

EXHIBIT 11
Supplemental Testimony and Exhibits
KYLE WHITE

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 15-036

June 24, 2016

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1 **I. INTRODUCTION AND QUALIFICATIONS**

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

3 A. My name is Kyle D. White. My business address is 625 9th Street, Rapid City, South
4 Dakota 57701.

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

6 A. I am employed by Black Hills Service Company (“Service Company”), a wholly-owned
7 subsidiary of Black Hills Corporation (“Black Hills”), as Vice President of Regulatory
8 Affairs. My areas of responsibility include regulatory affairs for the regulated utility
9 subsidiaries of Black Hills.

10 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING?**

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

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

13 A. I graduated with honors from the University of South Dakota in May of 1982 with a
14 Bachelor of Science degree in Business Administration, majoring in management. In
15 August of 1989, I graduated with a Master’s degree in Business Administration, also from
16 the University of South Dakota. I have been employed by Black Hills in rate, resource
17 planning, and marketing related work since July of 1982 and have been in my present
18 position since August of 2012. During my career, I have been actively involved in
19 preparing applications, testifying and receiving regulatory approvals related to numerous
20 rate cases, changes in rules or regulations, and requests for certificates of public
21 convenience and necessity for both power generation and transmission. I have also led
22 successful efforts to achieve regulatory approvals for utility acquisitions in six states. In

1 addition to on-the-job training, I have attended numerous seminars, trade association
2 meetings, and regulatory conferences covering a variety of utility-related subjects.

3 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?**

4 A. Yes, I have.

5 **II. PURPOSE OF MY SUPPLEMENTAL TESTIMONY**

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

7 A. My supplemental testimony supports the Company's Application by explaining (i) the
8 value of gas price forecasts, and (ii) the potential effective cost of gas under the COSG
9 Program, particularly given the very real likelihood of higher spot market natural gas prices
10 in the future.

11 **III. SUPPLEMENTAL TESTIMONY**

12 **Q. HAVE YOU PARTICIPATED IN RECENT MEETINGS AND DISCUSSIONS**
13 **WITH INTERVENORS IN OTHER COSG PROGRAM PROCEEDINGS**
14 **CONCERNING THE COSG PROGRAM?**

15 A. Yes, I have. I have also reviewed intervenors' testimony in pending proceedings
16 concerning the COSG Program in other states.

17 **Q. ARE THERE PARTICULAR CONCERNS FROM THOSE MEETINGS,**
18 **DISCUSSIONS AND TESTIMONY THAT YOU BELIEVE WARRANT FURTHER**
19 **EXPLANATION IN THIS MATTER? IF SO, PLEASE EXPLAIN.**

20 A. Yes. Intervenors in some proceedings in other states have raised concerns about two
21 related issues that I believe warrant further explanation. Specifically, certain intervenors
22 are concerned with the uncertainty concerning future gas prices, and they question the
23 usefulness of long-term gas price forecasts.

1 **Q. HOW DO YOU ADDRESS INTERVENOR CRITIQUES ABOUT RELYING ON**
2 **GAS PRICE FORECASTS?**

3 A. The intervenors in other states do not fairly represent the value of forecasts or how they
4 would be used in the COSG Program. The intervenors point out that forecasted prices do
5 not match actual prices. This is an unremarkable observation. As the Commission is
6 clearly aware, forecasts always vary to some extent from actual performance. That fact
7 does not undermine the importance of using forecasts in utility decision-making.
8 According to the intervenors' logic, one would never use long-term forecasts to make any
9 resource decisions because actual performance will vary from forecasted performance.
10 That view is clearly shortsighted and ignores the usefulness of forecasts. Long-term
11 forecasts are routinely relied on throughout the utility industry to make long-term
12 decisions. That is at least in part why they are generated in the first place. That said, care
13 should be taken to use current industry-accepted forecasts and market fundamentals should
14 be considered in connection with price forecasts. That is precisely what the COSG
15 Program requires in Phase II. As noted throughout the Company's direct testimony, the
16 COSG Agreement requires that a proposed acquisition would be assessed against the *then-*
17 *current* Long-Term Market Price Forecast for Gas.¹ This forecast will be a composite of
18 industry-accepted long-term price forecasts, which will reflect the then-existing long-term
19 market supply/demand balance fundamentals. In this Phase I proceeding, the potential
20 value of the COSG Program can also be assessed by looking at current market conditions
21 in light of historical gas costs.

¹ COSG Agreement, Exhibit 3.1, Exhibit A.

