

Direct Testimony and Exhibits
Douglas N. Hyatt

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 Authority to Increase Rates for Electric Service in South Dakota

Docket No. EL26-_____

February 19, 2026

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TABLE OF ABBREVIATIONS AND ACRONYMS

AMI	Automated Metering Infrastructure
A&E	Average and Excess
BHC	Black Hills Corporation
Black Hills Colorado	Black Hills Colorado Electric, LLC
Black Hills Power	Black Hills Power, Inc.
BHSC	Black Hills Service Company, LLC
CCOSS	Class Cost of Service Study
Cheyenne Light	Cheyenne Light, Fuel, and Power Company, LLC
Company	Black Hills Power, Inc.
COSS	Cost of Service Study
CP	Coincident Peak
FERC	Federal Energy Regulatory Commission
JCOSS	Jurisdictional Cost of Service Study
kW	Kilowatt
kWh	Kilowatt Hour
MAC	Management Applications Consulting
NARUC	National Association of Regulatory Utility Commissioners
NCP	Non-Coincident Peak
SCADA	Supervisory Control and Data Acquisition
SGS	Small General Service
SIGS	Small Interruptible General Service
T&D	Transmission and Distribution
Test Period	The twelve (12) months ended September 30, 2025
UCF	Utility Controlled Residential Service
UCG	Utility-Controlled General Service
UFE	Unaccounted for Energy
USNO	United States Naval Observatory

1 **I. INTRODUCTION AND QUALIFICATIONS**

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

3 A. My name is Douglas N. Hyatt. My business address is 14103 Denver West Pkwy, Suite
4 100, Golden, CO 80401-3114.

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

6 A. I am employed by Black Hills Service Company, LLC (“BHSC”). I am a Manager of
7 Regulatory. BHSC is a wholly owned subsidiary of Black Hills Corporation (“BHC”).

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

9 A. I have earned a bachelor’s degree in political science Colorado State University, an
10 M.B.A from the University of Colorado at Denver, and a Master of Applied Science in
11 Telecommunications from the University of Denver.

12 I began my employment with Black Hills Corporation in June 2014, as Principal
13 Regulatory Analyst. In this role and my current role as Manager of Regulatory, I have
14 prepared and presented complex analyses and studies for the electric and natural gas
15 utilities of BHC. I have prepared many studies and analyses in support of Company
16 advocacy before the Arkansas Public Service Commission, Colorado Public Utilities
17 Commission, Kansas Corporation Commission, Iowa Utilities Commission (formerly the
18 Iowa Utilities Board), Nebraska Public Service Commission, and the Wyoming Public
19 Service Commission for both electric and natural gas rate proceedings.

20 **Q. PLEASE DESCRIBE YOUR RESPONSIBILITIES IN YOUR CURRENT**
21 **POSITION.**

22 A. I am a Manager of Regulatory, responsible for cost allocation and rate design and I
23 manage two analysts. My responsibilities include gathering, researching, and analyzing

1 customer billing and other data and information for the preparation of analyses and
2 studies in support of cost allocation and rate design.

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

4 A. I am testifying on behalf of Black Hills Power, Inc. d/b/a Black Hills Energy (“Black
5 Hills Power”).

6 **II. PURPOSE OF TESTIMONY**

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

8 A. The purpose of my testimony is to present studies and models that were prepared by
9 Black Hills Power to update allocations of costs between customer classes in the Class
10 Cost of Service Study (“CCOSS”), and present Black Hills Power’s proposed rate design
11 and customer bill impacts. I also sponsor Volume I, Section 4, Statements N and O of the
12 Application.

13 The testimony presented below specifically addresses the following areas:

- 14 ○ Overview of Rate Design
- 15 ○ Jurisdictional Cost of Service Study
- 16 ○ Class Cost of Service Study
- 17 ○ System Load Study
- 18 ○ Customer Load Study
- 19 ○ Demand Allocation
- 20 ○ Demand Allocation Model
- 21 ○ Primary and Secondary Distribution Cost Study
- 22 ○ Meter Cost Study
- 23 ○ Proposed Rates

1 **Q. ARE YOU SPONSORING ANY EXHIBITS?**

2 A. Yes. I am sponsoring the following exhibits:

3 Exhibit DNH-1 Revenue Allocation

4 Exhibit DNH-2 System Load Study

5 Exhibit DNH-3 Customer Load Study

6 Exhibit DNH-4 Demand Allocation Model

7 Exhibit DNH-5 Primary and Secondary Cost Study

8 Exhibit DNH-6 Meter Cost Study

9 Exhibit DNH-7 Summary of Rate Design

10 Exhibit DNH-8 Customer Bill Impacts

11 **III. OVERVIEW OF RATE DESIGN**

12 **Q. WHAT GUIDELINES DID YOU FOLLOW IN THE DESIGN OF PROPOSED**
13 **RATES?**

14 A. The guidelines were as follows:

15 a) Assign costs to customers according to the costs they cause. The assignment
16 of costs to customers is also known as ‘cost causation’.

17 b) Propose just and reasonable rates for all customers.

18 c) Consistent with the above goals, rates should be designed to recover the full
19 cost of service as nearly as practical.

20 **Q. IS BLACK HILLS POWER PROPOSING RATE DESIGN CHANGES TO**
21 **EXISTING RATE SCHEDULES?**

22 A. Black Hills Power is proposing to make rate design changes to its General Service rate
23 schedules, removing four rate schedules that have been closed to new customers, and is

1 proposing a new Small General Service rate schedule. These changes align the rate
2 schedules with the cost-causation results of the updated CCOSS and reduce reliance on
3 outdated or closed schedules.

4 **A. General Service Rate Schedules**

5 **Q. WHAT CHANGES ARE BEING PROPOSED FOR THE GENERAL SERVICE**
6 **RATE SCHEDULES?**

7 A. Black Hills Power is proposing to remove the current Power Factor Adjustment from the
8 determination of billing demand from all rate schedules billed in kilowatt (“kW”) demand
9 and is proposing a new Power Factor Adjustment as described in the Direct Testimony of
10 Michael Pogany.

11 **B. Removal of Rate Schedules**

12 **Q. WHAT RATE SCHEDULES ARE BLACK HILLS POWER PROPOSING TO**
13 **REMOVE FROM THE TARIFF?**

14 A. Black Hills Power proposes to remove the following rate schedules from the tariff:
15 Utility-Controlled Residential Service (“UCR”), Small Interruptible General Service
16 (“SIGS”), and Utility-Controlled General Service (“UCG”). Affected customers will be
17 moved to the appropriate Residential, proposed Small General Service, or General
18 Service schedules.

19 **C. Proposed Rate Schedule**

20 **Q. IS BLACK HILLS POWER PROPOSING ANY NEW RATE SCHEDULES?**

21 A. Yes. Black Hills Power is proposing a new Small General Service rate schedule for the
22 smallest commercial customers with a maximum measured demand that does not exceed
23 25kW.

