

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-21-335

Exhibit _____

RATE CASE OVERVIEW

November 1, 2021

TABLE OF CONTENTS

	Page
I. INTRODUCTION AND QUALIFICATIONS	1
II. MINNESOTA POWER AND OUR CUSTOMERS	7
III. EXCEEDING STATE ENERGY GOALS AMID CHANGE SINCE THE COMPANY’S LAST RATE CASE	12
A. Minnesota Power’s Vision and Actions Align with State Energy Policy	12
1. Customers	15
2. Climate	23
3. Community	29
B. Economic Changes Since the Last Completed Rate Case	32
1. Sales Changes	33
2. Financial Position of the Company	36
C. Relevance to the Rate Case	39
IV. INTRODUCTION TO THIS FILING	41
A. Revenue Requirements	41
B. Cost and Risk Mitigation Efforts	43
C. Class Cost of Service and Rate Design	46
V. INTRODUCTION OF WITNESSES	49
VI. 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., doing business as Minnesota Power (“Minnesota
8 Power” or the “Company”). My current position is as Manager of Regulatory Strategy
9 and Policy.

10
11 Q. Please summarize your qualifications and experience.

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

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

1 was an intelligence professional in the United States military for the last 20 years. I am
2 originally from Hibbing, Minnesota and have 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. In light of the five years that have passed since the Company filed its last completed
10 rate case, Minnesota Power has a projected overall revenue requirement of \$724.3
11 million (MN Jurisdictional¹) in the 2022 test year and seeks a rate increase of \$108.3
12 million (MN Jurisdictional) or 17.58 percent above present rate revenue of \$615.9
13 million. These amounts are based on the Company's capital budget and projected
14 operations and maintenance ("O&M") expense for the 2022 test year, a rate of return on
15 equity ("ROE") of 10.25 percent, and an overall rate of return of 7.5 percent. The
16 Company is proposing an equal increase adjustment of 18.22 percent across all General
17 Rates for sales by rate class. For interim rates, Minnesota Power is requesting a revenue
18 increase of \$87.3 million (MN Jurisdictional) or 14.23 percent above the Company's
19 present rate revenue. The support for these requests is set forth in my testimony, as well
20 as by the other witnesses testifying on behalf of Minnesota Power, and this overall filing.

21
22 **Q. At a high level, please explain why Minnesota Power is submitting this rate request.**

23 A. Minnesota Power has filed only three completed rate cases in the last 25 years, with our
24 last completed case initiated five years ago. Minnesota Power has also made substantial
25 capital investments to decarbonize the system and is the first utility in the State to deliver
26 50 percent renewable energy to customers. However, while we have held O&M levels
27 steady for over a decade, our rates reflect even lower O&M levels than we have actually
28 incurred. Additionally, at the conclusion of our last completed rate case in Docket No.
29 E015/GR-16-664 ("2016 Rate Case"), the Company's actual sales were immediately

¹ A summary of allocation factors used across the Company for purposes of calculating the Minnesota Jurisdictional totals is provided in Volume 3, Direct Schedules B-16 to B-19 and C-13 to C-16.

1 below the level set for ratemaking in that case and have since declined substantially. At
2 the same time, low wholesale power market prices and the Company's substantially
3 changed generation fleet have made it impossible for Minnesota Power to offset
4 revenues lost due to industry downturns.

5
6 As a result, over the last several years, Minnesota Power experienced credit rating
7 downgrades, as discussed by Company witness Patrick L. Cutshall, despite substantially
8 reducing both its workforce and costs. Continued employee and expenditure reductions
9 to offset inflating costs and revenue deficiencies are neither possible nor sustainable,
10 and would result in further loss of employees, as well as the reductions of services,
11 decrease in quality of service, or both. Our current credit metrics likewise create a
12 material risk of a further credit downgrade absent reasonable recovery of our costs and
13 a strong return in this case.

14
15 At the same time Minnesota Power has transitioned its system while withstanding these
16 financial challenges, our Company has been thoughtful of its customers' economic
17 situations overall, including the specific hardships experienced during the COVID-19
18 pandemic. We have instituted or proposed a number of customer protections and rate
19 mitigation efforts, described later in my testimony, to ensure reasonable customer rates
20 and appropriate supporting programs for our most vulnerable customers. As I discuss
21 later in my testimony, Minnesota Power's residential rates have remained low as
22 compared to state and national averages and will continue to remain reasonable even
23 with the requested rate increase.

24
25 We have reached a point at which it is vital to re-establish base rates that reflect our
26 current revenue and reasonable cost structures to maintain a financially health utility.
27 Such rate relief would allow the Company to better withstand reduced sales while
28 maintaining its excellence in addressing industry and customer transformation,
29 renewable energy additions, carbon reduction, conservation programs, customer
30 programs and services, and community support.

31

1 **Q. At a high level, please introduce the main drivers of Minnesota Power’s current**
2 **rate increase request.**

3 Much has changed since our last completed rate case. Overall, the main drivers of
4 Minnesota Power’s current rate increase request are:

5 (1) the Company’s continuing investments and leading efforts to decarbonize its system;

6 (2) revenue changes and increased risk profile due to a significant concentration of
7 highly cyclical industrial customers;

8 (3) the need to recover increased capital and O&M expenses as compared to the levels
9 currently in rates, supporting high quality utility service to customers; and

10 (4) Minnesota Power’s diminished ability to offset business and economic changes, as
11 well as the credit-negative outcome of the Company’s last completed rate case, through
12 cost cutting or selling power through the wholesale markets.

13
14 Minnesota Power is at a critical inflection point in its *EnergyForward* transition. The
15 Company has led the State in reducing carbon emissions and has transitioned from
16 relying almost entirely upon coal-fired generation to being the first Minnesota utility to
17 deliver a power supply that is 50 percent renewable in just 15 years. Minnesota Power
18 needs regulatory support in order to continue this important progress toward a carbon
19 free future for customers.

20
21 **Q. At a high level, please introduce Minnesota Power’s unique company risk.**

22 Minnesota Power is unique among its peers in regards to its customer concentration and
23 the nature of its largest customers’ industries, which creates significant financial risk to
24 the Company. Minnesota Power serves the natural resources based economy of
25 northern Minnesota, and its industrial customers operate in the highly cyclical, globally
26 competitive industries of taconite mining and paper manufacturing. This cyclicity,
27 combined with the fact that customers in the mining, metals and forest products
28 industries represent approximately 64 percent of the Company’s annual retail sales,
29 mean that changes in their economic conditions can result in significant variations in
30 the Company’s sales. Even when some of these customers are operating at relatively
31 high production levels, others are not and the risk of steep declines is ever-present. For

1 example, in 2020, two of the Company's large industrial customers unexpectedly
2 reduced their energy demand by an amount equivalent to the entire residential class of
3 customers in response to the COVID-19 pandemic. Although the Company has
4 mitigated rate impacts as much as possible for customers while also significantly
5 decarbonizing its system, the Company's current financial circumstances necessitate
6 this rate proposal to realign rates with current costs and revenues and to provide new
7 tools to address changes in customer energy needs.