1 **Q. BASED ON CURRENT MARKET CONDITIONS, WHAT DOES THE COMPANY**
2 **ANTICIPATE A PHASE II APPLICATION WILL MEAN IN TERMS OF THE**
3 **FUTURE COST OF GAS TO GENERATE POWER FOR CUSTOMERS?**

4 A. With the current financial stress being experienced by the oil and gas industry, Black Hills
5 believes that it is possible to acquire gas production and related proven reserves at short
6 and long-run costs that would be attractive to the Company's customers. If the
7 Commission approves this Phase I application, Black Hills intends, based on general
8 market conditions in the recent past, to pursue an acquisition to initiate the COSG Program
9 that meets the approved criteria and that has an expected short and long-run total cost of
10 service price of [REDACTED] per dekatherm or better (i.e. or less). Considering relevant historical
11 prices for natural gas, this should be attractive and beneficial to customers. At this target
12 price, COSGCO will be seeking to acquire assets from non-affiliated producers.

13 **Q. WHAT EVIDENCE DOES THE COMPANY HAVE THAT THIS PRICE WOULD**
14 **BE ATTRACTIVE AND BENEFICIAL TO CUSTOMERS?**

15 A. Exhibit 11.1 provides the Henry Hub Natural Gas Spot Price in dollars per Million Btu (1
16 Million Btu equals 1 dekatherm), by month, for the years 1997 through 2015. This exhibit
17 is taken from the Direct Testimony of Iowa Office of Consumer Advocate witness Mr.
18 Blake J. Kruger, Schedule A, in the Iowa cost of service gas docket (Docket Nos. SPU-
19 2015-0028, WRU-2015-0032-0225, and TF-2015-0327). Mr. Kruger prepared this exhibit
20 to demonstrate that the average price at the Henry Hub from 2009 through 2015 was \$3.69
21 per dekatherm. It has now been highlighted by me to show all months beginning in 2000
22 where the spot market price was \$3.00 per dekatherm or greater. Mr. Loomis' Exhibit 6.1,

1 and Figure 1 from his direct testimony, also present similar data, from the same trading
2 hub, in a different format.²

3 **Q. WHAT DO YOU OBSERVE FROM THIS EXHIBIT?**

4 A. In 83% of the months since January 2000, the average Henry Hub price was *greater* than
5 \$3.00 per dekatherm. In 90% of the months during that same 16-year period, the average
6 Henry Hub price was greater than \$2.75 per dekatherm. If instead we just consider average
7 monthly prices at Henry Hub that were at least roughly double the current low spot market
8 prices, we can see that 60% of the months are \$4.00 per dekatherm or more. In fact, the
9 average price in those months was \$6.23 per dekatherm, [REDACTED]

10 [REDACTED].

11 **Q. FROM THESE OBSERVATIONS OF THE DATA, WHAT ARE YOUR**
12 **CONCLUSIONS REGARDING THE PROBABILITY OF A SUCCESSFUL COST**
13 **OF SERVICE GAS PROGRAM FOR SOUTH DAKOTA CUSTOMERS?**

14 A. If COSGCO can successfully acquire natural gas assets with a cost of service price for
15 customers that we believe is likely in the near term, the Commission, and the customers
16 whose interests it represents, can feel confident that the COSG Program will likely realize
17 the two goals set forth in the application: (1) decrease customers' exposure to volatile
18 market prices over the long-term; and (2) save customers money over the life of the
19 reserves compared to spot market purchases. Approval is needed in this Phase I proceeding
20 to take the next step toward implementing the COSG Program by finding at least one
21 property that satisfies the approved Acquisition Criteria and then bringing it to the
22 Commission for review and approval.

² Loomis Direct Testimony, Exhibit 6, Page 5.

1 **Q. BASED ON CURRENT MARKET CONDITIONS, HOW LONG DOES THE**
2 **COMPANY EXPECT THIS OPPORTUNITY WILL BE AVAILABLE?**

3 A. It is challenging to know when the spot market price for natural gas will rebound.
4 However, the financial shake-up in the oil and gas industry that is creating this opportunity
5 may only last for a year or two. This is because the weakest producers will exit, and the
6 remaining businesses will have made the changes necessary to endure this low-price
7 environment until the next run-up in natural gas prices. It is a buyer's market today, and
8 buyers will need to act quickly when acquisition opportunities are presented.

