

Exhibit 3
Direct Testimony
NICHOLAS J. GARDNER

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

In the Matter of the Application of
Black Hills Power, Inc. d/b/a Black Hills Energy
For Approval to Implement a Renewable Ready Service Tariff

Docket No. EL18-_____

December 17, 2018

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1 **I. INTRODUCTION AND QUALIFICATIONS**

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

3 A. My name is Nicholas J. Gardner, and my business address is 409 Deadwood Avenue,
4 Rapid City, South Dakota, 57702.

5 **Q. PLEASE DESCRIBE YOUR EMPLOYMENT.**

6 A. I am currently employed with Black Hills Power as Vice President of Operations. I am
7 responsible for the operational and financial performance of utility operations for Black
8 Hills Power. I directly oversee operating functions, including electric distribution
9 network operations, maintenance, construction, local customer service, customer relations
10 and community relations. I am directly involved in the oversight of certain functions for
11 Black Hills Power that are centralized within Black Hills Corporation, Black Hills
12 Power's parent company. Examples of such centralized functions include regulatory and
13 legislative affairs, human resources, IT, and customer service call center functions.

14 **Q. PLEASE DESCRIBE YOUR EDUCATION AND BUSINESS BACKGROUND.**

15 A. I graduated from the University of Iowa with a Bachelor of Science degree in Mechanical
16 Engineering. I have 18 years of experience working for a regulated utility. Prior to my
17 current position, I worked in various roles within Black Hills Energy and its predecessors
18 in field design engineering and operations. I started as an intern while attending college
19 and upon graduating in 2003, I was hired as an engineer for our Iowa gas business unit
20 where I partnered directly with operations in planning, designing, and implementing
21 projects related to system growth as well as replacement of existing facilities. I was
22 promoted to a supervisory position in 2006 and to a management position in 2010. Both
23 roles were with the Iowa gas operation, where I led teams directly serving natural gas

1 customers, performing maintenance on facilities, and prioritizing and planning capital
2 projects for both growth and integrity investments. In 2013, I was promoted to a director
3 role in Black Hills Energy's Nebraska gas operation. In 2016, I was promoted to General
4 Manager in Black Hills Energy's Kansas gas operation. I have held my current position as
5 the Vice President of Operations for Black Hills Power since July 31, 2017.

6 **II. PURPOSE OF TESTIMONY**

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

8 A. The purpose of my testimony is to provide an overview of Black Hills Power's customer
9 base, service territory, and history. In addition, my testimony provides an overview of the
10 political and economic environment that supports Black Hills Power's proposed
11 Renewable Ready Service Tariff, as well as customer demand for renewable energy in
12 Black Hills Power's South Dakota service area. I will also introduce the Black Hills
13 Power witnesses providing testimony in support of this Application. Finally, I will
14 discuss the positive customer impact of the Black Hills Power proposed Renewable
15 Ready Service Tariff.

16 **III. INTRODUCTION OF WITNESSES**

17 **Q. PLEASE INTRODUCE THE BLACK HILLS POWER WITNESSES PROVIDING**
18 **PRE-FILED DIRECT TESTIMONY IN SUPPORT OF THIS APPLICATION AND**
19 **BRIEFLY SUMMARIZE THEIR TESTIMONY.**

20 A. The following witnesses who, in addition to myself, are providing pre-filed direct
21 testimony in support of the Renewable Ready Service Tariff Application, which I will
22 summarize:

1 **Kyle White – Vice President Regulatory Strategy.** Kyle White discusses
2 changing customer expectations and the desire for renewable energy nationally as well as
3 in Black Hills Power’s service area. He discusses the need to accommodate customers
4 requesting renewable energy who seek to fulfill corporate directives and strategies. Mr.
5 White also discusses the prudence of providing renewable energy to counteract the threat
6 of large customers implementing behind-the-meter generation and discontinuing some or
7 all electric service provided by Black Hills Power. Mr. White also provides a description
8 of customer protections incorporated into the proposed tariff, and the benefits Black Hills
9 Power customers will receive from the Renewable Ready Service Tariff. Finally, Mr.
10 White discusses the timing and need for utility-owned renewable generation, including
11 tax benefits.

12 **Jason Keil - Manager Regulatory Services.** Jason Keil discusses the intent of
13 the Renewable Ready Service Tariff, which is to provide customers with an option to
14 purchase renewable energy with minimal impact to non-subscribing customers. He also
15 discusses the basic tariff structure, including the terms and conditions of customer
16 standard service schedules, and the rules and regulations that will govern service under
17 the proposed Renewable Ready Service Tariff. Mr. Keil also discusses the impact to
18 customer bills, as well as changes to the Fuel and Purchase Power Adjustment portion of
19 Black Hills Power's Tariff related to the proposed Renewable Ready Service Tariff.