8
9 **Q. Why should the risks facing the Company matter to its customers?**

10 A. A financially healthy utility is critical to customers for two primary reasons. First, our
11 customers rely on Minnesota Power to provide safe, reliable, and environmentally sound
12 electric service, as well as excellent customer programs and services. While we have
13 shown we can weather many challenges, Minnesota Power needs sustainable levels of
14 support to be able to meet these needs and expectations. Second, as discussed by Mr.
15 Cutshall, credit ratings and increased perception of the risks associated with the
16 Company increase its costs of obtaining the capital necessary to finance utility
17 infrastructure and investments, which are increasingly necessary for the clean energy
18 transition. This increased cost of obtaining capital would in turn increase costs to
19 customers. Perhaps even more concerning is the risk of losing access to financial
20 markets and capital during broader market downturns, which we faced during the
21 pandemic. Our requests in this case are also designed to help ensure a reasonable cost
22 of capital for our customers. So, when we refer to risk or our risk profile, we mean risks
23 to the Company's economic well-being but also the corresponding risks to the customers
24 we serve.

25
26 **Q. Are there any additional proposals in this case you would like to highlight?**

27 A. Yes. As I noted, much of this case is focused on aligning our rates with our current
28 revenues and costs, which have been closely managed but also are not well reflected in
29 our current rates. Additionally, in an effort to help align the unique risks and benefits
30 of Minnesota Power's large industrial customer concentration between rate cases, the
31 Company is proposing a simple and balanced sales true-up mechanism. As described

1 further in Company witness Frank L. Frederickson's testimony, the proposed sales true-
2 up mechanism would allow customers to benefit when large industrial customer
3 operations increase beyond the baseline set in the test year, which would decrease the
4 risks associated with basing test year sales on a forecast for these globally competitive
5 customers. This mechanism would also help the Company avoid future rate cases that
6 are triggered so heavily by large industrial customer operational changes. Further, as
7 discussed in the testimony of Mr. Cutshall, ALLETE's credit rating agencies and credit
8 ratings would likely favor the mechanism, as the proposed mechanism shares both the
9 rewards and risks of industrial customer volatility with all customers.

10
11 **Q. How is your testimony organized?**

12 A. My testimony is organized as follows:

- 13 • In Section II, I describe Minnesota Power and our Customers;
- 14 • In Section III, I describe Minnesota Power's state energy policy leadership and
15 changes since the last approved rate case;
- 16 • In Section IV, I provide an Introduction to this Filing, including an overview of
17 requests, revenue requirements, cost mitigation efforts and rate design;
- 18 • In Section V, I provide an Introduction of Witnesses; and
- 19 • In Section VI, I conclude my testimony.

20
21 **Q. Please summarize your Case Overview Testimony.**

22 A. First, I provide an overview of ALLETE, Inc. and the Minnesota Power electric utility.
23 Specifically, I highlight how Minnesota Power serves one of the most unique customer
24 mixes of any utility in the country, consisting mostly of large industrial users on
25 Minnesota's Iron Range, and how the Company's economic environment affects this
26 rate case.

27
28 Second, I provide an overview of Minnesota Power's leadership on executing
29 Minnesota's state energy policy and the many changes to Minnesota Power since its last
30 completed rate case, filed in 2016. I provide examples of the many things Minnesota

1 Power has done to transform the electric system toward a cleaner energy future while
2 creating an experience that provides more choices for customers.

3
4 Third, I provide an overview of the specific requests in this filing, which focus on
5 revenue requirement and rate design updates that reflect the Company's capital
6 investments, resource acquisitions, current and foreseeable load, and changes in
7 customer operations. I also explain, at a high level, how the Company has reduced costs
8 and continues to contain costs but note that continued employee reductions to offset
9 inflating costs are neither possible nor sustainable. Finally, I discuss the rate impact of
10 this rate increase request, along with significant and proactive efforts the Company has
11 undertaken to mitigate rate increases for customers. I also provide an overview of why
12 the rate increase requested in this proceeding is just and reasonable, as further supported
13 by the broader filing.

14
15 Lastly, I introduce the other Minnesota Power witnesses who will present testimony in
16 this proceeding and introduce the subject matter of their Direct Testimony.

17 18 **II. MINNESOTA POWER AND OUR CUSTOMERS**

19 **Q. Please describe ALLETE, Inc.**

20 A. ALLETE, Inc. is a reliable provider of competitively priced energy services in the upper
21 Midwest. ALLETE is comprised primarily of regulated energy businesses with some
22 additional non-utility, energy-focused businesses. Minnesota Power is a division of
23 ALLETE and comprises the majority of ALLETE's activities. Net income from
24 Minnesota Power regulated operations is projected to be 65 percent of budgeted total
25 consolidated ALLETE net income in 2021. The remaining 35 percent of ALLETE's
26 budgeted consolidated net income comes primarily from the following wholly owned
27 subsidiaries: ALLETE Clean Energy; BNI Energy; Superior Water, Light and Power
28 Company; and an investment in the American Transmission Company. The Direct
29 Testimony of Mr. Cutshall identifies ALLETE's other businesses and subsidiaries in
30 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

Q. Please describe the Minnesota Power public utility.

A. Minnesota Power is a public utility operating division of ALLETE. First incorporated in 1906, Minnesota Power has been serving northern Minnesota for over a century and currently provides electricity to more than 145,000 residential and commercial customers, 15 municipal systems, and some of the nation’s largest industrial customers across a 26,000 square mile service area located in central and northern Minnesota.

Q. How does Minnesota Power serve its customers?

A. Minnesota Power currently utilizes a diverse combination of wind, hydro, solar, coal, biomass, and small amounts of natural gas generation, totaling nearly 1,800 megawatts (“MW”) of capacity, to serve its customers. Since 2013, Minnesota Power has decreased its thermal generation through coal plant retirements, idling, or remissioning, while the Company has added a substantial volume of renewable energy to the power supply. In fact, Minnesota Power has tripled its renewable energy generation since 2014. As described in further detail in the Direct Testimony of Company witness Julie I. Pierce, Minnesota Power added two significant renewable power purchases in 2020 — Manitoba Hydro and Nobles 2 wind farm. However, even with the new power supply additions, Minnesota Power’s total power supply output (including both purchases and Company-owned generation assets) will be slightly lower in 2022 than in 2010.