1 **Q. PLEASE DESCRIBE THE NEW RATE SCHEDULE?**

2 A. The proposed Small General Service rate schedule is designed for a homogeneous group
3 of the smallest commercial customers that have similar energy use characteristics to the
4 average Residential service customer. The proposed rate schedule has a two-part rate
5 with a Monthly Customer charge and a flat Kilowatt hour (“kWh”) charge. The rate
6 schedule gives Black Hills Power the ability to assign costs to the smallest commercial
7 customers with a two-part rate design. The Small General Service rate schedule will help
8 these smaller commercial customers by assigning only those costs that are appropriate for
9 this class of customers.

10 **Q. DO OTHER BLACK HILLS POWER AFFILIATED OPERATING UTILITIES**
11 **HAVE A SIMILAR RATE SCHEDULE IN OTHER ELECTRIC UTILITY**
12 **JURISDICTIONS?**

13 A. Yes. Cheyenne Light, Fuel and Power Company’s (“Cheyenne Light”) Commercial
14 Service Rate Schedule C, and Black Hills Colorado Electric, LLC’s (“Black Hills
15 Colorado”) Small General Service rate schedules are similar to the proposed Small
16 General Service rate schedule for customers in South Dakota.

17 **Q. HOW MANY COMMERCIAL CUSTOMERS IS BLACK HILLS POWER**
18 **PROPOSING TO MOVE TO THE NEW SMALL GENERAL SERVICE RATE**
19 **SCHEDULE?**

20 A. Based upon the measured and billed kW by customer for the twelve (12) months ended
21 September 30, 2025 (“Test Period”), Black Hills Power is proposing to re-classify and
22 then consolidate 10,637 customers from the General Service, Utility Controlled, and
23 General Service – Special Events rate schedules as Small General Service. The

1 movement of these customers is reflected in the billing determinants and hourly customer
2 demand shown in the Demand Allocation Model and Class Cost of Service Study as a
3 separate class for cost allocation and rate design.

4 **IV. JURISDICTIONAL COST OF SERVICE STUDY**

5 **Q. WHAT IS THE PURPOSE OF THE JURISDICTIONAL COST OF SERVICE** 6 **STUDY (“JCOSS”)?**

7 A. The purpose of the JCOSS is to allocate costs among the various jurisdictions in which
8 Black Hills Power operates, including South Dakota, Wyoming, Montana, and Federal
9 Energy Regulatory Commission (“FERC”). The JCOSS establishes the revenues needed
10 from South Dakota retail customers to recover Black Hills Power’s reasonable return on
11 rate base, as well as operational and maintenance, depreciation, and tax expenses.

12 **Q. PLEASE DESCRIBE THE STEPS INVOLVED IN CONDUCTING A JCOSS.**

13 A. The steps involved in conducting a JCOSS are like the class cost of service study. An
14 allocation percentage is used to allocate rate base and costs based on the main driver of
15 the rate base or expense. For example, production facilities are allocated based on
16 demand since generation is built to handle specific demands of Black Hills Power’s
17 customers. This methodology conforms to general cost causation rate making principles.
18 Consistent allocation methodologies are used between the jurisdictional and class cost of
19 service studies whenever possible and appropriate. The FERC jurisdictional investments
20 and costs are primarily directly assigned based on the approved annual formula rate
21 methodology in accordance with Black Hills Power’s FERC Joint Open Access
22 Transmission Tariff for the 230 kV Common Use System.

1 **Q. ARE THE JURISDICTIONAL ALLOCATION METHODOLOGIES**
2 **CONSISTENT WITH BLACK HILLS POWER’S PREVIOUS RATE REVIEW IN**
3 **SOUTH DAKOTA?**

4 A. Yes, the current JCOSS is consistent with the previous rate review in South Dakota.

5 **V. CLASS COST OF SERVICE STUDY**

6 **Q. WHAT IS THE PURPOSE OF A CCOSS?**

7 A. The purpose of a CCOSS is to determine the cost-of-service responsibilities of each
8 customer class upon which the base rates may be established. The CCOSS determines the
9 basic rate structures and/or the relative overall cost responsibility of each customer class.

10 Customer classes are defined as relatively homogeneous groups of customers
11 whose usage characteristics and service requirements are similar. The costs allocated to
12 the customer classes in the CCOSS are allocated utilizing cost causation principles.

13 The CCOSS is used in the design of the rates charged by the utility. The CCOSS
14 provides details regarding the cost of the various functions or services that the utility
15 provides.

16 Customer rates generally consist of fixed and variable components that target
17 recovery of specific fixed and variable costs from the revenue requirement calculated in
18 Cost of Service Study (“COSS”) presented in Volume I, Section 4 of the Application.
19 Fixed costs are costs that do not vary with the amount of the product produced or used,
20 while variable costs are those that do vary directly with the amount of product produced
21 or used. Fixed components of customer rates are typically the customer charge and the
22 demand charge. The variable component of customer rates is typically the energy charge.

1 To the extent practical, rates should be designed to reflect the fixed and variable nature of
2 the underlying costs.

3 **Q. PLEASE DESCRIBE THE CCOSS USED IN THIS PROCEEDING.**

4 A. Black Hills Power utilizes an Excel-based software program that was purchased from
5 Management Applications Consulting ("MAC"). The MAC model was previously used
6 by Black Hills Power in its last rate review proceeding before the Commission. The
7 MAC model was also used by other Black Hills Power regulated electric utility affiliates
8 in rate applications filed with the public utility commissions in the states of Colorado and
9 Wyoming. In addition to Black Hills Power and its affiliates, the MAC model has been
10 widely accepted in the industry and has been used by multiple other utility companies
11 before many different Commissions. The MAC model provides an in-depth analysis of
12 the CCOSS and related information relevant to developing rates on a customer charge,
13 demand, and energy basis.

14 **Q. IS THE CCOSS TRANSPARENT AND VERIFIABLE?**

15 A. Yes. The CCOSS provides complete detail as to each allocation made on an account-by-
16 account basis. In addition, cross references to supporting schedules are provided on all
17 summary pages.

18 **Q. WHAT ARE THE GOALS OF ALLOCATIONS USED IN A CCOSS?**

19 A. The primary goal of assignment and allocation of costs to each customer class is to
20 establish just and reasonable rates to customers. In this Rate Review proceeding, Black
21 Hills Power thoroughly reviewed how costs are incurred, and proposed rates that properly
22 account for cost causation and provide Black Hills Power with a reasonable opportunity
23 to recover those costs in a predictable manner. The development of cost-based rates helps

1 Black Hills Power recover fixed asset costs through rates that are just and reasonable.
2 Cost-based rates are established to minimize cross-subsidization between customer
3 classes, and between customers in the same class. This cross-subsidization minimization
4 is achieved through a proper allocation of costs so that each customer class is responsible
5 for its cost of service.