9 **Q. WHAT IS THE PLAN FOR IMPLEMENTING THE COSG PROGRAM IF**
10 **APPROVAL IS OBTAINED IN THIS PHASE I PROCEEDING?**

11 A. The following provides what the Company expects to be the plan basics:

- 12 1. Obtain regulatory approval in this Phase I proceeding in South Dakota and
13 other states.
- 14 2. With the Commission's input and approval, identify and engage independent
15 Hydrocarbon and Accounting Monitors to support the Commission and
16 stakeholders as the COSG Program is implemented.
- 17 3. Identify available reserves that would satisfy the Acquisition Criteria
18 approved by the Commission in this Phase I proceeding. To do so, the
19 Company would reach out to investment banks, issue formal RFPs, and also
20 engage a petroleum engineering firm to identify assets for potential
21 unsolicited purchase offers.
- 22 4. Negotiate to acquire identified reserve opportunities that can be presented to
23 the Commission for approval. Subject to adequate protections for
24 confidentiality, provide due diligence information about potential
25 acquisitions to the Hydrocarbon Monitor.
- 26 5. Execute an acquisition agreement with closing made contingent on state
27 commission approvals.
- 28 6. Submit proposed property and associated Drilling Plan to Hydrocarbon
29 Monitor for review; if it is determined it meets the criteria, submit proposed
30 property and associated Drilling Plan to regulatory commissions for
31 review/approval in accordance with process approved in this Phase I
32 proceeding.
- 33 7. If state commission approval is received, close on asset purchase by
34 COSGCO.

1 **Q. IS THE COMPANY PREPARED TO CONDUCT A SEARCH FOR LOW-COST**
2 **PRODUCTION AND RELATED PROVEN RESERVES?**

3 A. Yes. However, approval of the framework of the COSG Program in this Phase I proceeding
4 is required before Black Hills can know the specifications for the asset for which it should
5 be shopping.

6 **Q. WHAT HAVE YOU CONCLUDED FROM YOUR REVIEW OF THE RECORD?**

7 A. Although the business proposal presented with the Application is complex, the question
8 that needs to be answered now is actually quite simple: “Is there a place for [REDACTED] per
9 dekatherm natural gas in the natural gas supply portfolio used to generate power for the
10 Company’s South Dakota customers?” Based upon my review of the record in this docket
11 in conjunction with current and forecasted market conditions, the only reasonable answer
12 is: “Yes.”

13 **Q. WHAT CAUSED YOU TO REACH THIS CONCLUSION?**

14 A. A number of facts presented in this record, as well as what I see and understand is going
15 on in the market, demonstrates to me that now is an opportune time to acquire producing
16 natural gas reserves, at low prices, for the long-term benefit of South Dakota customers.
17 Foremost among the factors I have considered was my review of Iowa OCA witness Mr.
18 Kruger’s exhibit showing the last two decades of historical monthly natural gas prices at
19 the Henry Hub - in particular the high percentage of the time the monthly price exceeded
20 \$3.00 per dekatherm. I also took note that many producers are now selling natural gas
21 below the break-even cost of production. While this may be possible to do for the short-
22 term, it is not financially sustainable. As national production and storage volumes decline
23 and consumption increases, significant new replacement production is possible only when

1 natural gas prices are at levels that will support profitable investments in additional natural
2 gas production. With Black Hills' recommendation that a minimum of 35 percent of the
3 South Dakota natural gas supply portfolio include a long-term physical hedge through the
4 COSG Program, prices can be "locked in" in the range of [REDACTED] per dekatherm, and the
5 Company will continue to be able to acquire the remaining 65 percent of its natural gas as
6 it currently does. Under this approach, customers would not be as exposed as they are
7 today to the risk of significant price volatility or long-term price increases.

8 **Q. WHEN CONSIDERING THESE FACTS AND YOUR RESULTING**
9 **CONCLUSIONS, WHAT ACTIONS DO YOU REQUEST THAT THE**
10 **COMMISSION TAKE?**

11 A. The Company requests the Commission's thoughtful approval of the Company's
12 Application. This will allow BHUH to proceed to identify appropriate natural gas assets
13 that are both real and quantifiable for a subsequent application. Prior to closing on any
14 cost of service gas natural gas asset purchase and any impact to customers' rates under the
15 proposed tariff, Black Hills must prove to the Commission's satisfaction in a Phase II
16 proceeding that there is a reasonable expectation the customer benefits that are desired
17 from a long-term physical hedge through the COSG Program will be achieved.

18 **IV. CONCLUSION**

19 **Q. DOES THIS CONCLUDE YOUR SUPPLEMENTAL TESTIMONY?**

20 A. Yes.