

Direct Testimony
Jennifer J. Cady

Before the Minnesota Public Utilities Commission

State of Minnesota

In the Matter of the Application of Minnesota Power
For Authority to Increase Rates for Electric Utility
Service in Minnesota

Docket No. E015/GR-23-155

Exhibit _____

RATE CASE OVERVIEW

November 1, 2023

TABLE OF CONTENTS

	Page
I. INTRODUCTION AND QUALIFICATIONS	1
II. MINNESOTA POWER AND OUR CUSTOMERS	8
III. MINNESOTA POWER IS EXECUTING STATE ENERGY POLICY.....	12
A. Customers.....	13
B. Climate	19
C. Community.....	22
IV. CHANGES SINCE THE COMPANY’S LAST RATE CASE	27
A. Clean Energy Transition & Workforce Needs	28
B. Taconite Outlook.....	30
C. Inflation/Cost Pressures	32
D. Aligning Costs with Appropriate Cost Recovery Mechanisms	35
V. INTRODUCTION TO THIS FILING	40
A. Revenue Requirements	40
B. Class Cost of Service and Rate Design	45
VI. INTRODUCTION OF WITNESSES	48
VII. CONCLUSION	51

1 I. INTRODUCTION AND QUALIFICATIONS

2 Q. Please state your name and business address.

3 A. My name is Jennifer Jae Cady, and my business address is 30 West Superior Street,
4 Duluth, Minnesota, 55802.

5
6 Q. By whom are you employed and in what position?

7 A. I am employed by ALLETE, Inc. (“ALLETE”), doing business as Minnesota Power
8 (“Minnesota Power” or the “Company”). I am currently the Vice President of
9 Regulatory and Legislative Affairs.

10
11 Q. Please summarize your qualifications and experience.

12 A. I have been employed by Minnesota Power for 12 years and have regulatory experience
13 in the electric industry that includes customer program development, renewable project
14 development, resource acquisition, integrated resource planning, integrated distribution
15 planning, and rate design.

16
17 In my current position as the Vice President of Regulatory and Legislative Affairs, I
18 lead a team that develops and executes Minnesota Power’s regulatory and legislative
19 strategy; identifies, tracks, and develops energy policy issues and positions; develops
20 and leads processes to engage diverse sets of interested stakeholders; and represents the
21 Company before the Minnesota Public Utilities Commission (“Commission”) in
22 stakeholder groups and at industry initiatives.

23
24 I graduated from the College of Saint Scholastica (*cum laude*) with a bachelor’s degree
25 in International Studies. I also hold a master’s degree in International Relations and
26 Conflict Resolution, with a minor in Comparative Security Issues from the American
27 Military University (*summa cum laude*). Focusing on my experience in public policy, I
28 completed a foreign policy internship at the Center for Strategic and International
29 Studies in Washington D.C. and currently serve on the Board of Directors for the Center
30 for Rural Policy and Development and as the Chair of the Duluth Area Chamber of
31 Commerce Board of Directors. Finally, I served as an intelligence professional in the

1 United States military for 20 years. I am originally from Hibbing, Minnesota and have
2 been a lifelong Minnesota resident.

3
4 **Q. What testimony do you provide in this proceeding?**

5 A. I provide an overview of the Company's case and its rate increase request in this
6 proceeding.

7
8 **Q. What are the Company's overall requests in this proceeding?**

9 A. Minnesota Power proposes an Interim Rate increase net of riders of \$63.8 million (8.6
10 percent overall) and a General Rate increase net of riders of \$89.1 million (12.0 percent
11 overall). Including rider costs being transferred to base rates, the Company seeks an
12 Interim Rate increase of \$102.6 million (13.8 percent) and a General Rate increase of
13 \$127.9 million (17.2 percent). Volume 1, Direct Schedule A-1 (IR) and Volume 3,
14 Direct Schedule A-1 summarize Minnesota Power's proposed Interim Rate and General
15 Rate revenues, respectively. The support for these requests is set forth in my testimony,
16 as well as the testimony of the other witnesses testifying on behalf of Minnesota Power,
17 and this overall filing.

18
19 **Q. At a high level, please explain why Minnesota Power is submitting this rate request.**

20 A. Minnesota Power has a long history of limiting rate increase requests to only those times
21 when increased cost recovery from our customers is absolutely necessary. For example,
22 we were able to avoid rate cases for more than a decade between 1994 and 2008, and
23 then again for another seven years between our 2009 and 2016 rate case filings. While
24 we filed a rate case in 2019, we worked with stakeholders to withdraw that case during
25 the height of the COVID-19 pandemic by addressing only those changes associated with
26 a single expiring sales contract. Our last rate case, submitted in 2021 and based on a
27 budget developed in the summer of 2021, did not capture the high inflation levels that
28 began in the summer of 2022 or the costs of additional utility resources—namely, our
29 people—necessary to deliver safe and reliable electric service while decarbonizing our
30 system. Our current rates also do not reflect a representative level of sales on a year-

1 over-year basis, and as such, our current rates do not provide an opportunity or ability
2 to recover our authorized rate of return.

3
4 Further, the Company must undertake significant investments now and in the years
5 ahead to support the transmission and generation changes necessary to achieve
6 Minnesota’s clean energy and climate goals. These investments require attracting and
7 retaining both debt and equity investors, which in turn require solid credit metrics and
8 ratings as well attractive returns on both debt and equity, in order to make the
9 investments that ultimately serve Minnesota Power customers. Finally, as Minnesota
10 Power is working to comply with new environmental compliance obligations,
11 appropriate cost recovery mechanisms are required moving forward.

12
13 As a result, the main drivers of Minnesota Power’s current rate increase request are:

- 14 1. The need to recover increased capital and operating and maintenance (“O&M”)
15 expenses as compared to the levels currently in rates, supporting high quality
16 utility service to customers;
- 17 2. Revenue changes and increased risk profile due to a significant concentration of
18 highly cyclical industrial customers; and
- 19 3. The need to ensure the Company’s costs are being recovered through the
20 appropriate cost recovery mechanism, including by transferring completed
21 projects and updated production tax credits from rider recovery to base rates and
22 by utilizing appropriate mechanisms to account for new state and federal
23 environmental requirements.

24
25 **Q. At a high level, please introduce Minnesota Power’s unique company risk.**

26 A. Minnesota Power is unique among its peers in regards to its customer concentration and
27 the nature of its largest customers’ industries, which creates significant financial risk to
28 the Company. Minnesota Power serves the natural-resources-based economy of
29 northern Minnesota, and its industrial customers primarily operate in the highly cyclical,
30 globally competitive industries of taconite mining and paper manufacturing. These
31 factors increase Minnesota Power’s risk in multiple ways:

- 1 • Nearly 70 percent of Minnesota Power’s retail sales are to industrial customers
2 in three industries: taconite mining, paper/pulp, or pipeline industries.
- 3 • Approximately 56 percent of Minnesota Power’s retail sales are generated by
4 only two customers: U.S. Steel and Cleveland-Cliffs, Inc.
- 5 • Recent mining company efforts to acquire U.S. Steel could put more than 55
6 percent of Minnesota Power’s retail sales in the hands of a single customer.
- 7 • Taconite mining customer sales have been highly variable and largely
8 unpredictable in recent years, with customer contracts guaranteeing only a very
9 small percentage of total annual sales revenue with increasingly small
10 opportunities to make up for lost load in the wholesale markets.
- 11 • Paper and pulp customer power purchases from Minnesota Power have declined
12 steadily in recent years.
- 13 • Minnesota Power’s load factors remain at more than 80 percent due primarily to
14 these industrial customers, which require highly dependable, dispatchable
15 resources. This drives the composition of the Company’s generation mix and
16 while the high load factor means customers benefit from the efficient use of the
17 system, it also means that the Company can suffer intense sales downturns
18 during difficult economic conditions.

19
20 Although Minnesota Power has mitigated rate impacts as much as possible for our
21 customers while also significantly decarbonizing our system, the Company’s current
22 financial circumstances necessitate this rate proposal to align rates with current costs
23 and revenues and to address continuing changes in customer energy needs.

24
25 **Q. Why should the risks facing the Company matter to its customers?**

26 A. A financially stable and healthy utility is critical to customers for several reasons. First,
27 our customers rely on Minnesota Power to provide safe, reliable, and environmentally-
28 sound electric service, as well as excellent customer programs and services. While we
29 have shown we can weather many challenges, Minnesota Power’s risk profile has
30 become more (not less) volatile in recent years, creating increased risks to its ability to
31 meet all of our customers’ needs in a given year.

1
2 Second, as discussed by Company witness Mr. Joshua D. Taran, credit ratings and
3 increased perception of the risks associated with the Company increase its costs of
4 obtaining the capital necessary to finance utility infrastructure and investments, which
5 are required for a transition to a clean energy future. While this case is not driven by
6 capital in-service amounts by themselves, we continue to invest in infrastructure
7 projects that are currently before the Commission for approval or in the planning stages
8 for upcoming construction. We must have access to capital—including during market
9 downturns or our own customer downturns—as well as the ability to obtain capital at
10 reasonable costs for customers. This Company has had the first-hand experience of its
11 negative financial outlook affecting its access to financial markets and capital during
12 market downturns. Our requests in this case are designed to avoid such situations in the
13 future, and to help ensure a reasonable cost of capital for our customers. Therefore,
14 when we refer to risk associated with the Company or the Company’s risk profile, we
15 mean both risks to the Company’s economic well-being and the corresponding risks to
16 the customers we serve.

17
18 Finally, a healthy utility can offer enhanced programming to customers, support
19 customers in their individual energy goals and circumstances, and also be a positive
20 presence within the communities it serves. For instance, a financially-sound utility can
21 provide assistance to energy-insecure and low-income customers; address individual
22 renewable energy goals and support customers as the clean energy transition progresses;
23 and sponsor programs that help customers improve their energy efficiency and attain
24 their conservation goals. A healthy utility can also support the larger communities it
25 serves by investing in local projects and serving as a good community partner for local
26 governments and organizations. The Company’s ability to manage the unique risks it
27 faces can therefore directly impact the customers and communities that it serves.

28
29 **Q. Are there any additional proposals in this case you would like to highlight?**

30 A. Yes. As I noted, much of this case is focused on aligning our cost recovery with current
31 revenues and costs, and to help align that cost recovery with the appropriate ratemaking

1 mechanisms. To do that, it is important to smooth the unique risks and benefits of
2 Minnesota Power's large industrial customer concentration, to moderate the downside
3 risks to the Company or the risks of triggering a rate case due to lost sales, and to
4 moderate the unique risks to customers of missing out on the benefits of increased sales
5 in between rate cases. Therefore, the Company is proposing a customer rate stabilization
6 mechanism. As described further in Company witness Mr. Frank L. Frederickson's
7 testimony, the proposed rate stabilization mechanism reduces the risk that a test year
8 will under- or over-predict test year sales, reduce the risk of a rate case triggered by a
9 downturn in large power operations in a given year, and increase rate predictability for
10 customers as increases and decreases in revenues will be tracked for future vetting and
11 recovery. Further, as discussed in the Direct Testimony of Company witness Mr. Taran,
12 ALLETE's credit rating agencies and credit ratings would likely favor the mechanism,
13 as the proposed mechanism shares both the rewards and risks of industrial customer
14 volatility with all customers.

15
16 **Q. How is your Direct Testimony organized?**

17 A. The remainder of my Direct Testimony is organized as follows:

- 18 • In Section II, I describe Minnesota Power and our customers;
- 19 • In Section III, I discuss how Minnesota Power is executing the energy policy of
20 the State of Minnesota;
- 21 • In Section IV, I describe changes since the Company's last rate case;
- 22 • In Section V, I provide an overview of the requests in this case, including
23 revenue requirements, revenue allocation, and rate design;
- 24 • In Section VI, I provide an introduction of witnesses in this case; and
- 25 • In Section VII, I conclude my Direct Testimony.

26
27 **Q. Please summarize your Direct Testimony.**

28 A. First, I provide an overview of ALLETE, Inc. and the Minnesota Power electric utility.
29 Specifically, I highlight how Minnesota Power serves one of the most unique customer
30 mixes of any utility in the country, consisting mostly of large industrial users on

1 Minnesota's Iron Range, and how the Company's economic environment affects this
2 rate case.

3
4 Second, I outline how Minnesota Power is executing state energy policy by delivering
5 value for customers, decarbonizing its system for the changing climate, and supporting
6 its customers and communities during the clean energy transition.

7
8 Third, I provide an overview of changes that have occurred since the Company's last
9 completed rate case, including a discussion of increased inflation and other cost
10 pressures affecting the Company's business; increased investments and workforce
11 needs associated with the clean energy transition; the outlook for our taconite mining
12 customers; and certain disconnects between our current costs and cost recovery
13 mechanisms.

