

Direct Testimony and Exhibits
Jennifer C. Landis

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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Exhibit JCL-1: FutureTrack Workforce Development Program Description

Exhibit JCL-2 BHP FutureTrack Workforce Revenue Requirements

1 **I. INTRODUCTION AND QUALIFICATIONS**

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

3 A. My name is Jennifer C. Landis. My business address is 625 Ninth Street, Rapid
4 City, South 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-
7 owned subsidiary of Black Hills Corporation (“BHC”), as the Director, Corporate
8 Human Resources and Talent Management.

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

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

12 **Q. PLEASE BRIEFLY SUMMARIZE YOUR ACADEMIC AND**
13 **PROFESSIONAL BACKGROUND?**

14 A. I have a Bachelors Degree in Applied Management and a Masters Degree in
15 Global Human Resources Development. I have over 18 years of experience in
16 adult learning and development and 9 years in human resources with
17 specializations in strategic workforce planning, leadership and employee
18 development, succession planning, employee engagement, performance
19 management, and project management. I am certified by the Human Capital
20 Institute in Strategic Workforce Planning. I belong to several professional human
21 resource organizations and speak publicly on human resources topics at
22 association and industry conferences.

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

2 A. The purpose of my testimony is to provide: 1) a discussion regarding current
3 industry workforce concerns; 2) an overview of Black Hills Power’s current
4 workforce; and 3) an explanation of the proposed FutureTrack Workforce
5 Development Program, a recruitment and training program to address pending
6 retirements.

7 **II. INDUSTRY WORKFORCE CONCERNS**

8 **Q. PLEASE DESCRIBE THE CHALLENGES THE UTILITY INDUSTRY AS**
9 **A WHOLE IS EXPERIENCING WITH ITS WORKFORCE**
10 **REQUIREMENTS.**

11 A. The utility industry is uniquely faced with an aging workforce and a scarcity of
12 talent, especially technical talent. According to the 2013 Center for Energy
13 Workforce Development (“CEWD”) Gaps in the Energy Workforce Survey, the
14 utility industry will likely replace up to 55% of its workforce due to retirement and
15 attrition within the next 10 years. This impending wave of retirements, coupled
16 with a decrease in the number of workers entering the industry, is well
17 documented in several industry studies and white papers by the National
18 Regulatory Research Institute, the California Public Utilities Commission, and the
19 U.S. Department of Labor.

1 **Q. ARE THERE ANY POSITION SPECIFIC STATISTICS THAT SUPPORT**
2 **THIS CONCERN?**

3 A. Yes. The CEWD study highlights line mechanics, technicians, plant operators, and
4 engineers, and presents findings that 36% of these workers may be lost between
5 2013 and 2017 through attrition and retirement. In addition to the number of
6 employees leaving the job market, other industry data demonstrates an alarming
7 lack of candidates available to fill these openings. For example, the table below
8 provides nationwide data regarding the number of active candidates and job
9 openings for a number of typical utility jobs:

Position	Active Candidates in US	Job Postings in US
Instrument Controls Technician	6,116 candidates	6,654 open jobs
Lineman (Line Mechanic)	2,380 candidates	6,622 open jobs
Plant Maintenance Operator	7,936 candidates	12,483 open jobs
Substation Electrician	1,682 candidates	2,188 open jobs
Unit Operator	3,089 candidates	4,405 open jobs

10 These statistics illustrate the challenges the industry is facing with respect to
11 filling critical role vacancies.

12 **Q. ARE LOCAL UTILITIES ALSO EXPERIENCING A SHORTAGE OF**
13 **ELIGIBLE CANDIDATES TO FILL CRITICAL POSITIONS?**

14 A. Yes. According to statewide industry data, there were zero substation electricians
15 seeking employment in South Dakota from January 2012 to December 2013, but
16 there were 8 openings. During the same period, there were 35 line mechanics
17 seeking South Dakota employment, with 30 job postings. In the power generation

1 field, there were only 45 plant maintenance operators seeking employment in
2 Wyoming, with 232 job openings. There were 70 unit operators also looking for
3 work in Wyoming, with 146 job openings. Lastly, there were 19 instrument
4 control technicians searching for Wyoming employment and 32 job openings.

5 **III. BLACK HILLS POWER'S WORKFORCE**

6 **Q. IS BLACK HILLS POWER FACING THE SAME CHALLENGES AS THE**
7 **UTILITY INDUSTRY REGARDING IMPENDING RETIREMENTS?**

8 A. Yes. As of January 31, 2014, Black Hills Power employed approximately 265
9 people. Over the next 8 years, approximately 31% of Black Hills Power's current
10 workforce will reach the age of 62, which has been the historical average age of
11 retirement of employees at Black Hills Power and its parent, BHC.