6 **Q. PLEASE DESCRIBE THE STEPS INVOLVED IN CONDUCTING A CCOSS.**

7 A. There are three steps involved in conducting a CCOSS - functionalization, classification,
8 and allocation.

9 Functionalization identifies the operational source of where the costs are incurred,
10 either directly or indirectly, with respect to the physical process of providing service.

11 Classification refers to the separation of costs according to the usage
12 characteristic that drives the cost, for example, demand, energy, and customer-related
13 costs. Demand costs are costs that arise because of the rate of power consumption over a
14 short period of time (usually 15 minutes to an hour). Energy costs are those costs that
15 result from the volume of energy supplied over time. Customer costs vary as a function
16 of the number of customers.

17 Allocation is the process of using customer class metrics, along with the
18 knowledge that certain costs are incurred exclusively for the benefit of specific
19 identifiable customers (direct assignments), to assign or allocate the specific cost
20 components that have been functionalized and classified to customer classes. Customer
21 class information, such as non-coincident peak demands, coincident peak demands,
22 annual energy use, and customer counts, are employed to calculate class allocation
23 factors.

1 **Q. PLEASE DESCRIBE THE PROCESS OF COST FUNCTIONALIZATION USED**
2 **IN THE CLASS COST OF SERVICE STUDY.**

3 A. The individual cost components are functionalized based on the FERC Uniform System
4 of Accounts. The costs are separated into various FERC Accounts according to the
5 function or physical service they provide. These functions are:

- 6 • Production – costs associated with the production of energy and capacity,
7 including purchased power.
- 8 • Transmission – costs associated with the high voltage system that transports the
9 power to load centers.
- 10 • Distribution – costs associated with distributing the energy from the transmission
11 system to the end users.
- 12 • Customer Service – costs associated with providing service to the customer –i.e.,
13 service drops, metering, customer service and billing, the customer-related portion
14 of transformers conductors, and similar costs.
- 15 • Administrative and General – common costs, such as shared service costs, shared
16 buildings, software, and similar indirect costs that are incurred to support the
17 other functions of electric service.

18 **Q. PLEASE DESCRIBE THE PROCESS OF COST CLASSIFICATION USED IN**
19 **THE CCROSS.**

20 A. Cost classification is the process of further categorizing the functionalized costs
21 according to the cost-causation characteristic of the utility service being provided. The
22 three principal cost classifications are demand-related costs, energy-related costs, and
23 customer-related costs.

1 Demand-related costs are the fixed costs related to the kW demand that the
2 customers place on the system at any time. These costs vary with the maximum demand
3 imposed on the various facilities of the power system by customers.

4 Energy-related costs are those related to the kWh of energy that the customer
5 utilizes.

6 Customer-related costs are the costs incurred simply because of the number of
7 customers on the system. These costs, such as services, meters, and billing, are incurred
8 to serve individual customers.

9 **Q. PLEASE DESCRIBE THE PROCESS OF COST ALLOCATION USED IN THE**
10 **CCOSS.**

11 A. After functionalization and classification, class responsibility for each cost is determined
12 using the allocation of costs based upon the System Load Study, Customer Load Study,
13 Demand Allocation Model, Primary and Secondary Cost Study, and the Meter Cost
14 Study. These studies are discussed in more detail in the following sections of my direct
15 testimony. Each identifiable element of the total revenue requirement is allocated to each
16 customer class on the basis of the demands imposed by the class (using either coincident
17 peak (“CP”) demands or non-coincident peak (“NCP”) demands), energy use by the class
18 at the production source (i.e., after accounting for line and transformation losses), or
19 number of customers served (weighted by the appropriate weighting factor to recognize
20 differences in types of customers and their impacts upon the system). These allocations
21 are then summarized within the CCOSS to derive costs of service for each customer
22 class.

1 **Q. PLEASE DESCRIBE THE LAYOUT OF THE CLASS COST OF SERVICE**
2 **STUDY.**

3 A. The JCOSS and CCOSS are organized in thirteen (13) schedules, many of which are
4 similar to Black Hills Power's Cost of Service Study, as shown in Statement O and
5 Statement N of Volume 1 of the Application:

- 6 • Schedule M - Summary at Present Rates.
 - 7 ○ Pages 1-4: allocated components of cost of service and rates of return by
 - 8 customer class at and present and rates of return at 8.16%.
- 9 • Schedule D-2 - Development of Rate Base, pages 4-6.
- 10 • Schedule E - Accumulated Depreciation, page 7.
- 11 • Schedule F - Additions and Deduction to Rate Base, pages 8-10.
- 12 • Schedule I - Operating Revenues, page 11.
- 13 • Schedule H - Operation and Maintenance Expense, pages 12-15.
- 14 • Schedule J - Depreciation/Amortization Expense, page 16.
- 15 • Schedule L - Other Operating Expenses, page 17.
- 16 • Schedule K - Development of Income Taxes, page 18-20.
- 17 • Schedule AF - Allocation Factor Table, pages 21-26.
- 18 • Schedule AP - Allocation Proportions Table, pages 27-32.
- 19 • Schedule ADA - Allocated Direct Assignments, pages 33-34.
- 20 • Schedule RRW - Class Cost of Service Study Workpaper, page 35.

21 **Q. PLEASE DESCRIBE THE INPUTS TO THE CCOSS.**

22 A. The CCOSS has five inputs that are used for the functionalization and allocation of costs.
23 These five inputs include: (1) the costs for generation, transmission, and distribution

1 plant-in-service by FERC Account and category, (2) the adjusted billing determinants, (3)
2 the Demand Allocation Model, (4) Primary and Secondary Cost Study, and (5) the Meter
3 Cost Study. The inputs can be found in the following Statement and Exhibits:

- 4 • Statement M from the Cost-of-Service Study provides a detailed summary of the
5 overall revenue requirement items needed for the CCOSS.
- 6 • Exhibit EJV-1 - Billing Determinants of the Direct Testimony of Ethan J. Fritel.
- 7 • Exhibit DNH-4 - Demand Allocation Model provides the demand allocations for
8 the A&E and NCP factors for each customer class.
- 9 • Exhibit DNH-5 - Primary and Secondary Cost Study.
- 10 • Exhibit DNH-6 - Meter Cost Study.

11 **Q. WHICH CUSTOMER CLASSES ARE SHOWN IN THE CLASS COST OF**
12 **SERVICE STUDY?**

13 A. Six customer classes are shown in the CCOSS. The customer classes shown in the
14 CCOSS include:

- 15 • Residential Service (Residential, Total Electric, and Total Electric Demand).
- 16 • General Service (General Service, Total Electric, Other, and Small General
17 Service).
- 18 • Large General Service (Secondary, Primary, 69kV).
- 19 • Industrial Contract Service (Primary, 69kV).
- 20 • Water Pumping/Irrigation.
- 21 • Lighting (Traffic Signals & Flashers, Private Area Lights, Street Lighting Leased,
22 Street Lighting Customer-Owned, and Non-Metered Service/Rentals).