14
15 Next, I provide an overview of the specific requests in this filing, which focus on
16 revenue requirement and rate design updates that reflect the Company's capital
17 investments, resource acquisitions, current and foreseeable load, and changes in
18 customer operations. I also explain, at a high level, how the Company has reduced costs
19 and continues to contain costs but also emphasize that continued employee reductions
20 to offset inflating costs are neither possible nor sustainable. Finally, I discuss the rate
21 impact of this rate increase request, including the net impact to customers as costs move
22 from current cost recovery riders into base rates, along with efforts the Company has
23 undertaken to mitigate rate increases for customers. I also provide an overview of why
24 the rate increase requested in this proceeding is just and reasonable, as further supported
25 by the broader filing.

26
27 Lastly, I introduce the other Minnesota Power witnesses who will present testimony in
28 this proceeding and introduce the subject matter of their Direct Testimony.

29

1 **II. MINNESOTA POWER AND OUR CUSTOMERS**

2 **Q. Please describe ALLETE.**

3 A. ALLETE is a reliable provider of competitively priced energy services in the upper
4 Midwest. ALLETE is comprised primarily of regulated energy businesses with some
5 additional non-utility, energy-focused businesses. Relative to its size, ALLETE is the
6 largest investor in renewable energy in the country. Minnesota Power is an operating
7 division of ALLETE and comprises the majority of ALLETE’s activities. In fact, net
8 income from Minnesota Power’s regulated operations was 69 percent of budgeted total
9 consolidated ALLETE net income in 2022. The remaining 31 percent of ALLETE's
10 budgeted consolidated net income comes primarily from the following wholly-owned
11 subsidiaries: ALLETE Clean Energy; BNI Energy; New Energy Equity; Superior
12 Water, Light & Power Company; and an investment in the American Transmission
13 Company. The Direct Testimony of Company witness Mr. Taran identifies ALLETE’s
14 other businesses and subsidiaries in more detail.

15
16 **Q. Please describe the Minnesota Power public utility.**

17 A. Minnesota Power is a public utility operating division of ALLETE. First incorporated
18 in 1906, Minnesota Power has been serving northern Minnesota for over a century and
19 currently provides electricity to more than 150,000 residential and commercial
20 customers, 14 municipal systems, and some of the nation’s largest industrial customers
21 across a 26,000 square mile service area located in central and northern Minnesota.

22
23 **Q. How does Minnesota Power serve its customers?**

24 A. Minnesota Power currently utilizes a diverse combination of wind, hydro, solar, coal,
25 biomass, and small amounts of natural gas generation, totaling nearly 2,400 megawatts
26 (“MW”) of capacity, to serve its customers. Since 2013, Minnesota Power has decreased
27 its thermal generation through coal plant retirements or re-missioning, while adding a
28 substantial volume of renewable energy to the power supply. In fact, Minnesota Power
29 has nearly tripled its renewable energy generation since 2014. As described in further
30 detail in the Direct Testimony of Company witness Ms. Julie I. Pierce, Minnesota Power
31 added significant renewable power purchases in 2020, which resulted in the Company

1 being the first utility in the state to deliver 50 percent renewable energy to customers.
2 Minnesota Power has most recently added approximately 20 MW of additional solar
3 generation in 2022 and 2023 in northern Minnesota, which aided in the local economic
4 recovery from the COVID-19 pandemic and provided unique investment in a
5 community impacted by a facility ceasing coal operations by leveraging the use of local
6 labor and locally manufactured solar panels. Around the same time, the Company
7 implemented additional diversity, equity, and inclusion procurement practices. Most
8 recently, the Commission approved Minnesota Power’s 2021 Integrated Resource Plan
9 (“IRP”), under which the Company will add another 700 MW of new renewable
10 resources to its power supply by 2030.

11
12 Minnesota Power’s transmission system operates on voltages generally between 115
13 kilovolts (“kV”) to 500 kV and serves local loads across Minnesota Power’s service
14 territory, which spans more than 26,000 square miles of central and northeastern
15 Minnesota. As Company witness Mr. Daniel W. Gunderson describes in his Direct
16 Testimony, Minnesota Power’s transmission system is also critical in supporting the
17 larger regional transmission system’s overall reliability. Minnesota Power’s distribution
18 system is comprised of 6,216 miles of distribution lines and 201 distribution substations,
19 reaching from International Falls in the north to Royalton in the south, and from Duluth
20 in the east to as far west as the Long Prairie and Park Rapids communities. Much of this
21 area consists of rural communities, which present unique issues when planning for
22 investment in the distribution system.¹

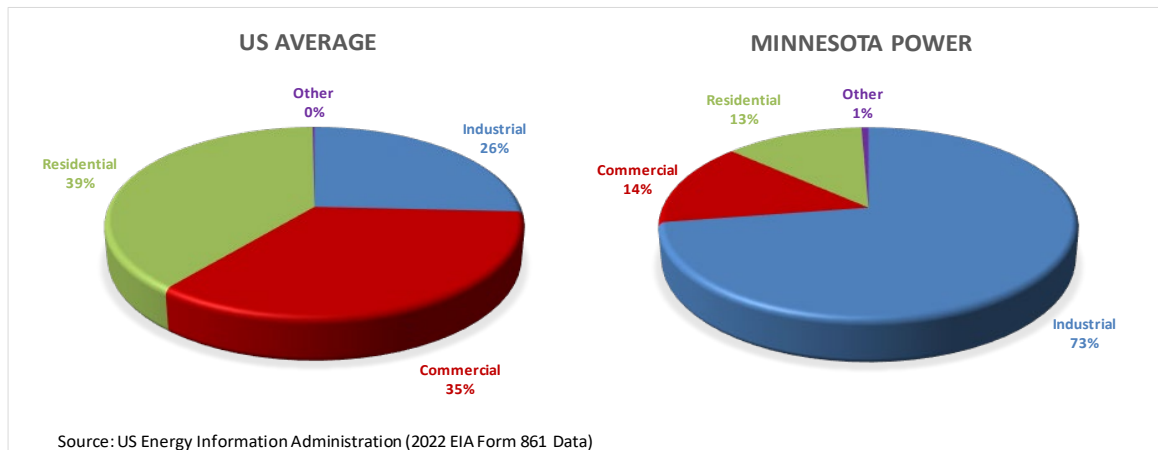
23
24 Through its generation, transmission, distribution, and customer experience assets,
25 Minnesota Power strives to always remain customer focused as it delivers safe, reliable,
26 affordable, and increasingly clean electricity to customers and communities across
27 northeastern and central Minnesota.

¹ Detailed information about Minnesota Power’s distribution system can be found in the 2023 Integrated Distribution Plan filed in Docket No. E015/M-23-258 on October 16, 2023.

1 **Q. Please provide additional information about Minnesota Power’s customers.**

2 A. In 2022, Minnesota Power’s retail customer mix included approximately 125,200
3 residential, 23,800 commercial, 400 industrial customers and 1,000 public authorities
4 and lighting customers, with programs and services for each customer class. As noted
5 previously, Minnesota Power’s system is dominated by industrial customers, with
6 approximately 73 percent of retail kilowatt-hour (“kWh”) energy sales delivered to this
7 customer class alone in 2022, while only 13 percent of sales to the residential class and
8 14 percent of retail sales to commercial customers. For comparison, the average utility
9 in the United States sells just 26 percent of its retail kWh energy sales to industrial
10 customers and sells 39 percent and 35 percent of retail kWh energy sales to residential
11 and commercial customers, respectively, as shown in Figure 1 below.

12
13 **Figure 1. Minnesota Power's Customer Concentration is Unique**

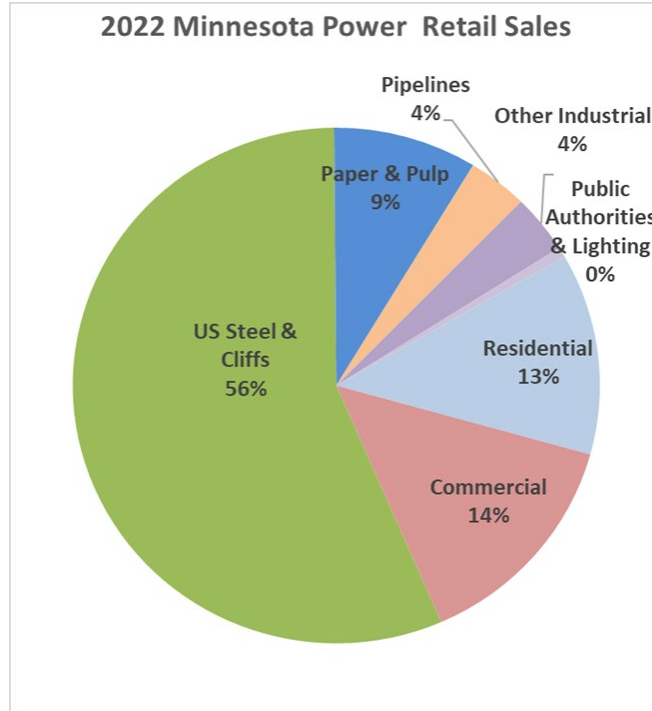


14
15
16 **Q. Please describe how this customer concentration creates unique circumstances for the Minnesota Power system.**

17
18 A. Minnesota Power’s large industrial customers are unique in both their high overall
19 percentage of revenue and kWh energy usage on the system, as well as the individual
20 size of the customers relative to a typical utility. As depicted in Figure 2 below,
21 Minnesota Power’s large industrial customers primarily consist of taconite producers.
22 The industries that Minnesota Power serves, like the Company itself, are significant

1 components of the regional economy, as discussed in more detail in the Direct
2 Testimony of Company witness Mr. Frederickson.

3
4 **Figure 2. Minnesota Power Retail Energy Sales by Customer Class (2022)**



5
6
7 Additionally, Minnesota Power’s industrial customer operations are unique, as they use
8 large quantities of energy and typically operate around the clock every day of the year.
9 As a result, when the industrial customers are operating, the energy usage pattern of the
10 industrial customer class is relatively stable compared to the other customer classes.
11 This stable usage contributes to more consumption of energy in off-peak hours than
12 other customer classes, which is typically lower cost energy. The size and operations of
13 these industrial customers results in Minnesota Power having one of the highest load
14 factors of any utility in the country, over 80 percent, which allows our system to be used
15 very efficiently, creating additional value for all Minnesota Power customers.

16
17 However, the energy usage from this globally competitive and price-sensitive industrial
18 customer class can vary widely from year-to-year, which dramatically increases the risk
19 profile of Minnesota Power compared to other electric utilities in the state and nation,

1 as further discussed by Company witness Mr. Taran. I also address the relationship
2 between these unique factors and the drivers of this rate case later in my Direct
3 Testimony.

4 5 **III. MINNESOTA POWER IS EXECUTING STATE ENERGY POLICY**

6 **Q. What is the purpose of this section of your testimony?**

7 A. In this section of my testimony I discuss how Minnesota Power’s business activity
8 supports the energy policy of the State of Minnesota, and why this policy alignment and
9 recent operational changes are relevant considerations in this rate proceeding.

10
11 **Q. What is Minnesota Power’s understanding of Minnesota’s energy policy goals
12 directed by the state legislature?**

13 A. The State of Minnesota has a number of energy policy objectives set forth in state
14 statutes and implemented through Commission administrative rules. State policy
15 guidance related to customers includes regulation to assure reliable electric service at
16 just and reasonable rates,² a goal for retail electric rates to be at least five percent below
17 the national average for each customer class,³ and a specific directive to ensure
18 competitive electric rates for energy-intensive trade-exposed customers.⁴ Additional
19 energy policy goals relating to the climate include Greenhouse Gas Emissions reduction
20 targets,⁵ renewable energy standards — including a solar energy standard⁶ — and
21 energy conservation goals, including the Energy Conservation and Optimization
22 (“ECO”) Policy Goal.⁷ Most recently, the State of Minnesota enacted a carbon free
23 electricity generation standard, requiring Minnesota electric public utilities to generate
24 or procure sufficient electricity from carbon-free technologies so that 80 percent of total
25 retail electric sales to retail customers in Minnesota are generated from carbon-free
26 energy technologies by 2030, increasing to 100 percent by 2040.⁸

² Minn. Stat. § 216B.03 (2022).

³ Minn. Stat. § 216C.05 (2022).

⁴ Minn. Stat. § 216B.1696 (2022).

⁵ Minn. Stat. § 216H.02 (2022).

⁶ Minn. Stat. § 216B.1691 (2022).