12 **Q. DOES THE IMPENDING WORKFORCE LOSS CAUSE ANY CONCERN?**

13 A. Yes. The magnitude of impending retirements causes the Company great concern.
14 The employees expected to retire in the next eight years represent over 50% of
15 total years of experience with the Company. Many of the roles most critical to
16 Black Hills Power operations have a particularly high retirement risk. The
17 following table illustrates this point.

Position	2013 Headcount	Expected Retirements Over 8 Years	Expected Retirement Percent
Construction Representative	7	3	42.9%
Electrician	8	5	62.5%
Line Mechanic	43	13	30.2%
Unit Operator	24	14	58.3%
Instrument Technician	13	7	53.8%
Energy Services Technician	4	2	50.0%
Plant Maintenance Operator	40	4	10.0%
Meter Technician	6	3	50.0%

1 The impending loss of critical institutional knowledge, especially in jobs that have
2 significant technical skills requirements, presents a risk to the Company and its
3 ability to continue to efficiently provide safe and reliable service.

4 **Q. WHAT STEPS HAS BLACK HILLS POWER UNDERTAKEN TO**
5 **ADDRESS THESE CONCERNS IN THE PAST?**

6 A. BHC has implemented strategic workforce planning processes and practices at
7 each of its utility business units, including Black Hills Power. The strategic
8 workforce planning process includes an examination of the current workforce
9 demographics, projections of potential losses due to employee retirement over the
10 next 5 to 8 years, and a thorough discussion of the skills and knowledge that will
11 be needed to serve our customers. Through this process, Black Hills Power has
12 identified specific areas of risk due to an alarming shortage of workers possessing
13 specialized skills and gaps in unique organizational and systems knowledge.

1 **Q. WHAT STEPS ARE BLACK HILLS POWER CURRENTLY TAKING TO**
2 **ADDRESS THIS CRITICAL WORKFORCE ISSUE?**

3 A. Building on efforts already underway at Black Hills Power, the company has
4 created a comprehensive strategic workforce planning program – the FutureTrack
5 Workforce Development Program – which will involve the hiring, training, and
6 preparation of new workers to perform the specialized and critical work necessary
7 to continue providing Black Hills Power’s customers and communities with the
8 safe and reliable service they depend upon. This is a company-wide initiative that
9 BHC will implement at each of its utility subsidiaries.

10 **IV. FUTURETRACK WORKFORCE DEVELOPMENT PROGRAM**

11 **Q. PLEASE PROVIDE A GENERAL OVERVIEW OF THE FUTURETRACK**
12 **WORKFORCE DEVELOPMENT PROGRAM.**

13 A. The primary function of the FutureTrack Workforce Development Program is
14 to recruit talent within critical areas to complete the advanced training necessary to
15 fill the highly skilled positions upon retirement of existing employees. The
16 training provided to employees hired into the FutureTrack program will be flexible
17 and innovatively tailored to the education and experience level of the individual
18 employee. Most of the training will occur on the job and under very close
19 supervision. Some positions will require bookwork, classroom based training, and
20 examinations. In addition, potential candidates may be offered a scholarship,
21 covering tuition, books, and tools, to a South Dakota vocational school to receive
22 training necessary to meet minimum qualifications for FutureTrack positions. A

1 program description is included in Exhibit JCL-1.

2 **Q. PLEASE EXPLAIN WHY BLACK HILLS POWER NEEDS TO HIRE IN**
3 **ADVANCE OF RETIREMENTS.**

4 A. Black Hills Power relies on skilled labor to safely and reliably deliver electricity to
5 its customers. These roles are technically complex and take years of study and
6 application before competence is achieved. The learning period for these jobs far
7 exceeds the typical amount of notice Black Hills Power would receive from
8 employees giving notice of their intent to retire. To keep up with the loss of talent
9 caused by retirements, Black Hills Power must begin training and hiring
10 replacement workers well in advance of expected retirements. Given the scarcity
11 of qualified replacements, Black Hills Power will not be able to meet its workforce
12 demands by hiring off the street or from within the industry, as it has in the past.