1 **Q. WHAT OBSERVATIONS DO YOU HAVE REGARDING THE DEVELOPMENT**
 2 **OF THE CCOSS?**

3 A. The methods and procedures applied in the CCOSS are consistent with traditional rate-
 4 making principles employed by the electric utility industry. In addition, the results of this
 5 CCOSS fairly and reasonably reflect the costs to serve the various customer classes.

6 **Q. PLEASE SUMMARIZE THE RESULTS OF THE CCOSS BY CUSTOMER**
 7 **CLASS.**

8 A. The current retail revenues and rate of returns are shown on Schedule M of the CCOSS.
 9 The CCOSS shows that no customer class should receive a decrease in rates, and the rates
 10 for every class should be increased to equal the revenue requirement.

11 **Figure DNH-1: Results of the CCOSS**

	Total South Dakota Retail	Total Residential Service	Total General Service	Total Large General Service	Total Industrial Contract Service	Total Lighting Service	Total Water Pumping/Irrigation
Class Cost of Service	\$211,567,477	\$101,731,993	\$57,112,934	\$32,260,222	\$15,488,845	\$2,595,742	\$2,377,741
Base Rate Revenue at Present Rates	\$129,251,396	\$55,681,098	\$42,389,013	\$21,006,935	\$7,339,575	\$1,391,541	\$1,443,233
Other Operating Revenues	\$31,762,383	\$15,893,119	\$8,600,149	\$4,514,281	\$1,903,267	\$506,077	\$345,490
Net Base Rate Increase	\$50,553,698	\$30,157,776	\$6,123,772	\$6,739,006	\$6,246,003	\$698,124	\$589,017

12
 13 **Q. IS BLACK HILLS POWER PROPOSING RATES BASED SOLELY ON THE**
 14 **RESULTS OF THE CCOSS?**

15 A. No. Black Hills Power relies upon its CCOSS, but it is also proposing a customer-class
 16 revenue allocation strategy to limit the cost increase within the Residential customer
 17 classes. The goal is to set rates as close to the cost of service within each customer class

1 as is practical. The proposed rates are designed to recover the cost of serving each class
 2 of customers.

3 **Q. WHAT ARE THE RESULTS OF THE REVENUE ALLOCATION STRATEGY?**

4 A. As shown below and in Exhibit DNH-1, the cost-of-service results, and revenue
 5 allocation by customer class are as follows:

6 **Figure DNH-2: Revenue Allocation between Customer Classes**

Description	Total South Dakota	Residential Service	General Service	General Service Large	Industrial Contract Service	Lighting	Water Pumping/Irrigation
Total Cost of Service	\$179,805,094	\$85,838,874	\$48,512,785	\$27,745,941	\$13,585,578	\$2,089,665	\$2,032,251
Total Cost of Service Increase (Decrease)	\$50,553,698	\$30,157,776	\$6,123,772	\$6,739,006	\$6,246,003	\$698,124	\$589,017
Total Revenues	\$252,360,325	\$112,429,184	\$68,444,909	\$43,200,604	\$22,509,302	\$2,701,565	\$3,074,760
% Increase to Total Revenues	25%	37%	10%	18%	38%	35%	24%
Allocation of Revenue	\$0	(\$9,082,000)	\$6,260,000	\$2,822,000	\$0	\$0	\$0
Revenue Increase After Allocation	\$50,553,698	\$21,075,776	\$12,383,772	\$9,561,006	\$6,246,003	\$698,124	\$589,017
% Increase to Total Revenues after Allocation	25%	26%	20%	26%	38%	35%	24%

7
 8 **VI. SYSTEM LOAD STUDY**

9 **Q. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?**

10 A. As explained above, the principal method of allocating production, transmission, and
 11 distribution system costs is through a system load study and load research to develop
 12 customer class demand curves. The purpose of this section of testimony is to present the
 13 results of the System Load Study.

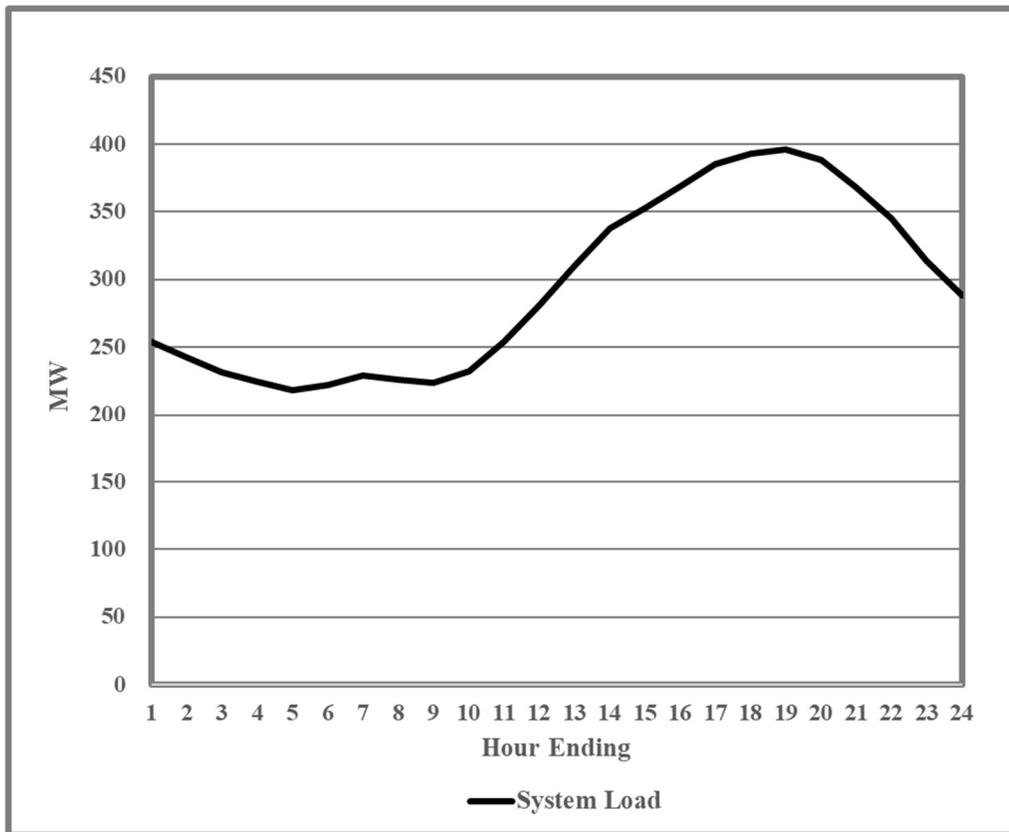
1 **Q. WHAT IS A SYSTEM LOAD STUDY?**

2 A. A system load study is conducted to develop system load curves based upon hourly
3 system load data.

4 **Q. WHAT IS A SYSTEM LOAD CURVE?**

5 A. A system load curve refers to the total hourly system load at the generation level (as
6 distinguished from the meter side level). The shape of the system load curve can be
7 measured across different periods of time. For example, a system load curve may show
8 an hourly curve during a day or the shape of the yearly load curve showing seasonal
9 system loads, as shown in Figure DNH-3 below.