Minnesota Power’s transmission system operates on voltages generally between 115 kilovolts (“kV”) up to 500 kV and serves local loads across nearly 26,000 square miles of central and northern Minnesota. As Company witness Daniel W. Gunderson describes in his Direct Testimony, Minnesota Power’s transmission system is also critical in supporting the larger regional transmission system’s overall reliability. Minnesota Power’s distribution system is comprised of 6,170 miles of distribution lines and 201 distribution substations, reaching from International Falls in the north to Royalton in the south, and from Duluth in the east to as far west as Long Prairie. Much

1 of this area consists of rural communities, which present unique issues when planning
2 for investment in the distribution system.²

3
4 In addition to investments in generating and delivering power, Minnesota Power
5 remains focused on the customer experience. As one example, Minnesota Power is
6 nearing completion of its Advanced Metering Infrastructure (“AMI”) deployment and
7 recently completed the implementation of a holistic Customer to Meter solution with
8 Meter Data Management functionality. Together, these foundational systems will allow
9 for further enhancements to customer service options through the Company’s
10 MyAccount tool, as well as sophisticated meter read estimates and advanced rate design
11 options to support customer engagement.

12
13 Through its generation, transmission, distribution, and customer experience assets,
14 Minnesota Power strives to always remain customer-focused as it delivers safe, reliable,
15 affordable, and increasingly clean electricity to customers and communities across
16 northeastern and central Minnesota.

17
18 **Q. Please provide additional information about Minnesota Power’s customers.**

19 A. Minnesota Power serves approximately 123,600 residential, 23,300 commercial, and
20 400 industrial customers, with programs and services for each customer class.

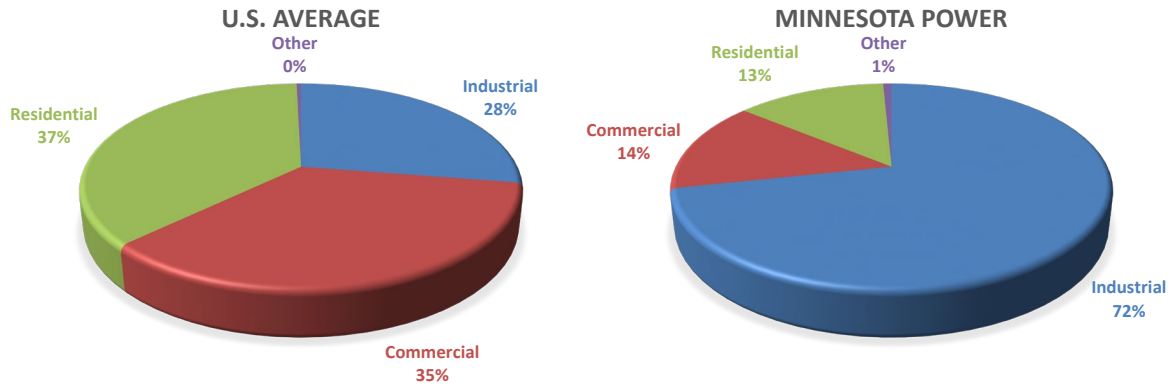
21
22 As noted previously, Minnesota Power’s system is dominated by industrial customers,
23 with approximately 72 percent of retail kilowatt-hour (“kWh”) energy sales delivered
24 to this customer class alone in 2020, while only 13 percent of sales supported the
25 residential class and 14 percent of retail sales were to commercial customers. In
26 contrast, the average utility in the United States sells just 28 percent of retail kWh energy
27 sales to industrial customers and 37 percent and 35 percent of retail kWh energy sales
28 to residential and commercial customers, respectively, as shown in Figure 1 below.

29

² Detailed information about Minnesota Power’s distribution system can be found in the 2021 Integrated Distribution Plan filed in Docket No. E015/M-21-390 on October 25, 2021.

1

Figure 1. Minnesota Power's Customer Concentration is Unique



2

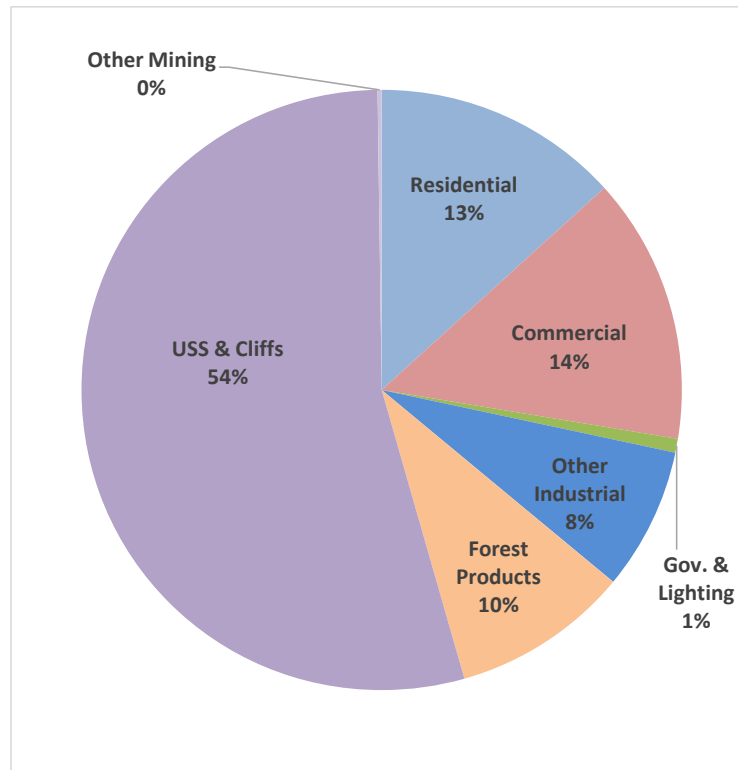
3

4 **Q. Please describe how this customer concentration creates unique circumstances for**
5 **the Minnesota Power system.**

6 A. Minnesota Power's large industrial customers are unique in both their high overall
7 percentage of revenue and kWh energy usage on the system, as well as the individual
8 size of the customers relative to a typical utility. Minnesota Power's large industrial
9 customers primarily consist of taconite producers and graphic paper and pulp producers
10 in northern Minnesota, as depicted in Figure 2 below. These industries, like Minnesota
11 Power itself, are significant components of the regional economy, as discussed in more
12 detail in the Direct Testimony of Company witness Mr. Frederickson.

1

Figure 2. Minnesota Power Retail Energy Sales by Customer Class (2020)



2

3

4

Additionally, Minnesota Power’s industrial customer operations are unique as they use large quantities of energy and typically operate around the clock every day of the year. As a result, when the industrial customers are operating, the energy usage pattern of the industrial customer class is relatively stable compared to the other customer classes. This stable usage contributes to more consumption of energy in off-peak hours than other customer classes, which is typically lower cost energy. The size and operations of these industrial customers results in Minnesota Power having one of the highest load factors of any utility in the country, near 80 percent, which allows the system to be used efficiently, creating additional value for all Minnesota Power customers. However, the energy usage from this globally competitive and price-sensitive industrial customer class can vary widely from year-to-year, which dramatically increases the risk profile of Minnesota Power compared to other electric utilities in the state and nation, as further discussed by Company witness Mr. Cutshall.