13 **Q. WHAT POSITIONS HAVE BEEN IDENTIFIED FOR INCLUSION IN THE**
14 **PROGRAM?**

15 A. The FutureTrack program includes line mechanics, sub-station electricians,
16 construction representatives, energy services technicians, meter technicians, unit
17 operators, plant maintenance operators, instrument and controls technicians, and
18 information technology developers. Also included in the program is a category of
19 positions called operations support and management roles. This group of positions
20 is included due to the nature of the skills, knowledge, and advanced training
21 necessary for success in these roles. Roles included in the other support and
22 management category include: operations management, GIS analysts, systems

1 operators, system operations analysts, energy services representatives, and
2 generation dispatch/power marketing roles.

3 **Q. WHY WERE THESE POSITIONS SELECTED FOR INCLUSION?**

4 A. The positions selected for inclusion will have the following characteristics: the
5 role is critical to Black Hills Power operations; the role requires unique or
6 specialized skills and knowledge with a minimum requirement of six months
7 advanced training to achieve competence; the role is difficult to fill or requires a
8 unique or specialized skill set; and the role has incumbent employees who will
9 reach age 62 within the next 4-8 years.

10 **Q. HOW DID BLACK HILLS POWER FORECAST ITS WORKFORCE**
11 **NEEDS?**

12 A. Black Hills Power's workforce was assessed to determine retirement risk by job
13 function and/or position. The determining factor was employee age. Historical
14 retirement data demonstrates that long-tenured, pension eligible employees retire
15 almost exactly at age 62. Once the retirement risk was determined for each job
16 function, interviews were conducted with Black Hills Power business unit
17 managers and human resource support staff, and collective bargaining unit
18 agreements were consulted.

19 **Q. DESCRIBE THE TYPICAL EXPERIENCE PROFILE OF A**
20 **FUTURETRACK EMPLOYEE?**

21 A. There is no typical experience profile. The FutureTrack program will recruit both
22 inexperienced and partially qualified workers. One focus of the FutureTrack

1 program will be to identify and recruit high school students during their junior or
2 senior year of high school. These students will receive scholarships to a South
3 Dakota vocational school appropriate for the position they are selected to fill. The
4 program will also target re-training more mature workers who are interested in
5 entering the utility industry (e.g., former military personnel returning to South
6 Dakota).

7 **Q. PLEASE EXPLAIN WHY A SCHOLARSHIP COMPONENT IS**
8 **INCLUDED IN THE PROGRAM.**

9 A. Many of the jobs in the FutureTrack program require technical school certificates
10 or college degrees for consideration. Additionally, the majority of skilled utility
11 workers are approaching retirement. A different approach is necessary to attract
12 the sufficient numbers of people from the next generation to work in the utility
13 industry. The intent is to create South Dakota training for South Dakota residents
14 to fill South Dakota jobs.

15 **Q. PLEASE EXPLAIN HOW THE SCHOLARSHIP COMPONENT OF THE**
16 **PROGRAM WILL BE IMPLEMENTED.**

17 A. Of the FutureTrack jobs that require technical school certificates or college
18 degrees, roughly 50% of the FutureTrack positions expected to be filled over an
19 eight year period will receive scholarships. Technical school scholarships will
20 include tuition, books, and tools (as applicable). Recipients of full scholarships,
21 for example, will be asked to sign a letter of intent to work for Black Hills Power
22 upon graduation, with the stipulation that if the recipient decides not to work for

1 Black Hills Power for at least two years, the recipient must repay Black Hills
2 Power the sum of their scholarship. For positions requiring a college degree, a
3 scholarship will be offered to support the last year of the degree. The same letter
4 of intent with the payback stipulation will be used. These scholarships will send
5 South Dakota residents to South Dakota schools to prepare for South Dakota jobs
6 at Black Hills Power.

7 **Q. ARE YOU AWARE OF ANY OTHER COMPANIES THAT ARE**
8 **OFFERING SCHOLARSHIPS TO POTENTIAL EMPLOYEES?**

9 A. Yes. Approximately 25 companies are working with Mitchell Technical Institute
10 (“MTI”) to provide scholarships for MTI students that require employment with
11 the sponsoring company following graduation. These scholarships require the
12 recipient to work for the sponsoring company for a pre-determined number of
13 years.

14 **Q. WHAT ARE THE OVERALL COSTS TO CUSTOMERS ASSOCIATED**
15 **WITH THE FUTURETRACK WORKFORCE DEVELOPMENT**
16 **PROGRAM?**

17 A. The anticipated total annual cost to customers for the program is \$721,861 for
18 each of the next eight years. This includes costs associated with labor and
19 benefits, scholarships, relocation, and training as shown in the table below. As
20 described in the testimony of Chris Kilpatrick, Black Hills Power is requesting
21 that expenditures for the program that exceed \$721,861 annually over each of the
22 next eight years be recorded in a regulatory asset. If in any of the eight years the

1 annual expenditures are less than \$721,861, the amount of the difference will be
2 credited to customers through the regulatory asset. For additional information
3 regarding the requested treatment of these costs, please refer to the testimony of
4 Chris Kilpatrick.