10 **Figure DNH-3: System Load Curve on July 9, 2025**



11

1 **Q. WHAT IS THE SOURCE OF THE DATA USED TO DEVELOP A SYSTEM LOAD**
2 **CURVE?**

3 A. The system load curve is developed using the hourly Supervisory Control and Data
4 Acquisition (“SCADA”) data for Black Hills Power. SCADA data is used to develop the
5 system load curve. SCADA data is measured at the generation meter and is not the same
6 as AMI data used for customer class demand.

7 **Q. WHAT ANALYSIS DID BLACK HILLS POWER PERFORM TO MEASURE**
8 **THE MONTHLY SYSTEM PEAK LOADS?**

9 A. Black Hills Power performed analysis of the monthly system peak loads using the
10 Average Seasonal Coincident Peak Method.¹ This method compares the system peak
11 load of each month during a year to the annual system peak load. Each month that the
12 system peak load is equal to or greater than 90% of the annual system peak load is
13 considered a seasonal coincident peak load month. The results of this method are shown
14 in Figure DNH-4 below.

15 **Figure DNH-4: Test Period Seasonal Coincident Peak**
16

	Date											
	10/31	11/25	12/20	1/20	2/18	3/6	4/4	5/12	6/20	7/9	8/7	9/11
System Peak MW	253	277	298	341	343	282	253	290	354	396	379	337
% of System Peak	64%	70%	75%	86%	87%	71%	64%	73%	89%	100%	96%	85%

17
18
19 Black Hills Power’s system peak is considered a ‘dual peaking’ system with peaks that
20 consistently occur during the summer months of June through September and peaking
21 non-summer months of January and February.

¹ National Association of Regulatory Utility Commissioners (1992), Electric Utility Cost Allocation Manual, Chapter 5, p. 78.

1 **Q. DID BLACK HILLS POWER USE THIS SAME METHOD TO ANALYZE THE**
 2 **MONTHLY SYSTEM PEAK LOADS FOR EACH YEAR SINCE 2014?**

3 A. Yes. Using this method for the analysis of the monthly system peak loads shows the load
 4 curve during the four summer months of June through September since the load study
 5 performed for the last proceeding. The analysis of the seasonality for the years of 2014
 6 through 2025 is shown in Figures DNH-5 and DNH-6 below.

7 **Figure DNH-5: Maximum Monthly System Peak 2014-2025 (MW)**

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2014	277	285	258	247	300	377	384	361	362	262	285	298
2015	288	294	289	257	248	383	392	381	354	283	293	303
2016	290	299	250	265	277	406	412	395	356	277	287	302
2017	297	288	274	243	293	380	398	363	367	254	283	299
2018	291	279	254	277	332	413	411	366	377	313	291	289
2019	288	277	285	253	279	369	422	408	395	297	291	292
2020	278	273	272	257	320	368	397	401	383	284	266	297
2021	273	296	277	255	275	395	407	401	393	275	267	279
2022	279	296	281	246	317	381	410	402	382	261	279	334
2023	299	294	273	242	278	359	411	398	386	297	271	288
2024	346	300	288	264	262	355	388	388	348	253	277	298
2025	341	343	282	253	290	354	396	379	337			

8 Annual system maximum.

9 **Figure DNH-6: Test Period Seasonal Coincident Peak (Percentage)**

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2014	72%	74%	67%	64%	78%	98%	100%	94%	94%	68%	74%	78%
2015	73%	75%	74%	66%	63%	98%	100%	97%	90%	72%	75%	77%
2016	70%	73%	61%	64%	67%	99%	100%	96%	86%	67%	70%	73%
2017	75%	72%	69%	61%	74%	95%	100%	91%	92%	64%	71%	75%
2018	70%	68%	62%	67%	80%	100%	100%	89%	91%	76%	70%	70%
2019	68%	66%	68%	60%	66%	87%	100%	97%	94%	70%	69%	69%
2020	69%	68%	68%	64%	80%	92%	99%	100%	96%	71%	66%	74%
2021	67%	73%	68%	63%	68%	97%	100%	99%	97%	68%	66%	69%
2022	68%	72%	69%	60%	77%	93%	100%	98%	93%	64%	68%	81%
2023	73%	72%	66%	59%	68%	87%	100%	97%	94%	72%	66%	70%
2024	89%	77%	74%	68%	68%	91%	100%	100%	90%	65%	71%	77%
2025	86%	87%	71%	64%	73%	89%	100%	96%	85%			

10

1 **Q. WHAT DOES AN ANALYSIS OF THE SYSTEM PEAK HOURS SHOW FOR**
 2 **SYSTEM LOAD DURING THE TEST PERIOD?**

3 A. Figure DNH-7 below shows Black Hills Power’s system peak hour data.

4 **Figure DNH-7: Test Period Maximum Hourly Peak by Month**
 5 **During Non-Holiday Weekdays**

Time Period	12am-1am	1am-2am	2am-3am	3am-4am	4am-5am	5am-6am	6am-7am	7am-8am	8am-9am	9am-10am	10am-11am	11am-12pm	12pm-1pm	1pm-2pm	2pm-3pm	3pm-4pm	4pm-5pm	5pm-6pm	6pm-7pm	7pm-8pm	8pm-9pm	9pm-10pm	10pm-11pm	11pm-12am
Hour Ending	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Oct	207	208	206	219	219	228	248	249	243	238	229	219	235	247	247	262	284	267	262	255	242	232	225	216
Nov	227	226	225	224	231	239	254	250	247	253	250	250	244	249	252	255	256	271	265	266	257	250	246	238
Dec	229	229	226	229	235	245	263	261	253	252	252	246	254	262	264	270	274	288	283	275	267	259	248	241
Jan	251	248	250	250	255	264	281	292	284	278	277	282	271	278	273	275	279	292	299	290	287	272	263	258
Feb	245	243	246	246	250	258	268	280	276	274	268	260	242	239	239	241	263	270	285	282	277	274	242	234
Mar	216	211	212	211	215	233	247	247	247	259	253	254	246	234	240	239	248	253	252	259	253	239	228	225
Apr	206	204	202	202	199	212	226	232	235	236	235	233	218	226	222	217	234	242	241	236	236	230	213	203
May	199	195	188	187	190	199	208	214	218	221	217	223	230	244	261	274	262	269	259	256	251	243	228	211
Jun	241	223	217	217	215	215	215	233	237	236	254	264	284	299	322	334	348	352	353	350	330	307	282	260
Jul	266	251	241	234	239	242	249	270	284	292	306	326	346	369	383	398	411	399	393	379	361	338	310	285
Aug	267	255	245	239	239	244	252	266	271	276	289	305	320	344	359	375	385	389	388	377	361	336	306	283
Sep	251	243	231	227	222	223	222	223	226	236	251	272	296	311	337	350	362	370	365	354	331	308	282	257

6
 7 **Q. WHAT ARE BLACK HILLS POWER’S CONCLUSIONS BASED UPON THE**
 8 **SYSTEM LOAD STUDY?**

9 A. The system is a dual peaking system with peaks consistently occurring during the
 10 summer months of June-September and winter months of January-February.