17

1 **III. EXCEEDING STATE ENERGY GOALS AMID CHANGE SINCE THE**
2 **COMPANY’S LAST RATE CASE**

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

4 A. In this section of my testimony I discuss how Minnesota Power arrived at the place it is
5 today. I begin by discussing Minnesota Power’s *EnergyForward* strategy and carbon-
6 free vision, along with the Company’s ongoing leadership in implementing state energy
7 policy and regulatory goals set forth by the Commission. Additionally, I explain
8 relevant changes to the Company since the last completed rate case, filed in 2016. These
9 include changes to the resource mix, customer operations, and financial standing. I then
10 address Minnesota Power’s perspective on why this policy alignment and recent
11 operational changes are relevant considerations in this rate proceeding.

12
13 A. **Minnesota Power’s Vision and Actions Align with State Energy Policy**

14 **Q. What is Minnesota Power’s understanding of Minnesota’s Energy Policy goals**
15 **directed by the state legislature?**

16 A. The State of Minnesota has a number of energy policy objectives codified in state
17 statute. State policy guidance related to customers includes regulation to assure reliable
18 electric service at just and reasonable rates,³ a goal for retail electric rates to be at least
19 five percent below the national average for each customer class,⁴ and a specific directive
20 to ensure competitive electric rates for energy-intensive trade-exposed customers.⁵
21 Energy policy goals related to the climate include Greenhouse Gas Emissions reduction
22 targets,⁶ renewable energy standards — including a solar energy standard⁷ — and
23 energy conservation goals, including the recently passed Energy Savings and
24 Optimization Policy Goal.⁸

25

³ Minn. Stat. § 216B.03 (2021).
⁴ Minn. Stat. § 216C.05 (2021).
⁵ Minn. Stat. § 216B.1696 (2021).
⁶ Minn. Stat. § 216H.02 (2021).
⁷ Minn. Stat. § 216B.1691 (2021).
⁸ Minn. Stat. § 216B.2401 (2021).

1 **Q. What is Minnesota Power’s understanding of the Commission’s policy goals?**

2 A. The Commission has reinforced and refined state energy policy through its orders. In
3 the January 8, 2019 Order Establishing Performance-Incentive Mechanism Process in
4 the proceeding titled *In the Matter of a Commission Investigation to Develop*
5 *Performance Metrics, and Potentially, Incentives for Xcel Energy’s Electric Utility*
6 *Operations*, Docket No. E002/CI-17-401 (the “*Performance Metric Investigation*”), the
7 Commission set forth the following regulatory goals:

- 8 1. Environmental protection;
- 9 2. Adequate, efficient, and reasonable service;
- 10 3. Reasonable rates; and
- 11 4. Opportunity for utilities to earn a reasonable return.⁹

12
13 The Commission described its desired outcomes of the policy goals as follows:

- 14 1. Environmental performance, including carbon reductions and beneficial
15 electrification;
- 16 2. Reliability, including both customer and system-wide perspectives;
- 17 3. Affordability;
- 18 4. Customer service quality, including satisfaction, engagement, and
19 empowerment; and
- 20 5. Cost effective alignment of generation and load, including demand
21 response.¹⁰

22
23 Further, in May 2020, the Commission issued a Notice in the Matter of an Inquiry into
24 Utility Investments that May Assist in Minnesota’s Economic Recovery from the
25 COVID-19 Pandemic¹¹ that required all rate-regulated utilities to provide a list of

⁹ *In the Matter of a Commission Investigation to Identify and Develop Performance Metrics, and Potentially, Incentives for Xcel Energy’s Elec. Util. Operations*, Docket No. E002/CI-17-401, ORDER ESTABLISHING PERFORMANCE-INCENTIVE MECHANISM PROCESS at 11-12 (Jan. 8, 2019); *See also In the Matter of a Commission Investigation to Identify and Develop Performance Metrics, and Potentially, Incentives for Xcel Energy’s Elec. Util. Operations*, Docket No. E002/CI-17-401, ORDER ESTABLISHING PERFORMANCE METRICS, at 1-2 (Sept. 18, 2019).

¹⁰ *Id.* at 12.

¹¹ *In the Matter of an Inquiry into Util. Inv. that May Assist in Minn.’s Economic Recovery from the COVID-19 Pandemic*, Docket No. E,G-999/CI-20-492, NOTICE OF REPORTING REQUIRED BY UTIL. (May 20, 2020).

1 possible investments that would meet conditions set by the Commission. These
2 conditions can be interpreted as considerations of priority for the Commission, and the
3 Notice requested possible investments that: provide significant utility system benefits;
4 are consistent with approved resource plans, triennial conservation plans, and existing
5 Commission orders; reduce carbons or other pollutants in the power sector or across
6 economic sectors; increase access to conservation and clean energy resources; create
7 jobs or otherwise assist in the economic recovery for Minnesotans; and use woman,
8 veteran, or minority owned businesses as much as possible.

9
10 **Q. What is Minnesota Power’s understanding of the Department of Commerce’s**
11 **position on state policy goals?**

12 A. The Minnesota Department of Commerce (“Department”) produces a State Energy
13 Policy and Conservation Report, informally referred to as the Quadrennial Report,
14 which documents major emerging trends and issues in Minnesota’s energy supply,
15 consumption, conservation, and costs.¹² The most recent Quadrennial Report, issued on
16 March 1, 2021, states that “Commerce is dedicated to ensuring that Minnesota has a
17 reliable energy system well into the future – an energy system that meets the State’s
18 economic needs, provides energy resources at costs that are reasonable, and minimizes
19 environmental impacts from production and consumption.” The Report further states
20 that the Department works to ensure Minnesota meets the laws and goals established by
21 the legislature.¹³

22
23 The Report also includes content on the COVID-19 Pandemic response, noting that the
24 Department “continues to monitor emerging trends in the energy sector with a focus on
25 relief and recovery efforts for low-income households and businesses affected by civil
26 unrest.”

27
28 The specific energy policy goals outlined in the Quadrennial Report include:

¹² Minn. Stat. § 216C.18 (2021).

¹³ Div. of Energy Res., *Energy Policy and Conservation Quadrennial Report, 2020*, COM. DEPT., https://mn.gov/commerce-stat/pdfs/20210301_quad_report.pdf (Mar. 1, 2021).

- 1 • Derive 25 percent of total energy used in the State from renewable sources by
2 2025;
- 3 • Reduce greenhouse gas emissions statewide to a level at least 15 percent below
4 2005 base levels by 2015, 30 percent by 2025, and 80 percent by 2050;
- 5 • Save 1.5 percent of average annual retail sales each year through energy
6 conservation;
- 7 • Generate 1.5 percent of public utility retail electric sales from solar energy by
8 2020 and 10% of all retail electric sales from solar by 2030; and
- 9 • A preference for renewable energy in integrated resource planning processes.¹⁴

10
11 **Q. To what extent has Minnesota Power aligned itself with these state policy goals?**

12 A. Each of the goals outlined above are also Minnesota Power’s shared goals, and the
13 Company has already been pursuing and achieving them for many years. As previously
14 noted, our *EnergyForward* initiative is focused on the holistic sustainability of our
15 customers, the climate, our communities, and the Company itself. Below, I discuss how
16 Minnesota Power is meeting state policy goals for the holistic benefit of our customers,
17 the climate, and the communities we serve.