20 **Bret Jones - Regional Manager of Business Development.** Bret Jones provides
21 testimony outlining the process undertaken by Black Hills Power to identify and analyze
22 the customer desire for renewable energy in the Black Hills Power service territory. Mr.
23 Jones describes how Black Hills Power developed the Renewable Ready Service Tariff

1 and how eligible customers were identified. Finally, Mr. Jones outlines the contacts his
2 team has had with customers and their indication of interest in the program.

3 **Jason Hartman - Director Generation Project Engineering.** Jason Hartman
4 provides testimony related to the Corriedale Project, which will be the source of the
5 renewable energy for customers served under the Renewable Ready Service Tariff. Mr.
6 Hartman adopts and incorporates his detailed testimony filed with the Wyoming
7 certificate of public convenience and necessity provided in this docket as Exhibit 8.

8 **IV. BLACK HILLS POWER OVERVIEW**

9 **Q. PLEASE BRIEFLY DESCRIBE BLACK HILLS POWER'S HISTORY.**

10 A. Black Hills Power and its predecessor companies have been providing electric power to
11 the Black Hills region since 1883 when Pilcher Electric Light Co. was formed by early
12 pioneers in Deadwood. Black Hills Power and Light was formed in 1941 through the
13 purchase and combination of several existing electric utilities throughout the Black Hills.
14 Headquartered in Rapid City, Black Hills Power is now a wholly owned subsidiary of Black
15 Hills Corporation.

16 **Q. PLEASE PROVIDE AN OVERVIEW OF BLACK HILLS POWER'S BUSINESS**
17 **OPERATIONS.**

18 A. Black Hills Power is a regulated electric utility serving approximately 72,000 customers
19 in South Dakota, Wyoming and Montana. Black Hills Power's service territory covers
20 approximately 9,300 square miles. Currently, Black Hills Power has approximately 225
21 employees, and is further supported with centralized services within Black Hills
22 Corporation.

23

1 **Q. PLEASE DESCRIBE BLACK HILLS POWER’S ELECTRIC OPERATIONS.**

2 A. Black Hills Power is primarily engaged in the generation, transmission, distribution, and
3 delivery of electricity in its service territory. Black Hills Power provides electric service
4 via a system of transmission lines, distribution lines, substations, and other infrastructure
5 strategically placed across its service territory. In addition to 2,506 line-miles of owned
6 distribution and 1,264 line-miles of owned transmission lines, Black Hills Power also
7 jointly owns 44 miles of high voltage transmission lines with Basin Electric Power
8 Cooperative and Powder River Energy Corporation. In 2017, Black Hills Power
9 delivered over 1,700,000 MWhs of electricity to its retail customers.

10 **Q. HOW HAS BLACK HILLS POWER DETERMINED THERE IS A NEED FOR**
11 **RENEWABLE ENERGY RESOURCES IN ITS SERVICE TERRITORY?**

12 A. An increasing number of customers are seeking renewable energy in order to meet
13 sustainability goals. As of October 2018, 78 major U.S. companies announced plans to
14 obtain 69,000,000 MWh of renewable energy. Walmart has announced a goal to operate
15 with 50% renewable energy by 2025, and an ultimate goal of operating with 100 percent
16 renewable energy. Other national brands represented in our region with renewable
17 energy targets include Marriott, AT&T, Target, Hilton, Starbucks, and McDonald's.
18 Additional discussion of this movement is included in the testimony of Kyle White
19 (Exhibit 4).

20 **Q. PLEASE DESCRIBE THE CUSTOMER INTEREST IN RENEWABLE ENERGY**
21 **WITHIN THE BLACK HILLS POWER MARKET.**

22 A. In its 2017 annual report, Regional Health announced a plan to obtain 70% of its power
23 supply needs for its eight urgent care centers from on-site solar power installations.

1 Regional Health also achieved a 9.1% decrease in usage system-wide with its
2 sustainability and efficiency efforts.

3 According to its website, Black Hills State University recently completed the
4 installation of on-site solar panels, which generated 30.7 MWh of energy in the first two
5 months of operation.¹

6 **Q. DOES BLACK HILLS POWER EXPECT THE INTEREST IN RENEWABLE**
7 **ENERGY TO CONTINUE TO GROW?**

8 A. Yes. The increased interest in behind-the-meter renewable energy generation is
9 forecasted to continue as the adoption of sustainability goals becomes more prevalent and
10 the price for rooftop and ground sited solar systems continues to decrease. In particular,
11 corporate sustainability and renewable energy goals create a significant risk to Black
12 Hills Power, as it will continue to lose commercial customer load and potentially large
13 customers in their entirety if it does not offer a renewable energy option to this customer
14 segment.

15 **Q. WHAT IS THE TARGET MARKET FOR BLACK HILLS POWER'S PROPOSED**
16 **INITIAL OFFERING?**

17 A. As discussed in the testimony of Bret Jones, Black Hills Power is offering service under
18 its proposed Renewable Ready Service Tariff to commercial customers with an aggregate
19 usage of 300,000 kWh or more per year and governmental accounts.