11 **VII. CUSTOMER LOAD STUDY**

12 **Q. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?**

13 A. The purpose of this section of testimony is to present the results of the Customer Load
 14 Study performed by Black Hills Power. Customer Load Study results are applied to
 15 develop hourly demand data used for the allocation of production, transmission, and
 16 distribution plant-in-service to customer classes. The methodologies used to allocate
 17 costs based upon customer demand are described later in my testimony.

1 **Q. WHAT IS A CUSTOMER LOAD STUDY?**

2 A. A customer load study develops customer class hourly demand for the allocation of
3 production, transmission, and distribution plant-in-service costs used in a CCOSS. The
4 customer load study analyzes hourly customer meter data from the AMI meters installed
5 at each customer's metering point. The meters measure the amount of energy used at the
6 customers' premises and is aggregated by customer class to produce demand curves.

7 **Q. WHAT IS A DEMAND CURVE?**

8 A. A demand curve refers to the graph of customer class demand produced when hourly
9 kilowatt data resulting from a load study is measured across time. The demand curves
10 provide the basis for how costs are allocated to each customer class. Customer class
11 hourly demand can be used to show the different characteristics of each class, and
12 between classes, according to use patterns with variations during different seasons, days
13 of the week, and time-of-day.

14 **Q. HOW DOES HAVING AMI METER DATA IMPACT THE ACCURACY OF THE**
15 **ALLOCATIONS OF PLANT-IN-SERVICE COSTS?**

16 A. Customer load has traditionally been based upon a statistical sample of customers that
17 would be representative of the customers in a class. Now, the availability of AMI meter
18 data for the measurement of energy consumed by all metered customers has a positive
19 impact upon the accuracy of the cost allocations in the CCOSS based upon customer
20 class demand. A Customer Load Study based upon AMI meter data for all metered
21 customers uses customer meter level data. Because the customer meter data is at the
22 individual meter level, Black Hills Power now has data for all customers on metered
23 service.

1 **Q. HAS BLACK HILLS POWER USED SAMPLE DATA FOR THIS PROCEEDING?**

2 A. No sample data has been used in the load research conducted for this proceeding.

3 **Q. ARE THERE ANY CUSTOMER CLASSES WHERE AUTOMATED METERING**
4 **INFRASTRUCTURE (“AMI”) INTERVAL DATA WAS NOT AVAILABLE?**

5 A. Yes. Black Hills Power has some lighting customer classes that are non-metered, thus
6 AMI interval data is not available for use in a load study for these lighting customer
7 classes.

8 **Q. WHY ARE SOME LIGHTING CLASSES NOT METERED?**

9 A. Lights consume a fixed amount of energy based upon the wattage of each fixture, so the
10 amount of energy consumed can be determined simply by multiplying the wattage of
11 each fixture by the number of hours of illumination for billing of customers. Metering
12 for lighting would be costly and would not yield useful information or benefits to
13 customers or Black Hills Power.

14 **Q. WHAT METHOD HAS BEEN USED TO DETERMINE THE HOURLY DEMAND**
15 **FOR NON-METERED LIGHTING?**

16 A. Since non-metered lighting does not have AMI interval data available, an hourly data set
17 was developed from available information to arrive at the hourly demand for non-metered
18 lighting customers. The calculation of an hourly data set is a detailed process involving
19 the use of sunrise and sunset data from the United States Naval Observatory (“USNO”)
20 and billing data by rate ID.

1 **Q. WHAT ARE THE CUSTOMER CLASSES INCLUDED IN THE CUSTOMER**
2 **LOAD STUDY?**

3 A. Customer class hourly load (i.e., demand) has been included in the load study for all
4 customer classes, which are as follows:

- 5 • Residential Service
- 6 • Small General Service
- 7 • General Service
- 8 • Large General Service
- 9 • Industrial Contract Service
- 10 • Water Pumping/Irrigation
- 11 • Lighting

12 **Q. HOW WAS THE CUSTOMER LOAD STUDY DEVELOPED FOR THIS**
13 **PROCEEDING?**

14 A. The compilation of data and processes required to develop the customer load study for
15 this proceeding can be summarized in the following stages:

- 16 • AMI interval data processing.
- 17 • The aggregation of interval data into hours.
- 18 • Adjustments for time changes.
- 19 • Calculation of hourly non-metered customer class lighting demand.
- 20 • The addition of Transmission and Distribution (“T&D”) losses to the hourly
21 customer class demand.
- 22 • Association of system hourly load at generation to hourly customer class demand.
- 23 • Determination of the hourly customer class demand for each allocation method.

1 **Q. HOW DID BLACK HILLS POWER USE THE RESULTS OF THE LOAD STUDY**
2 **IN THE CCOSS?**

3 A. The load study results provide inputs used in the CCOSS for the allocation of production,
4 transmission, and distribution costs. The method employed for the allocation of plant-in-
5 service costs based upon customer class demand.

6 **VIII. DEMAND ALLOCATION**

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

8 A. This section of testimony describes and provides support for Black Hills Power’s
9 methods used for allocating production, transmission, and distribution system costs.

10 **Q. PLEASE DESCRIBE DEMAND ALLOCATION.**

11 A. Demand allocation refers to the use of customer class demands on the electric system to
12 allocate production, transmission, and distribution system plant-in-service costs. When
13 using customer class demand to allocate plant-in-service costs, National Association of
14 Regulatory Utility Commissioners (“NARUC”) Manual provides multiple alternative
15 methods.²

16 **Q. WHAT ARE THE DIFFERENT DEMAND ALLOCATION METHODS?**

17 A. The NARUC Manual describes methods that can be used for demand allocation. Black
18 Hills Power is proposing to use three different methods for the allocation of plant-in-
19 service costs based upon jurisdictional and customer class demand in this proceeding.
20 Two methods use the customer class Non-Coincident Peak (“NCP”), and one uses the
21 customer class average and excess method for cost allocations.