18
19 1. Customers

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

22 A. Minnesota Power recognizes the high value its customers place on safe, reliable, and
23 affordable service and strives to provide that to all customers across its service territory
24 in northeastern and central Minnesota. As described in the Company’s most recent
25 Safety, Reliability and Service Quality (“SRSQ”) report,¹⁵ Minnesota Power customers
26 experience a high level of reliability with respect to their electric service. Specifically,
27 in 2020, residential customers experienced average service reliability of 99.97115
28 percent; commercial customers experienced average service reliability of 99.99480

¹⁴ *Id.*

¹⁵ *In the Matter of Minn. Power’s 2020 Safety, Reliability and Serv. Quality Standards Report*, Docket No. E015/M-21-230, SAFETY, RELIABILITY AND SERV. QUALITY STANDARDS REPORT (Apr. 1, 2021).

1 percent; and industrial customers experienced average service reliability of 99.9991
2 percent. Minnesota Power has maintained this high level of reliability amongst
3 significant change in the Company’s regional baseload generation footprint and
4 increases in extreme weather in recent years. Additional discussion on system reliability
5 can be found in the Direct Testimony of Company witness Mr. Gunderson.
6

7 **Q. Are Minnesota Power’s rates consistent with the policy goal of providing**
8 **reasonable and affordable rates?**

9 A. Yes. Minnesota Power’s rates are competitive among all utilities across the nation,
10 especially considering the significant amount of decarbonization that has taken place in
11 Minnesota Power’s energy supply since we formerly had one of the highest carbon
12 intensities in the nation in 2005. Though rates for all customer classes have risen over
13 this period, the rate increases for industrial customers have outpaced the national
14 average, while rates for residential customers have remained well below the national
15 average. According to the United States Energy Information Administration (“EIA”),
16 Minnesota Power’s residential customers paid approximately 15 percent less than the
17 national average in 2020, and its industrial customers paid approximately five percent
18 more than the national average. If the industrial customers were not receiving the
19 Energy Intensive Trade Exposed (“EITE”) Rider discount, which amounts to
20 approximately a three percent reduction in their rate, the overall industrial class rate
21 would have been approximately eight percent above the national average. As discussed
22 later in this testimony, the Company is requesting the Commission discontinue the
23 separate EITE Rider concurrent with the implementation of final rates in this case.
24

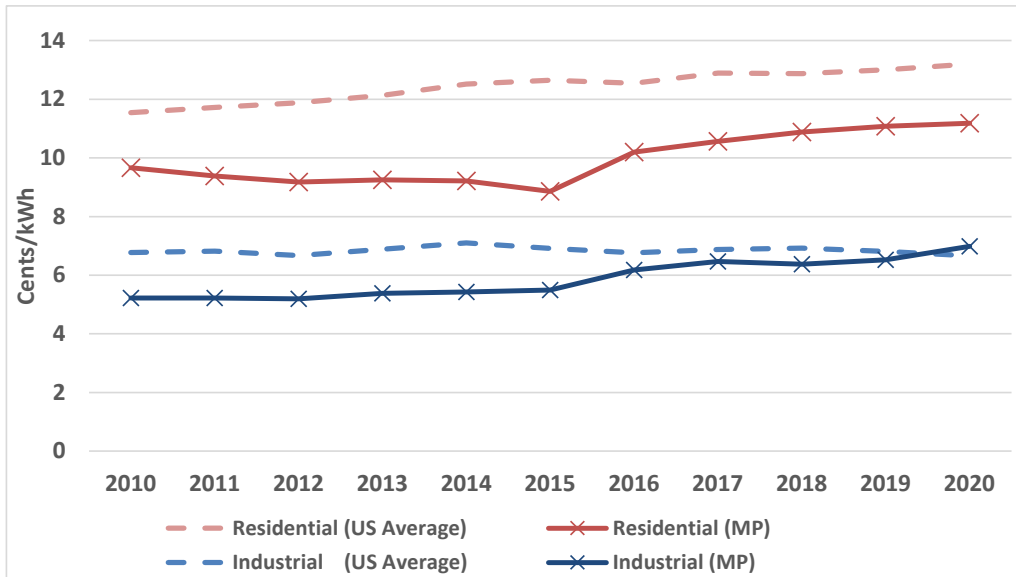
25 **Q. Are Minnesota Power’s rates consistent with the policy goal of providing**
26 **reasonable and affordable rates that are five percent below the national average**
27 **for all customer classes?**

28 A. Yes. According to the EIA, Minnesota Power’s average electric rate (revenue/kWh
29 sold) is 8.04 cents/kWh; this is 24.5 percent lower than the U.S. average of 10.66
30 cents/kWh. Thus, the Company has maintained reasonable and affordable rates for all
31 classes despite rapid system decarbonization and the development of a plethora of new

1 programs and services for customers, including electric vehicle (“EV”), solar garden,
2 energy conservation, and affordability programs.

3
4 However, the data by class provides a clearer picture of what is driving these low rates.
5 Minnesota Power’s residential rates in 2020 were almost 15 percent lower than the
6 national average and 17 percent lower than the state average, and commercial rates are
7 three percent lower than the national average and two percent lower than the state
8 average. The Company’s average industrial rates in 2019¹⁶ are about four percent lower
9 than the national average and 13 percent lower than the state average. The chart in
10 Figure 3 below shows the historical and projected average rates for Residential and
11 Industrial customers relative to national averages, per the EIA.
12

13 **Figure 3. Industrial and Residential Average Rates: MP vs. US Average**



14
15
¹⁶ Industrial sales and revenues were strongly affected by the COVID-19 recession with lower than normal operating rates, and 2020 data is not a representative comparison when gauging general competitiveness with the State or US.

1 **Q. What steps has Minnesota Power taken to assist customers over the last several**
2 **years?**

3 A. Minnesota Power has taken several proactive steps to keep customer rates reasonable
4 and competitive. These actions include, but are not limited to, settling the 2019 Rate
5 Case, the approved extension of the EITE rate, the inclusion of a low-income usage
6 qualified discount as the Company transitions from the current Inverted Block Rate
7 structure to a future default Time-of-Day rate for residential customers, and voluntarily
8 offering protections for customers during the COVID-19 pandemic. Taken together,
9 these actions represent a holistic, creative, and forward-looking approach to mitigating
10 rate increases and protecting customers as Minnesota Power continues its clean energy
11 transition in the midst of a global pandemic.