⁷ Minn. Stat. § 216B.2401 (2022).

⁸ Minn. Stat. § 216B.1691, subd. 2g (2023 Supp.).

1
2 **Q. Does the State of Minnesota identify other goals for electric utilities and electric**
3 **utility service?**

4 A. Yes. Fundamentally, the Standard of Service statute in Minnesota requires every public
5 utility to provide “safe, adequate, efficient, and reasonable service.”⁹ Likewise, the
6 Department of Commerce – Division of Energy Resources (“Department”) produces a
7 State Energy Policy and Conservation Report, informally referred to as the Quadrennial
8 Report, which documents major emerging trends and issues in Minnesota’s energy
9 supply, consumption, conservation, and costs.¹⁰ The most recent Quadrennial Report,
10 issued on March 1, 2021, states that “Commerce is dedicated to ensuring that Minnesota
11 has a reliable energy system well into the future – an energy system that meets the
12 State’s economic needs, provides energy resources at costs that are reasonable, and
13 minimizes environmental impacts from production and consumption.” In short, there
14 are many interrelated policy goals for public utilities in the State of Minnesota.

15
16 **Q. To what extent has Minnesota Power aligned itself with these state policy goals?**

17 A. The goals outlined above are also Minnesota Power’s shared goals, and the Company
18 has been pursuing and achieving them for many years. As previously noted and
19 discussed in more detail below, our *EnergyForward* strategy is focused on the holistic
20 sustainability of our customers, the climate, our communities, and the Company itself.
21 Below, I discuss how Minnesota Power is meeting state policy goals for the holistic
22 benefit of our customers, the climate, and the communities we serve.

23
24 **A. Customers**

25 **Q. To what extent is Minnesota Power meeting the policy goals of providing reliable**
26 **and efficient service?**

27 A. Minnesota Power recognizes the high value its customers place on safe, reliable, and
28 affordable service and strives to provide that to all customers across its service territory
29 in northeastern and central Minnesota. As described in the Company’s most recent

⁹ Minn. Stat. § 216B.04 (2022) and Minn. Rules Ch. 7826.

¹⁰ Minn. Stat. § 216C.18 (2022).

1 Safety, Reliability and Service Quality (“SRSQ”) report,¹¹ Minnesota Power customers
2 experience a high level of reliability with respect to their electric service. In 2022, the
3 Company provided over 99 percent reliability for its residential, commercial, and
4 industrial customers. Minnesota Power has maintained this high level of reliability
5 despite significant change in the Company’s regional baseload generation footprint and
6 increases in extreme weather in recent years. Additional discussion on system reliability
7 can be found in the Direct Testimony of Company witness Mr. Gunderson.

8
9 **Q. Are Minnesota Power’s rates consistent with the policy goal of providing**
10 **reasonable rates?**

11 A. Yes. Minnesota Power’s rates are competitive among other utilities, especially
12 considering the significant amount of decarbonization that has taken place in Minnesota
13 Power’s energy supply since 2005. While we are seeking a rate increase in this
14 proceeding due in part to inflation-driven cost increases, as utilities must do from time
15 to time, our rates remain well below national averages. According to the EIA, Minnesota
16 Power’s average electric rate (revenue/kWh sold) is 10.26 cents/kWh; this is 17 percent
17 lower than the U.S. average of 12.36 cents/kWh.

18
19 We have accomplished this in part by working carefully year over year to control costs.
20 As Company witness Mr. Colin B. Anderson notes, Minnesota Power successfully
21 managed O&M increases to an average annual increase of 1.1 percent over many years,
22 even as annual inflation rates averaged approximately 3 percent. We continue to work
23 to contain costs in a variety of ways, as discussed by Company witnesses Mr. Anderson,
24 Ms. Laura E. Krollman, Mr. Gunderson, and Mr. Todd Z. Simmons. Thus the Company
25 has maintained reasonable and affordable rates for all classes while also delivering high
26 value to customers through rapid system decarbonization and the development of a
27 plethora of new programs and services, including electric vehicle (“EV”), solar garden,
28 energy conservation, and affordability programs.

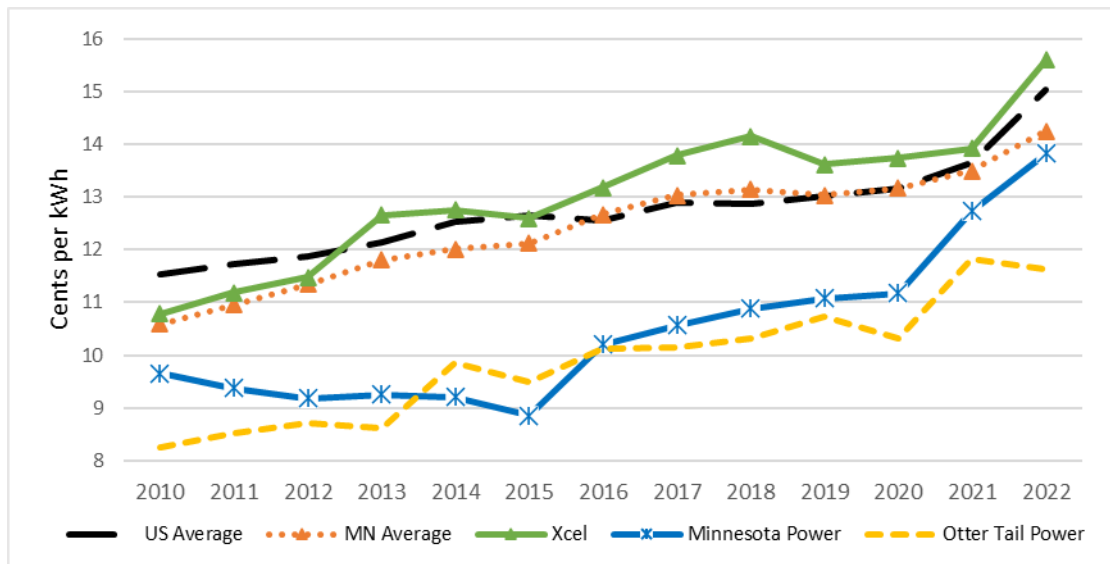
29

¹¹ *In the Matter of Minn. Power’s 2022 Safety, Reliability and Serv. Quality Standards Report*, Docket No. E015/M-23-75, SAFETY, RELIABILITY AND SERV. QUALITY STANDARDS REPORT (Apr. 3, 2023).

1 **Q. How have Minnesota Power’s residential rates changed over the past decade**
2 **relative to other utilities in the State and nation?**

3 A. Minnesota Power residential customers have historically enjoyed below-average rates
4 among investor-owned and cooperative utilities in Minnesota for all residential
5 customers, regardless of economic status. There is no doubt that costs have increased,
6 both for Minnesota utilities and on average across the country, as the pace of the clean
7 energy transition and inflationary pressures have intensified, as illustrated in Figure 3
8 below. Specifically, Figure 3 plots the last decade of residential rates for the nation, state
9 (including cooperative and investor-owned utilities), and several Minnesota electric
10 public utilities. Overall, Minnesota Power’s residential rates are currently
11 approximately three percent lower than the state average.
12

13 **Figure 3. Minnesota Residential Electric Rates**



14
15
16 **Q. How is the Company supporting those residential customers who may require**
17 **assistance with their energy bills?**

18 A. Energy affordability is a shared priority between the Company, its customers, other
19 stakeholders, and the State of Minnesota. Broad assistance like the Low-Income Home
20 Energy Assistance Program (“LIHEAP”) is critical, but also currently only reaches
21 about one-third of eligible households. As such, Minnesota Power has made it a priority

1 to increase outreach efforts to expand the LIHEAP pool and bring these much-needed
2 dollars to customers in its service territory. This includes a first-in-the-state option for
3 customers to self-declare their income in order to qualify for, and participate in, the
4 Company’s income-qualified programs and an income-and-usage qualified rate
5 discount, an important effort to remove barriers for customers to access needed
6 assistance.

7
8 Further, the Company has worked collaboratively with low-income advocates to modify
9 its Customer Affordability of Residential Electric (“CARE”) program to ensure a best-
10 in-class low-income affordability program. Additionally, Minnesota Power currently
11 delivers a first-of-its-kind in Minnesota Low Income Solar Grant Program to increase
12 equitable access to renewable energy by low-income customers. Energy conservation
13 efforts are also foundational to all customer programming, and Minnesota Power offers
14 conservation program resources directly targeted to low-income customers through its
15 Energy Partners program. The Energy Partners program helps customers to decrease
16 overall energy consumption and lower their electric bills. Finally, the Company’s
17 residential rate structure includes specific discounts for qualified low-income customers
18 that will help these customers continue to realize some of the lowest electric rates in the
19 state.

20
21 **Q. Can you provide additional information regarding how Minnesota Power is**
22 **empowering customers to conserve while also saving money on their overall**
23 **electric bills?**

24 **A.** Yes. Minnesota Power was the first investor-owned utility in the state to deploy
25 Advanced Metering Infrastructure (“AMI”) meters to nearly all residential customers.
26 Minnesota Power attained approval to be the first Minnesota utility to transition to a
27 default Time-of-Day (“TOD”) rate design for all residential customers, which will help
28 customers manage their bills and reduce their energy costs by shifting energy usage to
29 times when energy pricing is lower. Building on its TOD Pilot Program that had been

1 in place since 2014,¹² on October 1, 2022 Minnesota Power began transitioning
2 residential customers to new default TOD rates that were approved by the Commission
3 in 2021.¹³ Phase 1 of the TOD rollout is currently underway, with approximately 2,700
4 customers enrolled in the TOD rate as of August 17, 2023.¹⁴ The new TOD rate features
5 adders/credits to the standard energy rate based on when usage occurs during three time
6 periods (on-peak, off-peak, and super-off peak).

7
8 The Company also offers robust and effective programs for energy conservation to assist
9 customers in reducing usage and keeping the average total bill for a residential customer
10 low, even as rates increase.

11
12 **Q. Is there evidence Minnesota Power is succeeding in supporting customers with**
13 **these efforts?**

14 A. Yes. As noted above, Minnesota Power’s long history of success in energy conservation
15 and our unique northern lakeside climate¹⁵ have led customers to consume less
16 electricity than others in the State, keeping total bills low. The average Minnesota
17 residential customer used almost 9,300 kWh in 2022, while the average Minnesota
18 Power residential customer used just over 8,400 kWh. Figure 4 below shows how this
19 relatively low per-customer usage, combined with some of the lowest rates in the State,
20 has translated to affordable monthly bills for Minnesota Power’s residential customers
21 when compared to other electricity providers in the state and across the nation.

22

¹² See *In the Matter of Minnesota Power’s Petition for Approval of a Temporary Rider for Residential Time-of-Day Rate for Participants of the Smart Grid Advanced Metering Infrastructure (“AMI”) Pilot Project*, Docket No. E015/M-12-233, ORDER (Nov. 30, 2012).

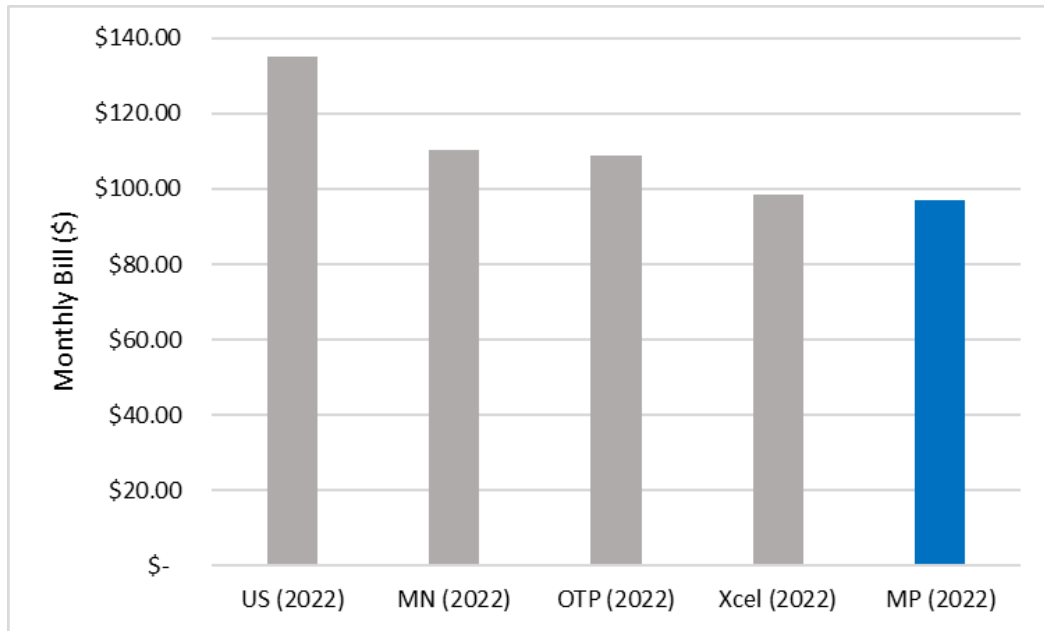
¹³ See *In the Matter of the Petition for Approval of Changes to Minnesota Power’s Residential Rate Design*, Docket No. E015/M-20-850, ORDER APPROVING TRANSITION FROM INVERTED BLOCK RATE TO TIME-OF-DAY RATES (Aug. 27, 2021).