² Electric Utility Cost Allocation Manual, National Association of Regulatory Utility Commissioners, January 2022.

1 **Q. WHAT IS THE PURPOSE OF DETERMINING THREE DIFFERENT TYPES OF**
2 **CUSTOMER CLASS PEAK DEMAND?**

3 A. A coincident peak demand is used to allocate costs when it is appropriate to allocate costs
4 based upon customer class demand on the system at the same time or is coincident with
5 the monthly system peak. Non-coincident peak demand is used when a measure of the
6 maximum customer class demand, regardless of when the class peaks, is appropriate for
7 the allocation of plant-in-service. Average and excess demand is used when production
8 plant based upon a combination of class average and non-coincident peak demand.

9 **Q. WHICH DEMAND ALLOCATION METHODS DOES BHP PROPOSE TO USE**
10 **IN THIS PROCEEDING?**

11 A. Black Hills Power proposes to continue using the Average and Excess ("A&E") method
12 to allocate production plant-in-service costs and the NCP method of allocating T&D
13 system plant-in-service related costs.

14 **Q. WHAT IS A CP?**

15 A. The CP is the hour of the month or a year when the maximum system load occurs. The
16 demand that is measured during each system peak hour is the customer class CP for each
17 class because it coincides with the system peak.

18 **Q. WHAT IS A NCP?**

19 A. In contrast with the CP, a NCP is the measured maximum customer class demand that
20 occurs during any hour of a month or year for each customer class. The maximum
21 demand for each customer class is determined independently of the other customer
22 classes or the monthly system peak load.

1 **Q. PLEASE DESCRIBE HOW “AVERAGE AND EXCESS” DEMAND IS USED FOR**
2 **THE ALLOCATION OF PRODUCTION PLANT.**

3 A. As noted in the NARUC Cost Allocation Manual, the average and excess demand
4 allocation factor consists of two parts.³ The first component of each class's allocation
5 factor is its proportion of total system average demand. The second component of each
6 class's allocation factor is the excess demand. The excess demand is the portion of
7 demand above, or more than, the system average demand. The combination of the
8 average demand and excess demand into a weighted average allocation allows for the
9 base load demand of all customer classes to be combined with the customer class demand
10 attributable to peak load demand. This methodology is sometimes referred to as the
11 “A&E Method.”

12 **Q. PLEASE DESCRIBE WHY THE A&E METHOD IS APPROPRIATE.**

13 A. This approach was used in the last rate review and is appropriate because it ensures that
14 all customer classes are assigned a minimum level of cost responsibility for demand-
15 related costs while basing that responsibility on the load used during the highest use
16 months. The NCP load represents the peak demands placed on the system and reflects
17 how production costs are driven by peak class load.

³ Electric Utility Cost Allocation Manual, National Association of Regulatory Utility Commissioners, January 2022. pages 49-52.

1 **Q. WHY IT IS APPROPRIATE TO USE THE NCP METHOD TO ALLOCATE**
2 **TRANSMISSION PLANT?**

3 A. The use of the NCP is the most appropriate method for the allocation of transmission
4 plant costs for Black Hills Power because it allocates transmission plant costs to those
5 customer classes peak demand.

6 Unlike generation resources, decisions to build transmission plant-in-service do
7 not entail trade-offs between capital costs and energy costs. The same type and size
8 transmission line would be built to meet a given maximum load regardless of whether the
9 line is expected to be lightly loaded at times or heavily loaded at other times. Thus, an
10 average and excess type of allocation method, which has an average demand (i.e., energy)
11 component, is not appropriate for allocating transmission costs. An NCP allocation fairly
12 and reasonably reflects the impacts of customer loads upon the transmission system
13 investment.

14 **Q. PLEASE DESCRIBE WHY IT IS APPROPRIATE TO USE THE NCP METHOD**
15 **TO ALLOCATE DISTRIBUTION PLANT.**

16 A. The most appropriate method for allocation of distribution plant cost is the NCP method,
17 as it allocates costs based upon the demands placed upon distribution assets. Distribution
18 plant investment decisions are made to meet customer class demands whenever they
19 occur and not to meet only the demand coincident with the system peak. Accordingly,
20 the use of the NCP method for the allocation of distribution plant-in-service follows
21 distribution plant investment decisions. Support for the use of the NCP method for the
22 allocation of distribution plant-in-service can be found in the NARUC Manual:

23 The NCP method attempts to give recognition to the maximum demand
24 placed upon a system during the year by all customers. This method is based

1 upon the theory that facilities are sized to meet these maximum demands.
2 Therefore, the costs of the facilities are allocated in accordance with each
3 customer's contribution to the sum of the maximum demands of all
4 customers imposed on the facilities.⁴
5

6 **IX. DEMAND ALLOCATION MODEL**

7 **Q. WHAT IS THE PURPOSE OF THE DEMAND ALLOCATION MODEL?**

8 A. The Demand Allocation Model is used to establish the customer class demand allocators
9 utilized in the CCOSS. The Demand Allocation Model is an internally developed model
10 that was utilized in Black Hills Power's last rate review. The Demand Allocation Model
11 is used to calculate the A&E allocator for production related costs; the NCP allocator that
12 is used for transmission-related costs; and the NCP allocator that is used for the allocation
13 of distribution-related costs, and the system energy costs, including losses.

14 **Q. HOW HAVE THE RESULTS OF THE DEMAND ALLOCATION MODEL BEEN**
15 **INCORPORATED INTO THE CLASS COST OF SERVICE STUDY?**

16 A. The results from each of the two demand allocators ("A&E" and "NCP") are entered as
17 inputs in kW to each customer class in the CCOSS.

18 **X. PRIMARY AND SECONDARY DISTRIBUTION COST STUDY**

19 **Q. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?**

20 A. This section of my testimony describes how Black Hills Power's distribution plant assets
21 were designated as either "primary" or "secondary" in nature. The allocation of
22 distribution plant-in-service cost requires the proper association of primary and secondary
23 assets to the appropriate customer classes.

⁴ National Association of Regulatory Utility Commissioners (1992), Electric Utility Cost Allocation Manual, Chapter 6, p. 80.

1 **Q. WHAT IS THE DIFFERENCE BETWEEN PRIMARY AND SECONDARY**
2 **DISTRIBUTION?**

3 A. Primary distribution is the portion of the electric system connecting line transformers to
4 substations. Secondary distribution is the portion of the electric system that connects line
5 transformers to customer service laterals.

6 **Q. WHICH DISTRIBUTION PLANT IS ALLOCATED BETWEEN PRIMARY AND**
7 **SECONDARY CUSTOMERS?**

8 A. The allocation of distribution plant is first allocated on demand using the NCP method
9 described above, with some plant further allocated to primary and secondary customers
10 based upon a review of plant-in-service by FERC Accounts. Plant booked to FERC
11 Accounts 364 through 367 are allocated between primary and secondary customers.