12
13 **Q. What actions did Minnesota Power take in regards to its last filed rate case in**
14 **2019?**

15 A. On November 1, 2019, Minnesota Power filed its Petition for Authority to Increase
16 Electric Rates in Minnesota with the Commission. On March 13, 2020, Governor Walz
17 declared a peacetime state of emergency in response to the spread of the COVID-19
18 pandemic and issued executive orders directing Minnesotans to stay at home.¹⁷
19 Minnesota Power immediately began working to develop creative solutions to reduce
20 the administrative burdens of a rate case and the Company's overall rate increase, while
21 still supporting a financially stable utility. On April 23, 2020, Minnesota Power filed a
22 request to suspend the rate case in an effort to offer immediate rate relief to retail
23 customers and ultimately withdrew the 2019 Rate Case in collaboration with other
24 Company stakeholders and the Commission's approval. The proposed solution (of
25 moving asset based margins from base rates to the Company's fuel adjustment clause)
26 was intended to ease the administrative and safety burdens associated with litigating the

¹⁷ Minn. Stat. § 12.31, subd. 2; Minn. Exec. No. 20-01 (Walz), Emergency Executive Order 20-01 Declaring a Peacetime Emergency and Coordinating Minnesota's Strategy to Protect Minnesotans from COVID-19 (Mar. 13, 2020); Minn. Exec. 20-20 (Walz), Emergency Executive Order 20-20 Directing Minnesotans to Stay at Home (Mar. 25, 2020); Minn. Exec. 20-33 (Walz), Emergency Executive Order 20-23 Extending Stay at Home Order and Temporary Closure of Bars, Restaurants, and Other Places of Public Accommodation (Apr. 8, 2020).

1 2019 Rate Case and allowed Minnesota Power and other stakeholders to focus on more
2 pressing needs associated with the COVID-19 pandemic.

3
4 **Q. How else did Minnesota Power act to protect residential and commercial**
5 **customers during the COVID-19 Pandemic?**

6 A. Protecting the health and safety of Minnesota Power' employees, families, customers,
7 and communities is of the utmost priority to the Company. As early transmission of the
8 COVID-19 virus caused growing uncertainty and concern throughout the region and
9 nation, Minnesota Power took several proactive and voluntary steps to provide customer
10 protections,¹⁸ including:

- 11 • Immediate suspension of disconnections for residential customers facing financial
12 hardship in relation to the coronavirus pandemic;
- 13 • Voluntary extension of Minnesota's Cold Weather Rule; and
- 14 • Encouraging customers to contact the Company regarding payment plans and
15 options that reflect their unique financial resources and circumstances.

16
17 The Company also proactively and voluntarily:

- 18 • Waived late payment charges for residential and small business (general service)
19 customers who were affected by the coronavirus pandemic;
- 20 • Suspended disconnections for small business (general service) customers facing
21 financial hardship in relation to the coronavirus pandemic; and
- 22 • Waived reconnection fees during normal business hours for residential and small
23 business (general service) customers previously disconnected for non-payment.
24 These reconnections will continue to be prioritized to ensure prompt action for those
25 seeking to reinstate service.

26
27 In anticipation of the Governor's peacetime emergency ending, which included
28 provisions for regulated utilities, the Company submitted to the Commission a

¹⁸ *In the Matter of an Inquiry into Actions by Elec. and Nat. Gas Util. in Light of the COVID-19 Pandemic Emergency*, Docket No. E,G999/CI-20-375, RESPONSE LETTER (Mar. 30, 2020).

1 thoughtful approach to transitioning back to normal operations.¹⁹ This approach
2 demonstrates our continued commitment to working with customers through these
3 challenging times.

4
5 **Q. How else does the Company maintain affordable electric service for residential**
6 **customers?**

7 A. Minnesota Power recently attained approval to be the first Minnesota utility to transition
8 to a default time of use rate design for all residential customers, which will help
9 customers manage their bills and reduce their energy costs by shifting energy usage to
10 times when energy pricing is lower. The Company also has robust and effective
11 programs for energy conservation to assist customers in reducing usage and keeping the
12 average total bill for a residential customer low, even as rates increase.

13
14 **Q. How is the Company keeping rates affordable for its low-income residential**
15 **customers specifically?**

16 A. Energy affordability is a shared priority between the Company, its customers, other
17 stakeholders, and the State of Minnesota. However, the Company recognizes that broad
18 assistance like the Low Income Home Energy Assistance Program (“LIHEAP”)
19 currently only reach about one-third of eligible households. As such, Minnesota Power
20 has made it a priority to increase outreach efforts to expand the LIHEAP pool and bring
21 these much-needed dollars to customers in its service territory. Further, the Company
22 has worked collaboratively with low-income advocates to modify its Customer
23 Affordability of Residential Electric program to ensure a best in class low-income
24 affordability program. Additionally, Minnesota Power currently delivers a first-of-its
25 kind in Minnesota Low Income Solar Grant Program to increase equitable access to
26 renewable energy by low-income customers. Finally, energy conservation efforts are
27 foundational to all customer programming, and Minnesota Power offers conservation
28 program resources directly targeted to low income customers through its Energy
29 Partners program. The Energy Partners program helps customers to decrease overall

¹⁹ *In the Matter of an Inquiry into Actions by Elec. and Nat. Gas Util. in Light of the COVID-19 Pandemic Emergency*, Docket No. E,G999/CI-20-375, MINN. POWER’S TRANSITION PLAN (Apr. 1, 2021).

1 energy consumption and lower their electric bills. Finally, the residential time of use
2 rates I discuss above include specific discounts for low-income customers that will help
3 these customers continue to realize some of the lowest electric rates in the State.
4

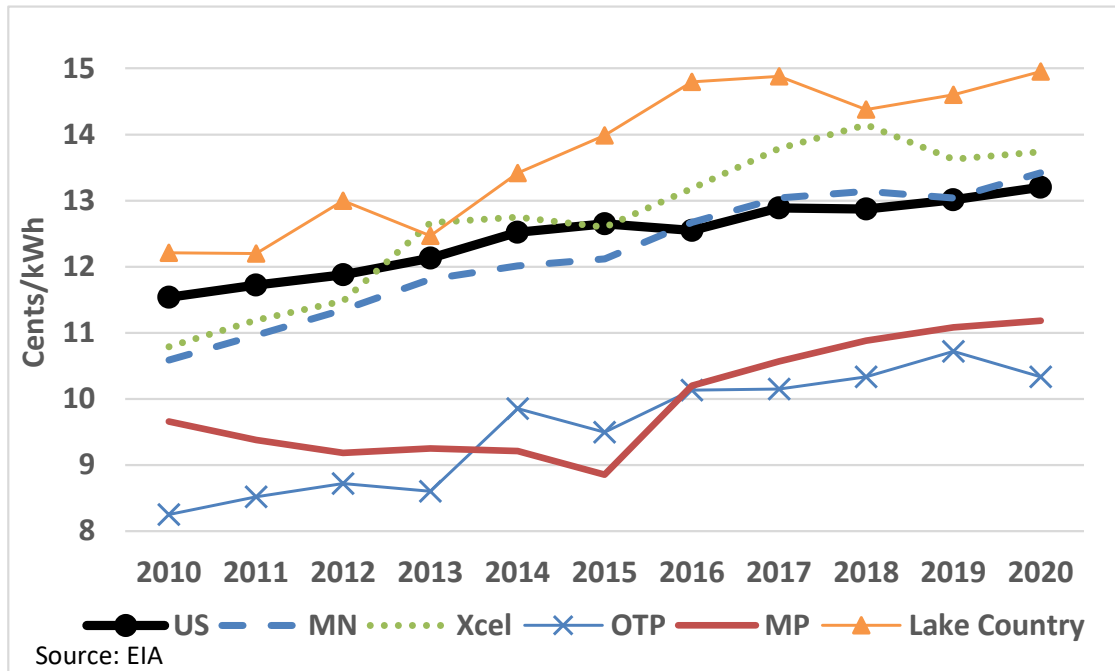
5 **Q. How have Minnesota Power's residential rates changed over the past decade**
6 **relative to other utilities in the State and nation?**