¹⁴ See *In the Matter of the Petition for Approval of Minnesota Power’s Residential Rate Design*, Docket No. E015/M-20-850, COMPLIANCE FILING at 6 (Sept. 1, 2023).

¹⁵ Minnesota Power’s cool climate limits cooling (air conditioning) load in the summer, but does not appear to add significant space heating load in the winter, possibly due to the prevalence of natural gas heating.

1

Figure 4. Average Monthly Residential Bill Comparison



2

3

4 **Q.**

Does Minnesota Power have any information regarding its customers' satisfaction with their electric utility?

5

6 **A.**

Yes, as further described in Company witness Mr. Frederickson's Direct Testimony, Minnesota Power conducts routine customer survey work that examines customer satisfaction on a number of measures. In the Company's most recent survey, 88 percent of customers gave Minnesota Power's customer services a positive rating, with 28 percent providing a rating of "excellent." In the area of response to power outages, 89 percent gave a positive rating, with 23 percent providing a rating of "excellent." The survey also asked customers about the overall value they feel they receive from Minnesota Power. Using a ten-point scale, with ten being the most positive, customers gave Minnesota Power a rating of 8.14 for the following statement: "Considering the price I pay and the quality of service I receive, the electricity from Minnesota Power is an excellent value."

7

8

9

10

11

12

13

14

15

16

17

1 **B. Climate**

2 **Q. What is Minnesota Power’s current power supply strategy?**

3 A. Minnesota Power has been advancing a transformation of its power supply to a cleaner
4 energy future through its *EnergyForward* strategy. In 2005, Minnesota Power’s energy
5 supply had one of the highest carbon intensities in the nation, with a power supply that
6 consisted of 95 percent coal generation. Today, after closing or remissioning seven of
7 its nine coal generating units, Minnesota Power is delivering nearly 60 percent
8 renewable energy to customers and was the first Minnesota utility to achieve this
9 milestone. As part of Minnesota Power’s 2021 Integrated Resource Plan, Docket No.
10 E015/RP-21-33 (“2021 IRP”),¹⁶ the Commission approved the new acquisition of up to
11 400 MW of wind, 300 MW of solar, and up to 500 megawatt-hours (“MWh”) of energy
12 storage—resulting in an additional 1 million MWh of renewable generation. Through
13 these approved additions, the Company is committed to achieving an 80 percent
14 reduction in carbon emissions by 2035 compared to 2005 levels and our next IRP will
15 outline the plan to comply with Minnesota’s carbon-free standard. This transformation
16 has made Minnesota Power a state and regional leader in decarbonization, while at the
17 same time maintaining affordable and reliable electric service for customers.

18
19 **Q. What changes to its generation fleet and infrastructure has Minnesota Power made**
20 **in recent years?**

21 A. The Company accomplished this carbon intensity reduction by replacing coal
22 generation with carbon-free renewable energy. Specifically, Minnesota Power has idled,
23 phased-out, and retired 600 MW of coal-fired generation on its system in the past
24 decade, which is a significant transformation for a utility with an approximate system
25 peak of 1,663 MW. The Company also entered into a contractual relationship with
26 Silver Bay Power Company to enable its idling of an additional 130 MW of coal-fired
27 generation in the region in 2019. Just prior to filing the Company’s 2016 rate case,
28 Docket No. E015/GR-16-664 (“2016 Rate Case”), the Company refueled the Laskin
29 Energy Center (110 MW) to natural gas, ceased operations at Taconite Harbor Energy

¹⁶ *In the Matter of Minn. Power’s Application for Approval of its 2021-2035 Integrated Res. Plan*, Docket No. E015/RP-21-33, 2021 INTEGRATED RESOURCE PLAN (Feb. 1, 2021).

1 Center (“THEC”) Unit 3 (75 MW capacity) and economically idled of THEC Units 1
2 and 2 beginning in the fall of 2016 (150 MW of capacity). Minnesota Power has also
3 now received permission to move forward with the retirement and decommissioning of
4 THEC Units 1 and 2. The Company has also reduced its purchase of power from the
5 Milton R. Young Unit 2 lignite coal plant from 227.5 MW to 80 MW as of 2014, with
6 a complete phase out planned by 2026. Finally, the Company retired BEC Units 1 & 2
7 on December 26 and 27, 2018, and in 2021, BEC Unit 3 (“BEC3”) changed operations
8 to be economically dispatched in the Midcontinent Independent System Operator, Inc.
9 (“MISO”) market.¹⁷

10
11 **Q. What are the key power supply actions approved in the 2021 IRP?**

12 A. Through its 2021 IRP, Minnesota Power outlined a bold vision for a sustainable path to
13 achieve a carbon-free power supply by 2050. The Company’s next IRP, due in March
14 2025, will outline its plan to achieve Minnesota’s 100 percent carbon-free standard by
15 2040, which was passed after the completion of Minnesota Power’s 2021 IRP. The 2021
16 IRP was informed by a first-of-its-kind stakeholder engagement process and outlines
17 specific steps to facilitate a power supply that is 70 percent renewable in 2030, reduces
18 carbon emissions 80 percent by 2035, and results in a generation mix that is coal-free
19 by 2035—all while helping to ensure reliable and affordable power for Minnesota
20 Power customers and committing to a Just Transition¹⁸ for host communities. As part
21 of a joint agreement with Clean Energy Organizations, the City of Cohasset, Itasca
22 Economic Development Corporation, International Brotherhood of Electrical Workers
23 (“IBEW”) Local 31, Laborers’ International Union of North America, International
24 Union of Operating Engineers Local 49, North Central States Regional Council of

¹⁷ *In the Matter of an Investigation into Self-Commitment and Self-Scheduling of Large Baseload Generation Facilities*, Docket No. E999/CI-19-704, COMPLIANCE FILING (Mar. 2, 2020).

¹⁸ According to the Just Transition Alliance, a coalition of environmental justice and labor organizations founded in 1997, a “Just Transition” is a principle, a process, and a practice. The principle of Just Transition is that a healthy economy and a clean environment can and should co-exist. The process for achieving this vision should be a fair one that should not cost workers or community residents their health, environment, jobs, or economic assets. Any losses should be fairly compensated. The practice of Just Transition means that the people who are most affected by pollution—the frontline workers and the fence line communities—should be in the leadership of crafting policy solutions. The Just Transition Alliance’s website can be found at <http://jtalliance.org>.

1 Carpenters, and Large Power Intervenors (at the Commission hearing), Minnesota
2 Power offered and was subsequently ordered to do the following:

- 3 • Cease coal operations at BEC3 by December 31, 2029, and BEC Unit 4 by 2035;
- 4 • Acquire at least 300 MW and up to 400 MW of wind with at least 200 MW in
5 service by 2026 as practicable; and
- 6 • Acquire up to 300 MW of regional/in-service territory or net-zero solar and
7 implement storage demonstration projects of at least 100 MWh and up to 500
8 MWh by 2026 as practicable.

9
10 **Q. What types of investments will the Company be making in the near term to further**
11 **facilitate the move to a carbon-free future?**

12 A. In addition to the significant renewable acquisitions outlined in the most recent IRP
13 order, Minnesota Power is also moving forward reliable and resilient transmission
14 investments, including the High Voltage Direct Current (“HVDC”) Modernization
15 Project,¹⁹ the Northland Reliability Project,²⁰ and participation in the Big Stone South
16 – Alexandria – Big Oaks 345 kV transmission project, each of which is in ongoing
17 regulatory proceedings. The Company’s next IRP, due March of 2025, will identify the
18 additional investments needed for further system transition towards a carbon-free
19 energy system, including the post-coal future of Minnesota Power’s last remaining
20 baseload facility, Boswell Energy Center.

21
22 **Q. How is Minnesota Power performing with respect to its Conservation**
23 **Improvement Program (“CIP”) and ECO Goals?**

24 A. Minnesota Power has consistently met or exceeded its CIP and ECO goals, including in
25 2022. The Next Generation Energy Act of 2007 established a minimum annual energy
26 savings goal for utilities equal to 1.5 percent of (CIP eligible or non-CIP-exempt) gross

¹⁹ *In the Matter of the Application of Minnesota Power for a Certificate of Need for the HVDC Modernization Project*, Docket No. E015/CN-22-607; *In the Matter of the Application of Minnesota Power for a Route Permit for the HVDC Modernization Project*, Docket No. E015/TL-22-611.

²⁰ *In the Matter of the Application of Minnesota Power and Great River Energy for a Certificate of Need for the Northland Reliability Project 345 kV Transmission Line*, Docket No. E015/ET2/CN-22-416; *In the Matter of the Application of Minnesota Power and Great River Energy for a Route Permit for the Northland Reliability Project 345 kV Transmission Line*, Docket No. E015,ET2/TL-22-415.

1 annual retail sales. The ECO Act of 2021 established a new energy saving goal of 1.75
2 percent of Gross Annual Retail Energy Sales (net of Department exempted customers).
3 The approved energy savings goal is calculated based upon the most recent three-year
4 weather normalized average, excluding sales to CIP-/ECO-exempt customers. For
5 Minnesota Power, the 2022 approved kWh savings goal equates to 2.5 percent of CIP
6 eligible retail sales. Minnesota Power exceeded both the minimum and calculated
7 savings goals for 2022 by achieving 2.9 percent savings as a percentage of adjusted
8 sales. This is an ongoing success story for both Minnesota Power and our customers, as
9 we have exceeded our energy conservation goals every year since 2010, when the first
10 energy-savings goal went into effect, and continue to expand energy savings. This
11 strong performance with energy conservation programs has helped keep customers'
12 total bills lower in a rising rate environment.

13
14 **Q. Is Minnesota Power taking any other steps to promote conservation, demand side**
15 **management, and beneficial electrification?**

16 A. Yes. For example, Minnesota Power offers several programs designed to reduce the
17 barriers to electric vehicle (“EV”) adoption while optimizing system benefits, as
18 described by Company witness Mr. Frederickson. In this proceeding we also propose to
19 work with our large customers on Dedicated Renewable Resource projects, and
20 continue to advance our demand response programs, as described by Company witness
21 Ms. Leah N. Peterson. Overall, the Company has undertaken a broad array of resource
22 management efforts, conservation promotion programs, pricing tools, advanced rate
23 design initiatives, and education and outreach efforts consistent with the state’s interest
24 in environmental protection.

25
26 **C. Community**

27 **Q. What recent efforts has Minnesota Power taken to support the communities it**
28 **serves?**

29 A. The Company’s basic and most critical function is providing safe, reliable, economic,
30 and environmentally responsible energy to customers. In doing so, we improve the
31 safety, security, and quality of life for the communities we serve and the region.

1 Minnesota Power greatly values the communities it serves and makes additional
2 contributions to the overall health of the region through a number of efforts, including
3 by providing jobs and community support, economic development efforts, and overall
4 service to its communities. Because the Company considers these to be important and
5 valuable contributions to northern and central Minnesota, I highlight these community
6 and regional benefits to the State of Minnesota in this section of my testimony.

7
8 **Q. How does the Company support the health of the regional economy?**

9 A. Minnesota Power anticipates employing more than 1,175 people and providing an
10 annual payroll of approximately \$79 million (Total Company) in 2024. The Company
11 is one of northeastern Minnesota's only publicly-traded corporations with a local
12 headquarters. Therefore, Minnesota Power contributes to the regional economy as a
13 large employer and solid financial contributor, as well as by maintaining a strong
14 philanthropic and community presence.

15
16 In addition to the Company's direct contribution to the regional economy, Minnesota
17 Power has also provided economic development support to the communities it serves
18 for many decades. The Company actively engages with community partners on business
19 expansion projects to encourage business startups, expansions and locations, and
20 workforce attraction. Specifically, the Company has worked to diversify the regional
21 economy to buffer economic downturns from any single industry through its economic
22 development efforts.