Expense Type	Estimated Annual Cost
Labor & Benefits	\$652,200
Relocation	\$31,400
Scholarships	\$21,200
Training	\$17,100
Total	\$721,900

5 **Q. PLEASE PROVIDE AN EXAMPLE OF HOW THE COSTS FOR ONE**
6 **FUTURETRACK EMPLOYEE WOULD FLOW THROUGH THE**
7 **PROGRAM.**

8 A. The table below shows the progression of a newly recruited high school student
9 into the FutureTrack program and follows his or her progress through the entire
10 training period.

Year	Expense Type	Regulatory Account Cost	BHP Cost	Notes
0	Scholarship to Mitchell Technical Institute's Power Line Construction & Maintenance Program	\$13,400		Scholarship covers tuition, books, fees, and tools for the 2 semester program
1	Relocation cost	\$5,000		
	Training Cost (IBEW course work)	\$1,110		Covers IBEW's line mechanic certification course
	Labor & Benefits	\$78,741		
2	Training Cost (IBEW course work)	\$1,110		Covers IBEW's line mechanic certification course
	Labor & Benefits	\$90,799		
3	Labor & Benefits	\$51,706	\$54,181	Employee is able to begin working independently in year 3; costs are shared by BHP
4	Labor & Benefits		\$109,060	Employee transitions out of FutureTrack program and replaces a retiring BHP line mechanic

1 Not all FutureTrack employees will receive scholarships or relocation. This
2 example shows how all elements of the program, if used and necessary, are
3 applied. A complete description of the developed revenue requirement for the
4 FutureTrack program is included as Exhibit JCL-2.

1 **Q. IS A FUTURETRACK EMPLOYEE’S COMPENSATION CHARGED TO**
2 **THE FUTURETRACK REGULATORY ACCOUNT DURING THE**
3 **ENTIRE TRAINING PERIOD?**

4 A. Employee compensation costs are fully charged to the regulatory asset during the
5 initial training period, the length of which varies for each position. Once the
6 employee begins to gain competence and can begin to do some independent work,
7 however, the costs begin to shift from the regulatory account to Black Hills Power
8 capital and operations and maintenance accounts. As described in the testimony
9 of Vance Crocker and Mark Lux, productivity metrics were developed for
10 individual FutureTrack positions. These metrics are applied to estimate the
11 percentage and timing of moving compensation expenses from the regulatory
12 asset to Black Hills Power. By the end of the training period, the entire
13 compensation cost is covered by Black Hills Power and the employee will
14 transition into regular full-time employment as another employee is retiring.
15 Please refer to the testimony provided by Vance Crocker and Mark Lux for more
16 information regarding transitioning employees from a training role into an active
17 employment role.

18 **Q. HOW DOES BLACK HILLS POWER PLAN TO TRACK THE COSTS**
19 **ASSOCIATED WITH THE FUTURETRACK WORKFORCE**
20 **DEVELOPMENT PROGRAM?**

21 A. Each FutureTrack employee-in-training will be tracked using a custom field in
22 our human resources management system. FutureTrack has accounts created to

1 allow our financial systems to capture and report all expenses associated with the
2 labor, benefits, relocation, scholarship, and training of FutureTrack employees.

3 **Q. WHAT ARE THE BENEFITS OF THE FUTURETRACK PROGRAM FOR**
4 **CUSTOMERS?**

5 A. Black Hills Power's employees are the most important element of the Company's
6 ability to meet its obligation to serve. Given the certainty of upcoming retirements,
7 and the dramatic shortage of qualified utility-industry job applicants, innovative
8 solutions are required. By training and preparing workers in advance of retirement,
9 long-tenured and experienced workers are given the time and opportunity to
10 transfer their knowledge of the job, the customers, the company culture, and the
11 skills they've honed over their 30-plus years in a specialized role with Black Hills
12 Power. This knowledge transfer over time translates to increased understanding,
13 compliance, safety, and overall performance. It creates a deeper sense of
14 engagement and integration into the workgroup and Company for both the retiring
15 worker and the FutureTrack employee-in-training, which decreases turnover,
16 increases retention, and improves efficiency, system safety, and reliability.
17 Combined, these benefits decrease unnecessary costs due to preventable incidents,
18 inefficiencies, and knowledge loss. The FutureTrack program is good for our
19 customers, our communities, and for Black Hills Power.

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

21 A. Yes.