20
21

¹ <http://www.bhsu.edu/About-BHSU/News-Events/bhsu-part-of-national-solar-tour-with-solar-open-house-october-6-1>

1 **Q. HOW DID BLACK HILLS POWER IDENTIFY THE TARGET MARKET?**

2 A. During the last two years, Black Hills Power has been engaged with a variety of
3 customers on the availability of renewable energy, including customers in higher
4 education, healthcare and municipal government. In working with these customers, Black
5 Hills Power reviewed their usage and, in some instances, also prepared analysis for
6 customers on the potential impacts of these customers adding behind-the-meter
7 generation. These activities resulted in Black Hills Power initiating an effort to develop a
8 renewable energy option for its customers. As part of this initiative, Black Hills Power
9 took a number of additional steps: (1) it reviewed its list of the 20 largest customers and
10 developed a set of questions to pose to those customers to gage their level of interest in
11 renewables; (2) it reviewed the market and identified customers with known corporate
12 renewable energy goals; and (3) it reviewed national trends and publications to identify
13 the types of customers who are most likely to seek renewable solutions. Black Hills
14 Power then began to meet with customers on the target list to validate its assumptions.
15 *See* Testimony of Bret Jones (Exhibit 5) for additional details on customer contacts and
16 interactions.

17 **Q. WHY DID BLACK HILLS POWER SELECT ITS LARGEST CUSTOMERS FOR**
18 **PROGRAM ELIGIBILITY?**

19 A. Black Hills Power selected its large commercial customer segment for the Renewable
20 Ready Program for several reasons. First, large commercial customers often have
21 sustainability goals which encourage the use of renewable energy. Second, Black Hills
22 Power targeted its large commercial customers as the loss of all or some of their load
23 through behind-the-meter generation would have the most substantial negative impact on

1 other retail customers. Finally, large commercial customers have the size of loads
2 necessary to fully subscribe Black Hills Power's share of the Corriedale Project
3 generation.

4 By selecting this customer segment for the Renewable Ready Program, Black
5 Hills Power is able to enter the renewable market with the least likely risk to existing
6 customers. Once the proposed Renewable Ready Service Tariff is approved and Black
7 Hills Power is able to assess the program, it may develop additional renewable energy
8 programs for smaller commercial and residential customers.

9 **Q. WHAT IS THE FINANCIAL RISK TO CUSTOMERS IF THE COMMISSION**
10 **DOES NOT APPROVE THE RENEWABLE READY SERVICE TARIFF?**

11 A. If the proposed Renewable Ready Service Tariff is not approved by the Commission and
12 renewable energy behind-the-meter generation providers continue to convert customers to
13 serving their loads from behind-the-meter installations, remaining customers will be
14 forced to absorb between \$0.04302/kWh and \$0.07364/kWh for every kWh of energy
15 consumption offset by behind-the-meter generation systems. The cumulative effect of the
16 loss of load from commercial customers is illustrated in the table below, utilizing
17 assumptions as to loss of load that Black Hills Power could experience as the cost of
18 behind-the-meter generation solutions continues to decrease and the desire for renewable
19 energy increases.

Customer Type	Current Annual kWh	Fixed Cost Lost/kWh	Reallocation from 10% Loss	Reallocation from 20% Loss	Reallocation from 30% Loss
SD720	354,996,340	\$ 0.07364	\$ 2,614,193	\$ 5,228,386	\$ 7,842,579
SD723	37,470,225	\$ 0.06190	\$ 231,941	\$ 463,881	\$ 695,822
SD743	19,569,975	\$ 0.05395	\$ 105,580	\$ 211,160	\$ 316,740
SD731	30,017,580	\$ 0.04483	\$ 134,569	\$ 269,138	\$ 403,706
SD721	103,481,304	\$ 0.04483	\$ 463,907	\$ 927,813	\$ 1,391,720
SD752	146,011,672	\$ 0.04302	\$ 628,142	\$ 1,256,284	\$ 1,884,427

V. APPLICATION

Q. PLEASE PROVIDE A BRIEF OVERVIEW OF THE CONTENTS OF BLACK HILLS POWER'S APPLICATION FOR THE RENEWABLE READY SERVICE TARIFF.

A. Black Hills Power has provided information as required by Administrative Regulations 20:10:13:26 in its Application, which is further supported by the submitted exhibits, including direct testimony of myself, Kyle White (Exhibit 4), Jason Keil (Exhibit 6), Bret Jones (Exhibit 5) and Jason Hartman (Exhibit 7).

VI. CONCLUSION

Q. WHAT IS BLACK HILLS POWER ASKING FROM THE COMMISSION IN THIS DOCKET?

A. Black Hills Power requests the Commission enter an Order approving the Renewable Ready Service Tariff with an effective date of July 1, 2019.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