23
24 **Q. How does Minnesota Power engage with the communities it serves?**

25 A. Community engagement is one of the Company's core values and it underscores
26 Minnesota Power's commitment to help the businesses and people of the region we
27 serve to prosper. Civic and community engagement by employees take many forms,
28 including contributions of time and talent to regional organizations like the United Way,
29 direct financial contributions to community organizations and for scholarships, and
30 sharing our expertise with students and community groups. In addition, this engagement
31 comes through employees serving on governing boards of local not-for-profit entities

1 and government appointments to public and quasi-public entities to support local and
2 regional services, infrastructure, and economic development/business growth entities.
3 Minnesota Power employees are located throughout our service territory in northeastern
4 Minnesota, serving numerous roles that are integral to the communities where our
5 employees live and work.

6
7 Additional information about Minnesota Power’s community involvement can be found
8 in the Company’s 2021 Corporate Sustainability Report, available online at
9 <https://www.allete.com/Sustainability>. This report highlights the wide array of
10 volunteerism, philanthropy, and leadership we provide to communities across our
11 service area.

12
13 **Q. What efforts has the Company undertaken to support diversity, equity, and**
14 **inclusion?**

15 A. Minnesota Power is committed to promoting diversity, equity, and inclusion (“DE&I”)
16 for a more equitable society, ensuring opportunities across hiring and suppliers, and
17 engaging stakeholders in advisory panels, tribal liaisons, and government and
18 community contacts to build relationships, solicit feedback, and collaborate. Minnesota
19 Power has been a forerunner in several key areas, including gender equity in leadership
20 and veteran outreach and support. As one example of the Company’s commitment in
21 this area, in 2019 I served as a Co-Vice Chair of the Energy Utility Diversity Group,
22 which examined the challenges and opportunities for Minnesota’s energy utilities to
23 attract a diverse workforce with the skills needed to advance a 21st century industry and
24 to increase supplier diversity of energy utilities. A copy of the resulting report and
25 recommendations were provided to the Minnesota legislature on January 15, 2020, and
26 filed in Docket No. E,G-999/CI-19-336 on January 16, 2020.

27
28 ALLETE currently has a corporate board of directors in which five of ten directors
29 serving on the ALLETE board are women and three of the six ALLETE executive
30 officers are women. ALLETE was named as an Honor Roll company with Special
31 Distinction in the 2022 Minnesota Census of Women in Corporate Leadership,

1 produced by St. Catherine University’s School of Business. ALLETE was among only
2 six of 78 publicly held Minnesota companies that achieved gender parity on their board
3 of directors, among their executive officer positions, or both, in 2022, according to the
4 report.²¹ This was the fourth consecutive year ALLETE received the honor. ALLETE
5 has also been actively involved in Minnesota’s Empowered Women in Energy
6 movement and hosted the second Empowered Women event at its Duluth headquarters
7 earlier this year.

8
9 The State of Minnesota has also designated the Company as a Yellow Ribbon Company
10 in 2016 for its support of military service members, veterans, and their families, both
11 within the Company and in the communities it serves.²² Minnesota Power was the first
12 company headquartered north of the Twin Cities metro area to receive this designation.
13 An employee-led committee comprising of veterans, active service members, military
14 family members, and civilians execute the program’s mission to contribute to the
15 Company’s unique culture by proactively recruiting and retaining the best and
16 supporting an environment in which military-connected employees can thrive. In 2021
17 and 2022, the Company raised money for veteran organizations; supported employees,
18 families and service members during deployments and activations by providing care
19 packages; and educated and created awareness through online and in-person events.

20
21 In 2022, the Minnesota Power Foundation increased its DE&I outreach efforts and
22 partnered with organizations like the American Indian Housing Organization to ensure
23 their clients were heading back to school with all the supplies that they need to be
24 successful and cold winter funding to help with warm outdoor gear needs. The Company
25 also partnered with the Duluth National Association for the Advancement of Colored
26 People as they launched their Afro-Academic, Cultural, Technological and Scientific
27 Olympics Achievement Program.

28

²¹ More information on the 2022 Minnesota Census of Women in Corporate Leadership can be found at the following link: <https://www.stkate.edu/academics/school-of-business/mn-census-women-leadership>.

²² More information on Minnesota Power’s DE&I efforts can be found in ALLETE’s 2021 Corporate Sustainability Report available at the following link: <https://www.allete.com/Sustainability>.

1 Outside of Duluth area, the Company partnered with Family Safety Network in Walker,
2 Minnesota to provide funding for additional domestic violence services they needed as
3 they saw an increase in the numbers served following the pandemic. We also provided
4 funding to the Deer River Tech Hub, which is designed to advance digital equity for
5 youth in underserved communities. Both communities border Leech Lake reservation
6 and 80 percent of their clients are Native American.

7
8 Additionally, the Company officially started a Supplier Diversity Program in 2021,
9 which focuses on expanding and partnering with diverse suppliers, including minority-
10 owned, women-owned, veteran-owned, LGBT-owned, disability-owned, small
11 disadvantaged, and HUBZone businesses. Minnesota Power continues to build these
12 partnerships with the diverse communities we serve. The Company provides and
13 encourages equal access for all qualified businesses, as evidenced by:

- 14 • Discovering 200+ diverse and 500+ small businesses in our supplier database
15 through data enrichment (2022);
- 16 • Gaining and maintaining corporate memberships and/or sponsorships with
17 business development organizations such as the Women’s Business
18 Development Center, North Central Minority Supplier Development Council,
19 and Minnesota Tribal Contractors Council; and
- 20 • Partaking in 15+ trade shows and matchmaking events between 2021 and today.

21
22 Minnesota Power is a values-based organization, and DE&I is foundational to how we
23 do business. These collective efforts demonstrate the Company’s commitment to
24 ensuring the clean energy transition occurs in the most equitable manner possible,
25 considering impacts to customers, communities, and the climate. Additional
26 information on Minnesota Power’s DE&I efforts can be found in the Direct Testimonies
27 of Company witnesses Ms. Krollman and Mr. Gunderson.

28

1 **Q. How does the prior discussion regarding Company customers, climate, and**
2 **community support factor into the request for cost recovery and a reasonable rate**
3 **of return in this proceeding?**

4 A. Minnesota Power respectfully submits that when, as here, the utility has made
5 significant investments to meet and exceed state policy goals; has ensured that its
6 business is managed efficiently; is consistently working to enhance customer service
7 quality and reliability; is a responsible and supportive regional citizen and employer;
8 and is proposing rates that are affordable relative to comparable utilities, then the
9 expenditures to achieve those results should be considered reasonable and prudent
10 investments and result in an authorized return that is attractive to investors.

11
12 Further, while Minnesota Power has made massive strides in transforming its energy
13 system, there is still more to do to transition to a carbon-free future, particularly
14 following Minnesota’s recent passage of a 100 percent carbon-free by 2040 standard. A
15 financially healthy utility is a critical component of the regulatory compact, and a fair
16 outcome in this rate case will ensure Minnesota Power has the sound financial
17 foundation from which continued energy system reliability and transformation, and
18 customer satisfaction efforts, can occur. This requires a reasonable authorized rate of
19 return, as well as the reasonable opportunity to recover costs in order to earn that rate
20 of return. Even in a robust economy with record low unemployment, full customer
21 production, and efficient management of the business, other factors—such as inflation,
22 the greater need for investment in and transition of our system, the need to enhance the
23 workforce to meet these needs, and sales changes, which I discuss in more detail
24 below—current rates and revenues are insufficient for Minnesota Power to attain its
25 authorized rate of return. Rate relief is needed to enable Minnesota Power to continue
26 to safely and reliably provide essential services to our customers.

27
28 **IV. CHANGES SINCE THE COMPANY’S LAST RATE CASE**

29 **Q. What is the purpose of this section of your testimony?**

30 A. In this section of my testimony, I discuss the changes the Company has experienced
31 since Minnesota Power’s 2021 Rate Case, Docket No. E015/GR-21-335 (“2021 Rate

1 Case”), specifically as they drive the need for this case. In particular, I speak to the
2 additional resources needed to continue the clean energy transition, our customers’
3 taconite and our sales outlook, inflation and other cost pressures, and how we are
4 seeking to align cost recovery with new types of costs and cost drivers related to
5 providing electric service.

6
7 **A. Clean Energy Transition & Workforce Needs**

8 **Q. What are the types of workforce changes the Company is experiencing?**

9 A. As our generation fleet, transmission system, distribution grid, and customer programs
10 change to meet evolving state policy, regulatory, and energy service needs described
11 earlier in my Direct Testimony, it is critical for the utility to continue to develop the
12 workforce necessary to carry out this work. In doing so, Minnesota Power is able to
13 provide a greater number of quality jobs to individuals living in our region. At the same
14 time, competition for skilled labor and leadership has increased in the marketplace.
15 Therefore, the size and costs associated with our workforce have each increased since
16 our last rate case. I will discuss each in turn.

17
18 **Q. How has the Company experienced a need to create and fill new positions in its
19 workforce?**

20 A. As described by Company witness Ms. Krollman, Minnesota Power has experienced
21 and expects a continued future need to hire for new positions, particularly as we
22 transition our generation fleet from coal to more renewable sources and the transmission
23 and distribution infrastructure to support them. Recently, the Company’s employee
24 headcount in both bargaining and non-bargaining positions has increased due primarily
25 to the increase in generation and transmission projects (and related support work) in the
26 Company’s portfolio. In addition to Company witness Ms. Krollman, these increased
27 workforce needs are discussed in more detail by Company witnesses Mr. Simmons and
28 Mr. Gunderson.

29
30 Further, the Company continues to position its workforce for the future, increasing
31 headcount as necessary to transform our system into one that can provide 100 percent

1 carbon-free electricity to customers in the future. Recent legislation that boosts clean
2 energy development and incentivizes clean energy infrastructure projects, like the
3 Infrastructure Investment and Jobs Act (“IIJA”) and the Inflation Reduction Act
4 (“IRA”), underscores the need for Minnesota Power to adapt its workforce to a rapidly
5 changing energy industry. To utilize the incentives provided for under these laws and
6 support state policy on providing carbon-free electricity to customers in the future, the
7 Company foresees a need to create and fill new positions within its workforce.

8
9 Other world challenges likewise drive the need for additional workforce resources.
10 Cyber technology and security efforts to protect our systems and data; environmental,
11 land management, and real estate work to facilitate and support the land on which all of
12 our business sits; our increased focus on supplier diversity; and administrative services
13 to support these resources are all areas where we are offering additional high-quality
14 jobs in our service territory.

15
16 **Q. How has the Company been impacted by increased workforce costs?**

17 A. Increased costs to recruit and retain a skilled workforce continue to impact the Company
18 since its last rate case. Most recently, increased costs have been driven by a new
19 collective bargaining agreement (“CBA”) that the Company negotiated with the IBEW
20 Local 31, a union in which Minnesota Power expects to have over 450 employees in the
21 2024 test year. The new CBA includes base salary increases for bargaining employees
22 of up to 4 percent through 2026 and other negotiated items that indirectly impact our
23 workforce costs, like the addition of a parental leave program.

24
25 The Company has also been impacted by labor shortages, an issue that has lingered
26 since the onset of the COVID-19 pandemic. Since then, the Company has had to pay
27 more for labor as supply becomes tighter but regular demand expectations continue. The
28 Company requires a skilled workforce to continue to safely and reliably serve
29 customers, and increased costs to retain such a workforce are in part driving the need
30 for the base rate increase we are requesting in this case. Company witness Ms. Krollman
31 discusses these issues in more detail.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31

B. Taconite Outlook

Q. Have there been any developments in the taconite industry since the 2021 Rate Case?

A. Yes. As I mentioned above, Minnesota Power’s industrial customer base is unique in that industrial customers in three primary industries generate nearly 70 percent of Minnesota Power’s retail sales. Two customers in the taconite mining industry are alone responsible for over 50 percent of Minnesota Power’s retail sales. As Mr. Frederickson describes in his direct testimony, energy sales in the natural resources sectors are largely driven by global economic conditions, trade policies, and evolving technologies that impact likely future demand for derivative products.

Specifically, taconite mining customer sales have been highly variable and unpredictable in recent years, as Minnesota Power’s contracts with its taconite mining customers only guarantee a small percentage of total annual sales revenue. Even more, demand for products manufactured by these customers (for example, iron ore pellets) has been mitigated by the integration of new technologies in the larger steel industry, resulting in Minnesota taconite production capacity that now exceeds domestic demand and, in turn, additional idling of production facilities to balance supply with lower demand levels. Sales generated by customers in this sector, and in particular how we forecast those sales, can therefore have a significant impact on Company sales revenues and operations.