12 **Q. HOW WERE THE PRIMARY AND SECONDARY ALLOCATIONS FOR FERC**
13 **ACCOUNTS 364 THROUGH 367 DEVELOPED FOR THIS PROCEEDING?**

14 A. Distribution system plant-in-service booked cost detail was obtained from Black Hills
15 Power's plant accounting system for FERC Accounts 364 through 367. For a limited
16 number of asset types where the asset description was incomplete or indeterminate, a
17 50/50 allocation was reasonable to use for those assets.

18 **Q. IS THIS OVERALL METHOD OF DETERMINING WHICH DISTRIBUTION**
19 **PLANT ASSETS ARE PRIMARY AND WHICH ARE SECONDARY**
20 **APPROPRIATE?**

21 A. Yes. The categorization of distribution plant-in-service costs in FERC Accounts 364
22 through 367 by asset type is reasonable and this method was approved for use by Black
23 Hills Power in the last Rate Review.

1 **Q. HOW ARE THE PRIMARY AND SECONDARY ALLOCATIONS USED IN THE**
2 **CLASS COST OF SERVICE STUDY?**

3 A. The allocation of primary and secondary plant-in-service costs is accomplished using
4 percentage allocations by FERC account. The percentages are determined in the Primary
5 and Secondary Cost Study and entered as inputs into the CCOSS.

6 **XI. METER COST STUDY**

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

8 A. The purpose of this section of my testimony is to describe how the meter cost study was
9 conducted and how the study results are used in the CCOSS.

10 **Q. WHAT IS A METER COST STUDY?**

11 A. A meter cost study is conducted to develop the customer class costs used in the CCOSS
12 to appropriately assign meter-related costs to each customer class.

13 **Q. PLEASE DESCRIBE HOW THE METER COST STUDY WAS DEVELOPED**
14 **FOR THIS CASE.**

15 A. The meter cost study is based upon the actual count of meters in service as of September
16 30, 2025, by meter model and customer rate ID as shown in Exhibit DNH-6.

17 **Q. ARE THERE ANY DIFFERENCES BETWEEN THE METER COST STUDIES**
18 **FOR THIS PROCEEDING AND THE LAST RATE REVIEW?**

19 A. Yes. The meter cost study for this proceeding was conducted using the cost of meters
20 recorded in Black Hills Power's customer information billing system. In the last Rate
21 Review the allocation of meter costs was based upon the replacement costs of the
22 installed meters. An allocation based upon the booked cost is consistent with the electric
23 meter cost studies used in all electric utility rate reviews since the last Black Hills Power

1 rate review. Approximately 98.5% of the meters were manufactured between 2007-2011,
2 the cost of the individual meters by manufacturer model would not vary significantly due
3 to changes in cost during the period when most meters were manufactured.

4 **XII. PROPOSED RATES**

5 **Q. HAVE YOU PREPARED A SUMMARY OF THE PROPOSED RATES BY RATE**
6 **SCHEDULE?**

7 A. Yes. Exhibit DNH-7 details the current and proposed rates by rate schedule including the
8 monthly customer charge, kilowatt hour charges, and capacity charges. The proposed
9 rates are also shown in Figures DNH-8, 9, and 10 below.

10 **Table DNH-8: Residential and General Service Customer Charge**

Customer Class	Current Customer Charge	Proposed Customer Charge	\$ Change
Residential Regular Service	\$12.00	\$12.75	\$0.75
Residential Total Electric Service	\$15.00	\$15.00	\$0.00
Residential Demand Service	\$17.00	\$17.00	\$0.00
Small General Service	\$15.00	\$15.50	\$0.50
General Service	\$15.00	\$24.50	\$9.50
General Service Total Electric	\$20.00	\$24.50	\$4.50
General Service Energy Storage	\$14.00	\$24.50	\$10.50

1 **Table DNH-9: Proposed Residential and General Service Energy Charges**

Customer Class	Energy Charge				
	\$/kWh	1st Block \$/kWh	2nd Block \$/kWh	On Peak \$/kWh	Off Peak \$/kWh
Residential Regular Service	\$0.12602				
Residential Total Electric Service	\$0.10147				
Residential Demand Service	\$0.02948				
Small General Service	\$0.13101				
General Service		\$0.10057	\$0.08046		
General Service Total Electric		\$0.06783	\$0.06000		
General Service Energy Storage				\$0.04209	\$0.02105

2
3 **Table DNH-10: Proposed Residential and General Service Capacity Charges**

Customer Class	Capacity Charge				
	\$/kW	1st Block \$/kW	2nd Block \$/kW	On Peak \$/kW	Off Peak \$/kW
Residential Regular Service					
Residential Total Electric Service					
Residential Demand Service	\$12.00				
Small General Service					
General Service		\$12.00	\$10.80		
General Service Total Electric		\$12.00	\$10.80		
General Service Energy Storage				\$16.00	\$0.00

4
5 **Q. HAVE YOU CALCULATED THE BILL IMPACT FOR THE AVERAGE**
6 **RESIDENTIAL AND GENERAL SERVICE CUSTOMER?**

7 A. Yes. Based upon the average bill for Residential and General Service customers, these
8 customers would see an increase to their bills as shown in Exhibit DNH-8 and Table
9 DNH-11 below.

1

Table DNH-11: Average Residential and General Service Bill Impacts

Customer Class	Total Average Monthly Bill			
	Under Current Rates	Under Proposed Rates	Change	%
Residential Regular Service	\$98.96	\$124.08	\$25.13	25.4%
Residential Total Electric Service	\$131.63	\$167.18	\$35.55	27.0%
Residential Demand Service	\$201.76	\$253.41	\$51.66	25.6%
Small General Service	\$171.86	\$183.51	\$11.65	6.8%
General Service	\$1,600.30	\$2,010.05	\$409.75	25.6%
General Service Total Electric	\$435.58	\$550.28	\$114.70	26.3%

2

3

XIII. CONCLUSION

4

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

5

A. My testimony presents Black Hills Power’s jurisdictional and class cost of service analyses and the resulting rate design. It explains updates to power factor treatment, retirement of closed schedules, and introduces a two-part Small General Service rate. The testimony relies on the System Load Study and AMI-based Customer Load Study, which confirm Black Hills Power is a dual-peaking system and support the use of the A&E and NCP allocation methods. It also describes the Primary and Secondary Distribution Cost Study and updated Meter Cost Study, which uses actual recorded meter costs. Together, these components support a revenue allocation and rate design that move each class toward its cost of service while moderating customer impacts.

10

11

12

13

14

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

15

A. Yes, it does.

VERIFICATION

This Direct Testimony and Exhibits of Douglas N. Hyatt is true and accurate to the best of my knowledge, information, and belief.

/s/ Douglas N. Hyatt
Douglas N. Hyatt