7 A. Minnesota Power's average residential rate has increased by only about 1.5 percent per
8 year, on average, from 2010 to 2020. Over the same timeframe, the average residential
9 rate in the State of Minnesota increased by 2.4 percent per year, while the pace of
10 general inflation (as measured by the Consumer Price Index) has averaged 1.7 percent
11 per year. In short, both the rate of inflation and the average residential rate increases in
12 Minnesota have outpaced Minnesota Power's residential rates.
13

14 To illustrate this, Figure 4 plots the last decade of residential rates for the nation, state,
15 and several Minnesota utilities, and demonstrates that Minnesota Power's residential
16 rates are currently almost 17 percent lower than the state average. Further, Minnesota
17 Power's residential electric rates have not kept pace with general inflation over the last
18 decade, so the Company's electric rates have actually decreased by 0.2 percent annually
19 on an inflation-adjusted basis. This further underscores the reasonableness of
20 Minnesota Power's residential rates.
21

1

Figure 4. Minnesota Residential Electric Rates



2

3

4 **Q. Can you also provide a look at total bills for residential customers?**

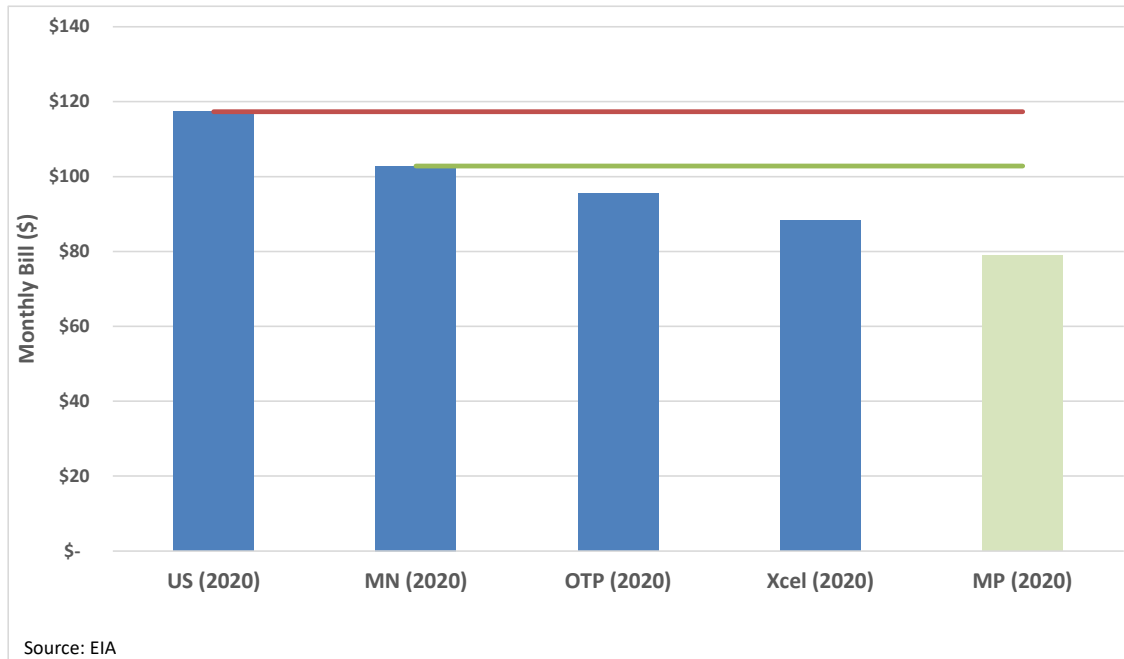
5 A. Yes. As noted above, Minnesota Power residential customers have historically enjoyed
 6 the lowest rates among investor owned and cooperative utilities in Minnesota for all
 7 residential customers, regardless of economic status. Further, Minnesota Power’s
 8 unique northern lakeside climate²⁰ and long history of success in energy conservation
 9 have led customers to consume less electricity than others in the State, keeping total
 10 bills low. The average Minnesota residential customer used almost 9,200 kWh in 2020,
 11 while the average Minnesota Power residential customer used just over 8,400 kWh.
 12 Figure 5 below shows how this relatively low per-customer usage, combined with some
 13 of the lowest rates in the State, has translated to extremely affordable monthly bills for
 14 Minnesota Power’s residential customers when compared to other electricity providers
 15 in the State and across the nation.

16

²⁰ 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 5. Average Monthly Residential Bill Comparison



2

3

4 **Q.**

How have Minnesota Power’s efforts, in total, supported Minnesota Power customers?

5

6 **A.**

Despite operating within O&M levels that have been held constant for over a decade and within base rates last set in the 2016 Rate Case, the Company has remained laser-focused on customers and undertaken extensive efforts to keep rates affordable while also achieving state energy policy objectives. However, the Company cannot sustain these efforts indefinitely and, as discussed in more detail below, cannot materially reduce or contain costs any further without additional workforce and/or customer impacts. To this end, the Company depends on customer, regulatory, and investor partnership to maintain and improve the Company’s financial health and integrity.

7

8

9

10

11

12

13

14

15

2. Climate

16

Q.

What is Minnesota Power’s current power supply strategy?

17

A.

Minnesota Power has been advancing a transformation of its power supply to a cleaner energy future through its *EnergyForward* strategy. In 2005, Minnesota Power’s energy supply had one of the highest carbon intensities in the nation, with a power supply that consisted of 95 percent coal generation. Today, Minnesota Power is delivering 50

18

19

20

1 percent renewable energy to customers and was the first Minnesota utility to achieve
2 this milestone. As part of this transition, Minnesota Power has either retired, refueled,
3 or remissioned seven of its nine coal-fired generating units. In our 2021 Integrated
4 Resource Plan (“2021 IRP”),²¹ the Company is going even further and has committed
5 to achieve an 80 percent reduction in carbon emissions by 2035 compared to 2005 levels
6 and has a stated goal of delivering 100 percent carbon-free energy by 2050. This
7 transformation has made Minnesota Power a state and regional leader in
8 decarbonization, while at the same time providing affordable and reliable electric
9 service for customers.