Q. Has the Company accounted for these industry changes and trends in this case?

A. Yes. As a result of the industry trends I briefly described above, the Company has updated its sales forecasting methodology for this case to better account for taconite mining customers and the sales they are likely to generate going forward. In the Company’s 2021 Rate Case, the 2022 test year sales forecast approved by the Commission overestimated MWh sales to Mining and Metals customers because the forecast did not account for production reductions as mining companies balanced their supply with demand and with maintenance activity at their facilities served by the

1 Company. The retooled forecast used for the 2024 test year in this case, however, is
2 more consistent with recent trends of increased volatility in taconite production levels,
3 yet still produces an assumed test year taconite production that falls within the range of
4 high- and low-production years for the taconite industry. Company witness Mr.
5 Frederickson presents this new forecast and the supporting data in more detail.
6

7 **Q. Is Minnesota Power proposing any mechanisms to help navigate serving this**
8 **variable industry?**

9 A. Yes. To help balance the increasing variability in the Company's industrial energy sales
10 and help the Company reduce the number of future rate cases, the Company is proposing
11 a customer rate stabilization mechanism to track and true-up sales following the
12 implementation of final rates in this case, whether those sales are over- or under-
13 estimated. Essentially, the Company would use the tracker to account for the level of
14 base revenues approved by the Commission in this proceeding, and all variances over
15 or under that level would flow to customers over time as those variances occur year-to-
16 year.
17

18 This mechanism will help align the risks and benefits of industrial customer volatility
19 that occur between rate cases with all customer classes, and in turn would be viewed
20 favorably from a credit ratings perspective, as risks would be appropriately allocated
21 among the Company and all customers. At the same time, this mechanism would also
22 reduce the impact to customers if the Company sets sales too high or too low (compared
23 to actual future sales) in this proceeding and may additionally reduce or avoid future
24 rate cases that are triggered solely by variances in industrial customers' operations.
25 Company witnesses Mr. Frederickson, Ms. Pierce, and Mr. Taran discuss the proposed
26 rate stabilization mechanism and its benefits to customers and the Company in more
27 detail.
28

1 **C. Inflation/Cost Pressures**

2 **Q. How has the Company been impacted by inflation?**

3 A. Like many businesses, the Company has been and continues to be impacted by inflation,
4 especially since the Company’s budget was developed in the 2021 Rate Case. In
5 particular, the highest inflationary increases occurred in the summer of 2022, long after
6 the Company prepared its 2022 test year budget and also after the evidentiary hearing
7 concluded in the 2021 Rate Case. These inflationary pressures have created broader
8 impacts on the Company’s costs of providing electric service to customers. For example,
9 inflation has in part caused increased prices for materials and supplies, commodity costs,
10 and labor costs, each of which is driving up the Company’s costs to serve. Company
11 witness Mr. Anderson addresses inflationary pressures and drivers in more detail in his
12 Direct Testimony. As a result, the Company’s 2022 test year did not entirely or
13 adequately reflect inflationary impacts or supply chain challenges in 2022 and beyond,
14 which are continuing to drive up costs. These market dynamics led to difficulty in
15 recovering our costs through 2022 and 2023 and have heightened the need for rate relief
16 in the 2024 test year.

17
18 **Q. How has the Company been impacted by supply chain challenges?**

19 A. Similar to inflation, supply chain challenges originating from the onset of the COVID-
20 19 pandemic have impacted the Company’s costs to serve its customers. Global supply
21 chain disruptions have resulted in increased materials costs, as well as increased lead
22 times for procurement. Our customers are also impacted by these disruptions, as
23 customers are seeing delays in connecting new load and increased costs due to high
24 demand for materials needed to complete customer-serving projects. While these
25 disruptions fall outside the Company’s control, the Company continues to take proactive
26 measures to mitigate disruptions, and as such has been planning early and started
27 executing the procurement phase of projects much earlier than ever before.

28
29 Moreover, not all challenges affecting supply chain can be fully solved by advance
30 planning. Minnesota Power continues to face higher demands on both people and
31 infrastructure not only from growing customer expectations and system needs, but also

1 increasingly frequent extreme weather events, new policy drivers, and overall system
2 transformation needs. Company witnesses Mr. Anderson and Mr. Gunderson address
3 supply chain challenges in more detail in their direct testimonies.
4

5 **Q. How do these factors affect this rate case?**

6 A. Unavoidable increases in O&M costs are a key reason why this rate case is needed.
7 Minnesota Power was able to maintain O&M levels below the rate of inflation for more
8 than a decade prior to its 2021 Rate Case, despite the need for significant capital
9 investments for the transformation of our power supply, rising market costs of employee
10 compensation and benefits, and overall marketplace inflation. However, maintaining
11 those levels of O&M is not sustainable. Although the outcome of the 2021 Rate Case
12 allowed for important increases in O&M budgets, the evolution of increased inflation
13 and other cost pressures that arose after the Company's evidentiary hearing in that case
14 mean that the Company was unable to predict the full extent of these significant impacts
15 when creating its 2022 test year budget in that case. Further, because the Company made
16 extensive O&M cutbacks in years prior, there is little more to cut. Minnesota Power has
17 made every effort to mitigate the impacts of these pressures on customers, but ultimately
18 must also seek the support of the Commission to generate the rates necessary to operate
19 the business in a safe, reliable, and sustainable manner.
20

21 **Q. How does Minnesota Power's rate of return factor into this discussion?**

22 A. The new costs that are not included in present rates, as well as high inflation that is
23 increasing existing O&M, including labor, materials, and maintenance costs are a
24 primary driver of the revenue deficiency and the Company's projected under-earning in
25 2024. Without rate relief, the Company's proposed 2024 test year MN Jurisdictional
26 rate of return is projected to be only 3.81 percent compared to our current authorized
27 rate of return of 7.12 percent. This earned rate of return is not reasonable or sustainable
28 given the Company's unique risk profile, and will restrict the Company's access to
29 capital.
30

1 In addition, market conditions indicate that the Company’s authorized rate of return
2 should increase compared to the level set in the 2021 Rate Case. We are grateful that
3 the Commission approved an increased ROE in our 2021 Rate Case to 9.65 percent,
4 which partially reflects Minnesota Power’s higher risk as compared to many utilities.
5 However, the Company’s risks have increased since the 2021 Rate Case as discussed
6 throughout our filing, and Company witness Ms. Ann E. Bulkley explains that the cost
7 of capital in the marketplace has likewise increased. Further, the increase in the
8 Company’s authorized ROE in the 2021 Rate Case was partially offset by the
9 Commission’s reduction in the Company’s equity ratio to 52.5 percent, as well as
10 overall cost recovery outcomes. In this proceeding, the Company needs recovery of
11 increased costs, as well as a rate of return aligned with current market dynamics and
12 Minnesota Power’s unique risks, to support its financial health. Company witness Ms.
13 Bulkley explains that in the interim, the cost of capital in the marketplace has increased
14 further. Without rate relief, the Company’s proposed 2024 test year MN Jurisdictional
15 rate of return is projected to be only 3.81 percent, which is not reasonable or sustainable
16 given the Company’s unique risk profile and will restrict the Company’s access to
17 capital.

18
19 **Q. At what level have credit rating agencies set the Company’s credit ratings and**
20 **outlook?**

21 A. As discussed further in Company witness Mr. Taran’s Direct Testimony, after the
22 Company’s 2016 Rate Case decision was announced, Moody’s Investor Services
23 (“Moody’s”) downgraded ALLETE from an A3 to a Baa1 credit rating. In Moody’s
24 2023 report, they highlighted “historically inconsistent rate case outcomes” as one of
25 the Company’s notable credit challenges. Moody’s further stated, “although the
26 outcome of the 2022 rate case was relatively more supportive than past outcomes, the
27 revenue increase was well below the company request.”²³ Additionally, the Company’s
28 credit rating agencies have identified the Commission’s decision not to include
29 Minnesota Power’s pension prepayments in rate base as contributing to their concern

²³ MP Exhibit ____ (Taran), Direct Schedule 5: Moody’s Credit Report on ALLETE, Inc. (Jun. 2, 2023).

1 about the regulatory framework in which the Company operates and the Company's
2 financial position as a whole. Ultimately, Moody's 2019 downgrade of ALLETE
3 resulted in the Company's credit rating being only two notches above a "junk" (non-
4 investment grade) rating. Moody's has also stated that a factor that could lead to a
5 downgrade is if ALLETE's regulatory framework becomes less credit supportive.

6
7 Similarly, Standard & Poor's ("S&P") downgraded ALLETE in April of 2020 to a rating
8 of BBB, which is only one notch above the lowest investment grade rating. By
9 comparison, Northern States Power Company – Minnesota is rated A by S&P and A2
10 by Moody's, which are three and two grades above ALLETE's credit rating,
11 respectively. Similarly, Otter Tail Power Company is rated BBB+ by S&P and A3 by
12 Moody's, each of which is one grade above ALLETE's credit rating.

13
14 These comparisons further illustrate the unique business risk facing the Company and
15 are important to customers in several ways. Not only is it important for a public utility
16 to have access to capital to provide safe and reliable service, the issue is of even greater
17 importance as utilities like Minnesota Power work to meet the state's policy of 100
18 percent carbon-free energy by 2040 and significant investments in energy infrastructure
19 are needed. Much of this capital will be needed in 2024 and beyond, even if the
20 associated infrastructure is not placed in service until later. Thus, an attractive cost of
21 capital in this case, as well as productive credit ratings, will be critical to ensure the
22 lowest financing costs and reasonable financing terms for customers as we make these
23 investments in our system.

24
25 **D. Aligning Costs with Appropriate Cost Recovery Mechanisms**

26 **Q. Are any carbon-reduction achievements factoring into how the Company proposes**
27 **to recover costs in this proceeding?**

28 A. Yes. As described further in the Direct Testimony of Company witness Mr. Gunderson,
29 the successful completion of the 500 kV Great Northern Transmission Line ("GNTL")
30 Project made it possible to initiate the Manitoba Hydro Power Purchase Agreement
31 ("PPA"). Together, these projects have allowed Minnesota Power's customers to access

1 carbon-free hydropower from Canada to meet energy needs while also advancing our
2 *EnergyForward* strategy to increase renewable energy generation on our system.

3
4 As described further in the testimony of Company witness Mr. Stewart J. Shimmin, the
5 GNTL Project (other than internal labor costs) is currently in the Company's
6 Transmission Cost Recovery ("TCR") Rider. Because GNTL is now in service, it will
7 be transferred from the TCR into base rates with the implementation of proposed interim
8 rates and the TCR Rider will be reduced at the same time. While the transfer of GNTL
9 from its current cost recovery rider into base rates will increase the base rates in this rate
10 case, the increase is offset by this reduction to the TCR rider that will likewise be
11 effective on January 1, 2024.

12
13 Similarly, the Company continues to generate Production Tax Credits ("PTCs") from
14 its Bison Wind Energy Center Projects and Taconite Ridge Wind Energy Center. In
15 Minnesota Power's 2016 Rate Case, and 2021 Rate Case, the Company established an
16 annual baseline level of PTCs in base rates, with an annual true-up for the difference
17 between the PTCs in base rates and the actual PTCs generated. In this rate case, the
18 Company is resetting the amount of PTCs in the 2024 test year effective with Interim
19 Rates on January 1, 2024, which will reduce the Renewable Resources Rider ("RRR")
20 factor to be filed in 2024. As in past rate cases, the test year in this rate filing has been
21 updated to reflect current projections for PTCs. The overall amount of PTCs moving to
22 base rates is nearly the same as the amount currently being recovered in the RRR;
23 however, there is currently a significant tracker balance in the RRR due to amounts
24 owed by customers prior to the 2024 test year but not yet recovered. The Company
25 intends to file a RRR factor filing in early 2024 requesting to implement a new, lower
26 RRR factor, to be effective once the tracker balance reaches near zero later this year.
27 Thus, customers will not pay more as a result of resetting PTCs in base rates in the test
28 year; the PTCs will simply be accounted for in base rates rather than in the RRR,
29 effective January 1, 2024.

