requirement. The amounts recorded to this account are the difference between 1)  
10 the actual quarterly CPGS Rider revenue requirement by customer class and 2)  
11 the actual amount recovered by customer class in the respective quarter through  
12 the CPGS Rider.

13 The actual quarterly CPGS Rider revenue requirement by customer class will be  
14 based on actual construction costs incurred during the quarter and the actual  
15 Libor-based effective interest rate for BHC's borrowings under its revolving  
16 credit agreement dated February 1, 2012.

17 The actual amount recovered by customer class through the CPGS Rider is the  
18 sum of the kWh energy sales for each month by customer class in the respective  
19 quarter multiplied by the effective applicable customer class' CPGS Rider. This  
20 may need to be adjusted at times for cycle billing prorations. Since the Company  
21 will not close the quarter month end books before the subsequent quarterly filing  
22 will be due to be filed with the Commission, the Balancing Account will be



1 included in the revenue requirement for the next quarter's filing, or on a one  
2 quarter delayed basis.

3 **Q. WILL INTEREST BE APPLIED TO THIS BALANCING ACCOUNT?**

4 A. Yes. Interest will accrue monthly on each end of month deferred balance by  
5 customer class only when the balance is negative or in those situations where the  
6 company has over collected and money is owed to the customer. Interest will not  
7 be applied when there is a positive balance or when the company has under  
8 collected and money is owed the company. The prior balancing account amount  
9 plus interest, when applicable, then becomes the beginning balancing account  
10 amount for the next month. The monthly interest rate shall be at a rate that is  
11  $1/12^{\text{th}}$  of the actual CPGS Rate of Return for the period.

12 **Q. HOW DID THE COMPANY DETERMINE THAT THE CPGS RIDER**  
13 **WAS BENEFICIAL TO CUSTOMERS?**

14 A. The customer costs under the proposed CPGS Rider were compared to the net  
15 present values of future customer costs on a traditional AFUDC basis, as shown  
16 on Attachment 3 to the Settlement Agreement. The result of the analysis set forth  
17 in Attachment 3 demonstrates that there is a significant savings to customers by  
18 using the proposed CPGS Rider and excluding AFUDC from rate base. The  
19 primary reason this net present value analysis results in significant savings to  
20 customers is due to historically low short term debt interest rates. Typically, this  
21 type of net present value analysis would not result in such significant savings to  
22 our customers but it does in this situation because of the spread between short  
23 term and long term debt costs.

1 **Q. PLEASE PROVIDE ADDITIONAL ANALYSIS REGARDING THE**  
2 **AFUDC RATE AS COMPARED TO THE CPGS RATE OF RETURN.**

3 A. A comparison of the historical AFUDC rate to the CPGS Rate of Return, for both  
4 Black Hills Power and Cheyenne Light, is as follows:

	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>Black Hills Power:</b>			
AFUDC Rate	7.34%	8.20%	8.66%
CPGS Rate of Return			6.42%
<b>Cheyenne Light:</b>			
AFUDC Rate	8.79%	8.90%	8.16%
CPGS Rate of Return			6.10%

5 **Q. WHY ARE THESE RATES SO DIFFERENT?**

6 A. The AFUDC rate, calculated in accordance with Federal Energy Regulatory  
7 Commission Rules, takes into account long-term debt costs. Whereas, the CPGS  
8 Rate of Return only considers short term debt costs. The difference in these rates  
9 is the main factor in the net present value analysis that shows customers benefit  
10 under the CPGS Rider.

11 **Q. PLEASE PROVIDE FURTHER INFORMATION REGARDING THE NET**  
12 **PRESENT VALUE ANALYSIS CALCULATIONS.**

13 A. The AFUDC revenue requirements provided on line 10 of Attachment 3 pages 2  
14 and 4 were calculated consistently with the revenue requirement provided in the  
15 original Cheyenne Prairie Generating Station CPCN application, including debt  
16 and equity structure as well as depreciation rates. In addition, the estimated 2012  
17 AFUDC rates for Applicants was used to project the amount of AFUDC. The

1 utility discount rate equal to the authorized rate of return from the last rate cases  
2 was then used to determine the net present value of this revenue requirement.  
3 This result is then compared to the total CPGS Rider revenue requirement as  
4 calculated on pages 1 and 3 of Attachment 3 and described in my testimony  
5 above, resulting in the savings to customers by avoiding AFUDC in base rates.

6 **Q. DOES THIS CPGS RIDER ELIMINATE THE NEED FOR A GENERAL**  
7 **RATE CASE IN THE FUTURE?**

8 A. No. This CPGS Rider is terminated once the facility is placed into service. We  
9 anticipate filing rate applications approximately 10 months prior to the in-service  
10 date for the new generation to account for the operating costs and to include it in  
11 rate base.

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

13 A. Yes.

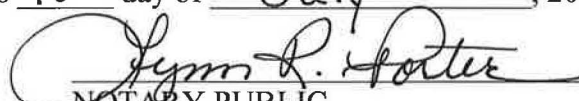
STATE OF SOUTH DAKOTA )

COUNTY OF Pennington ) : SS

I, Christopher J. Kilpatrick, being first duly sworn on oath, depose and state that I am the witness identified in the foregoing testimony in support of settlement and I am familiar with its contents, and that the facts set forth are true to the best of my knowledge, information and belief.

  
CHRISTOPHER J. KILPATRICK

Subscribed and sworn to me this 18<sup>th</sup> day of July, 2012

  
NOTARY PUBLIC



My Commission Expires: 12-1-14