30

1 Company witness Mr. Shimmin describes the GNTL roll-in, as well as the continuation
2 of rider recovery for other projects, in more detail, while Company witness Ms. Rena
3 E. Verdoljak discusses PTCs and Company witness Ms. Amanda L. Turner more
4 generally describes the Company’s adjustments to remove continuing cost recovery
5 riders in this case.
6

7 **Q. Have there been other changes since the last rate case that would affect the**
8 **alignment between the costs of providing service and the appropriate cost recover**
9 **mechanism?**

10 A. Yes. In particular, new regulations and emissions goals and new operational standards
11 for our generation facilities are affecting the variability of costs of generation operations
12 like reagents and the need for nitrogen oxide (“NOx”) allowances. Accordingly, the
13 Company is proposing to move reagent costs and revenues and expenses associated with
14 NOx allowances to the existing Fuel Adjustment Clause (“FAC”). Additionally, MISO
15 has changed its capacity requirements, affecting the Company’s capacity revenues and
16 expenses. Minnesota Power therefore proposes to create a Rider for Capacity Revenue
17 and Expense Adjustment (“CRE”) to account for highly variable capacity revenue and
18 expense. Finally, in an effort to encourage further customer movement to renewable
19 resources while saving fuel costs in alignment with evolving state policy, Minnesota
20 power proposes to create a Rider for Voluntary Renewable Resources – Large
21 Customers. I provide a more specific overview of each proposal below.
22

23 **Q. Please provide an overview of the changes affecting reagents and the associated**
24 **cost recovery proposal in this case.**

25 A. The Company uses a number of reagents—for instance, urea and ammonia—at its coal-
26 fired generation facilities for emissions reduction purposes. Currently, the Company
27 includes these costs in base rates by estimating the production of the generation units,
28 but unit production can fluctuate considerably after the Company makes these budget
29 estimates. Since our 2021 Rate Case, Minnesota Power has continued to experience a
30 changing market landscape toward more renewable generation sources and away from
31 thermal generation. With the onset of increased renewable generation, thermal

1 generation has become subject to increased cycling and variable dispatch such that it is
2 now considered a variable resource, and costs incurred in running thermal generation
3 units—like reagent costs—are now considered variable, too. This has resulted in more
4 year-over-year volatility in these costs, and this volatility makes recovery through the
5 FAC more appropriate because customers only pay for costs actually incurred under
6 that mechanism. The Company proposes that these costs be moved to the FAC effective
7 with the implementation of final rates in this proceeding. Company witnesses Mr.
8 Simmons and Ms. Pierce discuss this proposed recovery and the treatment of reagent
9 costs in their direct testimonies.

10
11 **Q. Please provide an overview of the changes affecting the Company’s need for NOx**
12 **allowances and, as a result, the appropriate cost recovery mechanism.**

13 A. As Company witness Mr. Simmons explains, new environmental compliance rules that
14 have gone into effect since the Company’s last rate case have reduced the number of
15 NOx allowances granted by the federal government to the Company’s affected
16 generation units. As such, the Company will need to purchase NOx allowances to
17 comply with the new environmental regulations like the Good Neighbor Rule. These
18 relate directly to the amount of fuel used in the Company’s generating units, and as more
19 renewable resources are brought online, the units have become a more variable resource
20 such that the volatility in both generation fuel use and its associated costs are more
21 appropriately tracked through the FAC. The Company currently recovers sulfur dioxide
22 (“SO₂”) emission allowance costs through the FAC, and the Company believes that the
23 same is appropriate for NOx allowances to best track all costs and revenues associated
24 with NOx allowances going forward. As such, the Company requests that NOx
25 allowance revenues and costs be moved from base rates to recovery under the FAC
26 coincident with the implementation of final rates in this case. Company witnesses Mr.
27 Simmons and Ms. Pierce discuss this proposed recovery mechanism in further detail
28 and provide additional background on NOx allowances.

29

1 **Q. Please provide an overview of the changes warranting the CRE.**

2 A. As Company witness Ms. Pierce explains, MISO recently underwent a change in its
3 capacity requirements, adjusting its resource adequacy requirements from an annual
4 construct to a seasonal construct, such that the Company is now required to demonstrate
5 its resource adequacy seasonally rather than annually. On a seasonal basis, the Company
6 may have excess capacity in some seasons and a shortfall of capacity in others, so the
7 new construct requires considerable change in planning and increased variability and
8 risk in the Company's engagement in the capacity market. As part of this case, the
9 Company is requesting approval of the CRE to align capacity revenue and expense with
10 the impacted MISO planning year. Creating a CRE would allow the Company to more
11 effectively balance its capacity needs between seasons and planning years, a symmetry
12 which also benefits the Company's customers. Company witness Ms. Pierce describes
13 the proposed CRE, as well as the MISO resource adequacy and capacity market, and
14 the Company's proposed defined filing process and oversight mechanisms, in more
15 detail.

16
17 **Q. Please describe what the Company seeks to address with the Rider for Voluntary
18 Renewable Resources – Large Customer.**

19 A. This Rider is proposed to further develop renewable resource opportunities for large
20 customers, thereby further advancing the clean energy transition in a cost-effective
21 manner. The proposed Rider would allow the Company and qualifying customers to
22 work collaboratively on new dedicated renewable resource projects up to 300 MW,
23 which would be owned or procured by the Company to provide renewable energy to the
24 customer(s). This energy would be delivered first through the meter, and billed as a new
25 rate that would reflect the costs of the dedicated resource, administrative charges, and
26 any other costs to ensure non-participating customers are not impacted by the project.
27 The participating customer then would not pay any Fuel and Purchased Energy Charge
28 costs associated with this energy. Company witness Ms. Peterson describes this
29 proposal in more detail.

30

1 **Q. Please summarize the changes since the last rate case that are driving the need for**
2 **this rate case.**

3 A. As discussed in this section of my testimony, the Company is experiencing policy, cost,
4 revenue, regulatory, and legislative changes that have necessitated the filing of this case
5 and the need to think somewhat differently about cost recovery associated with these
6 changes. Minnesota Power brings this rate case in an effort to align reasonable and
7 necessary costs with cost recovery overall and to continually enhance our service to
8 customers and the value we provide.

9
10 **V. INTRODUCTION TO THIS FILING**

11 **Q. What is the purpose of this section of your testimony?**

12 A. In this portion of my testimony, I provide a more detailed overview of the Company's
13 requests in this rate case.

14
15 **A. Revenue Requirements**

16 **Q. Please provide an overview of the Company's overall request for additional rate**
17 **revenues.**

18 A. Minnesota Power requests an overall increase in revenues net of riders of \$89.1 million
19 MN Jurisdictional, or 12.0 percent. As I previously discussed, the Company is
20 proposing to transfer costs of GNTL from the TCR to base rates (which will result in a
21 lower TCR factor) and reset production tax credits in base rates (which will result in a
22 lower RRR factor). The movement of costs between riders and base rates is largely
23 revenue neutral to customers. When taking into account only the increases to base rates
24 without the rider offset, the Company's gross revenue deficiency is \$127.9 million MN
25 Jurisdictional, or 17.2 percent. These amounts are based on the Company's projected
26 O&M expense and capital budgets for the 2024 test year, an ROE of 10.30 percent, and
27 an overall rate of return of 7.53 percent. The Direct Testimony of Company witness Ms.
28 Turner provides a detailed account of the Company's revenue deficiency.

29

1 **Q. What are the primary drivers of the revenue deficiency?**

2 A. The primary drivers of the revenue deficiency are a combination of O&M increases tied
3 to inflationary cost pressures and workforce needs to execute the clean energy transition,
4 changes to the taconite forecast, and the need to align costs with appropriate cost
5 recovery mechanisms as described earlier in my testimony.

6
7 **Q. Could Minnesota Power offset its revenue deficiency through reductions to O&M
8 expenditures or decreased capital investment?**

9 A. No. Minnesota Power has experienced significant inflation, supply chain challenges,
10 and increased costs to recruit and retain a skilled workforce, including a new collective
11 bargaining agreement with IBEW Local 31, since the filing of its 2021 Rate Case.
12 Additionally, Minnesota Power's long history of limiting rate increase requests results
13 in the inability to offset its current revenue deficiency. The Company was able to avoid
14 rate cases for more than a decade between 1994 and 2008, and then again for another
15 seven years between our 2009 rate case and 2016 Rate Case filings. While we filed a
16 rate case in 2019, we worked with stakeholders to withdraw that case by limiting cost
17 recovery. Our last completed case, filed in 2021, was only our fifth completed case in
18 nearly three decades. Due to these cost pressures, limited past rate increases, and
19 ongoing efforts to reduce costs to the extent possible, Minnesota Power cannot offset its
20 revenue deficiency through reductions to O&M expenditures or decreased capital
21 investment while maintaining its current level of service and continuing to execute
22 Minnesota's energy policy requirements.

23
24 **Q. What rate of return is Minnesota Power seeking in this rate proceeding?**

25 A. Minnesota Power seeks an overall rate of return of 7.53 percent, reflecting a
26 recommended capital structure that consists of 53.00 percent common equity and a rate
27 of return on equity of 10.30 percent. These requests reflect current market conditions
28 and the capitalization needs of the Company. The Direct Testimony of Company
29 witnesses Ms. Bulkley and Mr. Taran provides additional detail on this request.

30

1 **Q. Why is the Company’s overall rate request reasonable?**

2 A. As I previously discussed, Minnesota Power continues to deliver on state energy policy
3 goals as a leader in renewable energy supply; by exceeding the state energy conservation
4 goal every year since its inception in 2010; by reducing carbon dioxide emissions by 50
5 percent from 2005 levels; and by idling, retiring, or re-missioning seven of its nine coal-
6 fired generators. In addition, the Company has improved its low-income customer
7 programs and launched tools to enhance the customer experience. Minnesota Power also
8 leads the state in efforts to support future grid and customer enhancements and is in the
9 process of implementing a system to support advanced time of day rates. The Company
10 has continually executed its major projects on or under budgetary estimates and closely
11 manages its costs. On top of all of these performance attributes, Minnesota Power
12 operates with a customer risk profile that is significantly above average as previously
13 discussed in my testimony.

14
15 The recommended capital structure and rate of return in this request are needed to
16 support and maintain adequate investment-grade corporate credit ratings and financial
17 integrity necessary for Minnesota Power to continue to provide quality electric service.
18 As a result of the Company’s recent performance against all the metrics described above
19 and its continued efforts to demonstrate its strong management, customer service, and
20 partnership with all stakeholders, the request before the Commission is both reasonable
21 and prudent.

22
23 **Q. Does this requested revenue requirement reflect the Company’s efforts to mitigate**
24 **rate increases for all customer classes?**

25 A. Yes, it reflects both the reasonable costs of providing safe, reliable, affordable, and clean
26 energy to our customers, as well as all of the efforts described above to contain and
27 moderate those costs while also empowering customers to manage their energy usage
28 and overall bills.

29

1 **Q. Please describe the Company’s specific rate mitigation efforts, on top of cost**
2 **containment efforts.**

3 A. In addition to the efforts described earlier in my Direct Testimony, the Company has
4 also taken other recent steps to reduce the effects of any rate increase on customers.

5
6 For example, on August 31, 2020, Minnesota Power submitted a petition for
7 Commission approval to voluntarily begin selling land holdings along traditional hydro
8 reservoirs that are no longer necessary for maintaining hydro operations. As an effort to
9 ensure energy affordability for all customers, the Company proposed that all proceeds
10 go back to customers to mitigate rates. The Company’s petition was approved by the
11 Commission at its October 14, 2021 agenda hearing. Since the first lots were made
12 available in August of 2022 through September 30, 2023, Minnesota Power has sold
13 213 lots worth \$20.95 million. Less than 10 percent of offers have been declined by the
14 leaseholders. The land sales are being placed in a tracker to be returned to customers in
15 the future as rate mitigation through either the RRR or some other mechanism.

16
17 In addition to coordinating with stakeholders to facilitate these hydro land sales and
18 collaborating on a number of federal grant applications described below in my Direct
19 Testimony, the Company has engaged in conversations with various stakeholders
20 regarding other potential resolutions and rate mitigations, and remains open to further
21 dialogue including through potential settlement opportunities. The Company has
22 incorporated additional stakeholder feedback into this rate case filing in multiple ways,
23 as exemplified by not proposing an increase to the customer charge, and offering a new
24 customer rate stabilization mechanism proposal to limit rate cases triggered by changes
25 in large industrial customer operations.

26
27 **Q. How is the Company maximizing the benefits of the IIJA and IRA to reduce costs**
28 **for customers?**

29 A. The Company is taking a number of steps to maximize the benefits of these statutes and
30 associated programs.

31

1 First, Minnesota Power has applied for several federal funding opportunities, including
2 those related to the HVDC Modernization Project, long duration energy storage, and
3 improvements to the Company’s hydroelectric system. We are beginning to see success
4 from these efforts: on October 18, 2023, the Department of Energy (“DOE”) awarded a
5 \$50 million grant to Minnesota Power to support modernization of its HVDC
6 transmission system through the Grid Resilience and Innovation Partnerships (“GRIP”)
7 Program. The \$50 million award will help reduce the overall customer costs associated
8 with the Company’s HVDC Modernization Project.

9
10 In the last year, Minnesota Power has submitted, as a project owner or key project
11 partner, the following seven applications for five different funding opportunities:

- 12 1. DE-FOA-0002614 – Advanced Capture Study for Minnesota Biomass Power
13 Generation (Energy and Environmental Research Center was the applicant and
14 we were a partner); application submitted – not selected for award.
- 15 2. DE-FOA-0002936 – Mine Truck Electrification (US Steel was the applicant and
16 we were a partner); concept paper submitted – discouraged from submitting a
17 full application.
- 18 3. DE-FOA-0002779 – Section 247 Hydro Maintaining and Enhancing
19 Hydroelectricity Incentives; three applications submitted.
- 20 4. DE-FOA-0002867 Long Duration Energy Storage; application submitted,
21 selected for pre-award interview – not selected for award.
- 22 5. DE-FOA-0002740 – HVDC – Grid Resilience and Innovation Partnerships
23 (GRIP) Program (Topic Area 2); application submitted – award negotiations
24 ongoing.

25
26 As discussed by Company witness Mr. Taran, Minnesota Power is assessing the DOE’s
27 Loan Programs Office financing options and will submit applications as appropriate.
28 The Company also actively monitors funding opportunity announcements tracked by
29 the Minnesota Department of Commerce’s Energy Division, posted on the
30 Department’s New Energy Programs webpage, and distributed via the Department’s
31 Bipartisan Infrastructure Act Information email subscription. In addition, the Company

1 monitors and looks for funding opportunity announcements from the DOE’s Office of
2 Clean Energy Demonstrations and Grid Deployment Office, Department of
3 Transportation, Environmental Protection Agency, Department of Agriculture, as well
4 as other resources which share IRA and IJJA funding opportunities, such as industry
5 trade associations.

6
7 Overall, the Company continues to strategically identify federal funding opportunities
8 to pursue in support of its *EnergyForward* strategy and state renewable and carbon-free
9 electricity goals, and keep impacts on rates for customers as affordable as possible
10 during this time of energy transition. Preparing and submitting applications for federal
11 funding demands a significant investment of time and resources and typically has
12 matching fund and other requirements which need to be considered. Based on our
13 experience, the full application process for each project requires 1,000–3,000 employee
14 hours to complete. The number of employee hours depends largely on the complexity
15 of the application requirements. Some Federal funding opportunities are less
16 cumbersome, while others, like the GRIP program funding application, are highly
17 complex. Federal funding opportunities are also very competitive. As an example, our
18 GRIP program funding application was one of 326 concept papers submitted. Of those,
19 157 (including ours) were encouraged by the DOE to submit a full application. The
20 DOE ultimately selected 34 projects for GRIP program funding negotiations. Minnesota
21 Power is actively working with the Department of Commerce to align IRA incentives
22 with existing ECO program offerings. The Company will evaluate the opportunities
23 associated with the IRA and IJJA in future filings, including future resource
24 acquisitions, IRPs, integrated distribution plans, and petitions for cost recovery through
25 riders and rate cases.

26
27 **B. Class Cost of Service and Rate Design**

28 **Q. Please describe Minnesota Power’s approach to establishing a reasonable rate**
29 **design.**

30 **A.** Minnesota Power approaches rate design from an overall cost of service methodology,
31 in which rates are designed so that individual classes of customers pay an appropriate

1 and fair share of the costs associated with delivering safe and reliable electricity. Rate
2 design is further influenced by other factors such as existing rate design, overall
3 customer billing impacts, and rate design principles. More information on revenue
4 apportionment and rate design, taking Company witness Mr. Shimmin’s class cost of
5 service study (“CCOSS”) results into account, can be found in the Direct Testimony of
6 Company witness Ms. Peterson.

7
8 **Q. How does the significant transition of Minnesota Power’s energy system influence**
9 **rate design?**

10 A. As the Company has made investments to significantly reduce carbon emissions from
11 its electric supply, renewable energy supply has also advanced to exceed 50 percent of
12 customer energy requirements in 2023. Since renewable energy is variable by nature, it
13 is necessary for customer focused rate designs to support and incentivize controllable
14 customer load to better align with variable renewable generation. This alignment of load
15 with generation helps balance energy supply with demand in the most economical
16 manner for customers. Additionally, the low carbon intensity of the Company’s power
17 supply, which will decline even further in the future, creates opportunities for meeting
18 state policy goals for carbon reduction through beneficial electrification. Finally, the
19 need to balance affordability and competitiveness with these advancements in
20 sustainability is important to maintain customer satisfaction with the sustainable energy
21 transformation. Minnesota Power’s rate designs are intended to maintain reasonable
22 rates, especially for low-income residential customers, as well as for industrial
23 customers whose high load factor operations serve to increase the overall economic
24 efficiency of the energy system. The Company also considers how to use rate design to
25 empower customers with more control over their energy usage, as evidenced by its first-
26 in-the-state transition to time varying rates for the residential customer class. Together,
27 these factors also influence efficient and effective rate designs for Minnesota Power
28 customers.

29

1 **Q. Please explain Minnesota Power’s revenue apportionment proposal in this case.**

2 A. As described further in the testimony of Company witness Ms. Peterson, Minnesota
3 Power would ideally attempt to follow the CCOSS results to align rates with the cost to
4 serve each customer as provided by the CCOSS. However, strict adherence to the
5 CCOSS would require a 41.25 percent increase for the Residential customer class. The
6 Company realizes an increase of this magnitude could have an adverse impact on the
7 Residential customer class and with that impact in mind, the Company is proposing an
8 equal final percentage increase of 17.2 percent across all customer classes. It is
9 important to note, however, that approximately 30 percent of this increase will be offset
10 by reductions in the TCR and RRR cost recovery for the same period.
11

12 **Q. Is the Company proposing any increase to fixed portions of the Residential**
13 **customer bill?**

14 A. No. Recognizing that a modest increase was implemented in the last rate case (without
15 objection by residential and low-income consumer advocacy groups), the Company is
16 not proposing an increase to the fixed portion of its Residential bill in this rate case.
17

18 **Q. What is the overall result of the Company’s revenue requirement and rate design**
19 **proposals in this proceeding?**

20 A. Minnesota Power has demonstrated its ability to remain customer-focused—as
21 evidenced by the number of rate mitigation efforts undertaken—while leading the state
22 in achieving Minnesota’s energy policy goals. However, a critical component of the
23 regulatory compact is ensuring both recovery of prudent costs and investments along
24 with a reasonable rate of return. Minnesota Power became the first utility in the state to
25 serve customers from a power supply portfolio that is half-renewable, while also
26 providing innovative and first-of-its-kind offerings like time varying rate design and
27 increased access to solar energy for low-income customers.
28

29 The Company has executed its best efforts to ensure rates remain affordable for all
30 customers, and its residential customers currently enjoy electric rates that are below the
31 national and state averages, along with having average residential customer bills that

1 are lower than those of neighboring utilities. The Company also provides a usage
2 qualified discount to eligible low-income customers, as well as multiple programs
3 available to assist low-income customers. This proposed rate increase request includes
4 prudently incurred costs and thoughtful proposals to mitigate the unique risk serving the
5 industries of northern Minnesota creates. For Minnesota Power to continue
6 decarbonizing its system and offering innovative programming to customers at the pace
7 it has, a holistically reasonable outcome in this case that ensures the regulatory compact
8 remains intact is necessary.

9
10 **VI. INTRODUCTION OF WITNESSES**

11 **Q. What is the purpose of this portion of your testimony?**

12 A. In this section of my testimony, I identify and introduce the other witnesses presenting
13 testimony on behalf of Minnesota Power in this proceeding.

14
15 **Q. Please introduce Minnesota Power's other witnesses.**

16 A. In addition to my Case Overview Direct Testimony, the following individuals are
17 providing testimony on behalf of Minnesota Power:

- 18 • Joshua D. Taran, Manager – Financial Planning, will address the recommended
19 capital structure and overall rate of return for Minnesota Power, as well as the
20 Company's overall financial health, credit metrics, and risk position.
- 21 • Ann E. Bulkley, Senior Vice President at Concentric Energy Advisors, Inc.,
22 provides expert testimony on the Company's required return on equity and an
23 assessment of the Company's proposed capital structure.
- 24 • Frank L. Frederickson, Vice President of Customer Experience and Engineering
25 Services, provides an overview of Minnesota Power's customer base, customer
26 service programs, and sales, revenues, and the overall risks associated with the
27 Company's customer base. Mr. Frederickson also discusses the Company's
28 proposed rate stabilization mechanism.
- 29 • Colin B. Anderson, Controller of ALLETE, presents an overview of the
30 Company's budgeting process, including the reliability of the Company's
31 budgets, an overview of the Company's cost containment efforts since our last

1 rate case, and a discussion of certain depreciation and inflationary topics. He
2 also provides testimony on the Company's cost allocation process and employee
3 expense review—including support for travel, dues/memberships, and related
4 employee expenses.

- 5 • Julie I. Pierce, Vice President of Strategy and Planning, provides information on
6 changes to Minnesota Power's power supply and the MISO power market, and
7 supports the Company's rate stabilization mechanism and CRE rider proposal.
- 8 • Todd Z. Simmons, Vice President – MP Generation Operations, describes how
9 the Company continues to transform its generating fleet with increasing
10 renewable resources while maintaining efficient, reliable, and cost-effective
11 services for customers. Additionally, Mr. Simmons gives an overview of capital
12 projects and O&M expenses for Generation Operations and provides
13 information on environmental compliance costs and revenues for which the
14 Company is seeking approval to recover through the FAC.
- 15 • Daniel W. Gunderson, Vice President of Transmission and Distribution,
16 discusses the Company's power delivery systems, including related capital
17 investments and O&M expenses. Mr. Gunderson also provides an overview of
18 the investments the Company will be making going forward to ensure system
19 safety and reliability, and the availability of renewable resources to Minnesota
20 Power customers.
- 21 • Laura E. Krollman, Director – Human Resources, describes the compensation
22 and benefits provided to the employees of Minnesota Power, including overall
23 increases in the number of both bargaining and non-bargaining jobs Minnesota
24 Power is making available.
- 25 • Patrick L. Cutshall, the Vice President and Corporate Treasurer of ALLETE,
26 Inc., addresses Minnesota Power's proposals with respect to recovery of test
27 year pension and other post-employment benefit expense and provides support
28 for the Company's request to include Minnesota Power's accumulated
29 contributions in excess of net periodic benefit cost for the pension in rate base.
- 30 • Michael Farrell, Senior Director and North American Accounting Leader at
31 Willis Towers Watson, addresses the accounting requirements for defined

1 benefit pension plans under Accounting Standards Codification No. 715-30; the
2 accounting requirements promulgated by the Federal Energy Regulatory
3 Commission related to pension plans of rate-regulated utilities; and the financial
4 effect of a utility's pension plan and its interaction with the ratemaking process.

- 5 • Rena E. Verdoljak, Manager – Tax, will address several tax issues relevant to
6 this rate proceeding, including property tax and proposed property tax true-up,
7 excess deferred income taxes, and federal tax credits.
- 8 • Stewart J. Shimmin, Revenue Requirements Lead, presents Minnesota Power's
9 2024 test year CCOSS. Mr. Shimmin also discusses the process of jurisdictional
10 separation of costs, the functional assignment, and classification of costs, and
11 the allocation of costs to customer classes, including the development of
12 allocation factors used in the CCOSS. Mr. Shimmin also addresses how rider
13 costs are being transferred to base rates.
- 14 • Amanda L. Turner, Costing and Pricing Analyst Senior, discusses Minnesota
15 Power's revenue requirements for the test year consisting of calendar year 2024.
16 Ms. Turner also addresses the determination of rate base and operating income
17 and the treatment of adjustments made in the Interim and Adjusted Test Year
18 CCOSSs, and supports the determination of the Minnesota Jurisdictional
19 revenue increase required by Minnesota Power to earn its requested rate of return
20 in the Adjusted Test Year and the allowed rate of return in the Interim Test Year.
21 Additionally, she explains how the Company's cost recovery riders and tracker
22 balances bear on our 2024 test year cost of service, and supports the Company's
23 CIP tracker and base rate totals and several compliance items from other
24 dockets.
- 25 • Leah N. Peterson, Manager – Customer Analytics, will provide testimony to
26 support Minnesota Power's proposed rates and rate design for the 2024 test year,
27 addressing the distribution of increased revenue requirements among the classes
28 of service, the design of the Company's proposed rates for retail classes, and a
29 comparison of present and proposed rates for these customer classes.

30

VII. CONCLUSION

1

2 **Q. Does this complete your testimony?**

3 **A. Yes.**