10
11 **Q. What changes to its generation fleet and infrastructure has Minnesota Power made**
12 **in recent years?**

13 A. The Company accomplished this carbon intensity reduction through a reduction in coal
14 generation and replacement with renewable energy. Specifically, Minnesota Power has
15 idled, remissioned, phased-out, and retired 600 MW of coal fired generation on its
16 system in the past decade, which is a very significant transformation for a utility with
17 an approximate system peak of 1650 MW. The Company also entered into contractual
18 relationships with Silver Bay Power Company to enable its idling of an additional 130
19 MW of coal fired generation in the region in 2019. Just prior to filing the last completed
20 rate case in 2016, the Company refueled the Laskin Energy Center to natural gas, ceased
21 operations at Taconite Harbor Energy Center Unit 3 (75 MW capacity) and
22 economically idled of Taconite Harbor Energy Center Units 1 and 2 commenced in the
23 fall of 2016 (150 MW of capacity). Minnesota Power is proposing in the 2021 IRP to
24 move forward with the retirement of Taconite Harbor Energy Center Units 1 and 2 in
25 2021. The Company has also reduced its purchase of power from the Milton R. Young
26 Unit 2 lignite coal plant from 227.5 MW to 80 MW as of 2014, with a complete phase
27 out planned by 2026. Finally, the Company retired Boswell Energy Center (“BEC”)
28 Units 1 and 2 on December 26 and 27, 2018, and in 2021, BEC Unit 3 (“BEC3”)

²¹ *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 changed operations to be economically dispatched in the Midcontinent Independent
2 System Operator (“MISO”) market.²²

3
4 **Q. How has Minnesota Power further advanced its mix of renewable generation**
5 **resources since the 2016 Rate Case?**

6 A. Since the 2016 Rate Case, Minnesota Power has added significant renewable generation
7 to its power supply portfolio, and at the end of 2020 became the first Minnesota utility
8 to reach a milestone of providing 50 percent of its power from renewable resources.
9 The transformation of Minnesota Power’s generation fleet continues to include more
10 renewable resources, fewer coal resources, and adds an efficient, dispatchable natural
11 gas resource to provide cost effective, lower carbon emission energy to balance
12 customer needs at times of low renewable generation.

13
14 In partnership with the Minnesota National Guard, in 2017 Minnesota Power
15 commissioned its first utility scale solar array, a 10 MW project on Camp Ripley, near
16 Little Falls, Minnesota. At the time of commercial operation, it was the largest solar
17 array on any National Guard base in the country. In addition, the Company has also
18 been keeping pace with Minnesota’s Solar Energy Standard by also adding its
19 Community Solar Garden (1 MW) as well as continuing the SolarSense rebate program
20 for customer-sited solar projects. In addition, the Company received Commission
21 approval in May 2021 to add approximately 20 MW of additional solar generation to
22 support economic relief and recovery within Minnesota Power’s service territory in
23 response to the COVID-19 pandemic.

24
25 Finally, the Company received Commission approval for two significant renewable
26 power purchase agreements (“PPA”) from which customers started to receive energy in
27 2020: (1) 250 MW of additional wind generation from the Nobles 2 wind facility that
28 commenced commercial operations December 2020; and (2) 250 MW of carbon-free

²² *In the Matter of an Investigation into Self-Commitment and Self-Scheduling of Large Baseload Generation Facilities*, E999/CI-19-704, COMPLIANCE FILING (Mar. 2, 2020).

1 capacity and energy and 133 MW energy only purchase from Manitoba Hydro
2 (“Manitoba Hydro PPA”).
3

4 **Q. Are any of these carbon-reduction achievements a driver of this rate case?**

5 A. Yes. As described further in the Direct Testimony of Ms. Pierce, a critical component
6 of Minnesota Power’s achievement of providing customers with half of their energy
7 from renewable sources in 2020 is the initiation of the Manitoba Hydro PPA. On
8 February 1, 2012, the Commission approved the Manitoba Hydro PPA.²³ The term of
9 the agreement is from June 1, 2020 through May 31, 2035, and Minnesota Power is
10 seeking recovery of the previously approved demand costs of the Manitoba Hydro PPA
11 in this rate case. As described later in my testimony, the Company has already mitigated
12 the immediate impact of the capacity payment associated with the Manitoba Hydro PPA
13 for customers by negotiating a delay in the beginning of capacity payments from June
14 1, 2020 to January 1, 2022.
15

16 **Q. What are the key additional power supply actions proposed in the 2021 IRP?**

17 A. Through its 2021 IRP, Minnesota Power outlined a bold vision for a sustainable path to
18 achieve a carbon-free power supply by 2050. The 2021 IRP was informed by a first-of-
19 its-kind stakeholder engagement process and outlines specific steps to facilitate a power
20 supply that is 70 percent renewable in 2030, reduces carbon emissions 80 percent by
21 2035, and results in a generation mix that is coal-free by 2035 — all while helping to
22 ensure reliable and affordable power for Minnesota Power customers and committing
23 to a Just Transition²⁴ for host communities. Specific near-term steps to reduce carbon
24 and advance renewable energy include:

- 25
- Retiring the currently-idled Taconite Harbor Energy Center in 2021;

²³ *In the Matter of Minn. Power’s Request for Approval of a Power Purchase Agreement with Manitoba Hydro Co.*, Docket No. E015/M-11-938, ORDER (Feb. 1, 2012).

²⁴ 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 • Adapting operations at BEC3 to economic dispatch within the MISO market in
2 2021;
- 3 • Implementing the Demand Response Product C for industrial customers in 2022;
- 4 • Constructing three solar projects totaling 20 MW in 2022;
- 5 • Advancing 200 MW of new wind resources by 2025; and
- 6 • Maintaining leadership in both electrification and energy conservation efforts.

7
8 Longer-term steps outlined in the 2021 IRP include:

- 9 • Retiring BEC3 by December 31, 2029;
- 10 • Adding 200 MW of solar that leverage the Boswell site or other Minnesota
11 Power facilities by 2030;
- 12 • Working collaboratively with customers to pursue up to 50 MW of long term
13 demand response by 2030; and
- 14 • Developing and implementing transmission solutions to facilitate the early
15 retirement of BEC3, and investigating options to refuel or remission BEC Unit
16 4 (“BEC4”) as coal operations cease by 2035.

17
18 **Q. How is Minnesota Power performing with respect to its Conservation**
19 **Improvement Program (“CIP”) Goals?**

20 A. Minnesota Power has consistently met or exceeded its CIP goals, including in 2020.
21 The Next Generation Energy Act of 2007 established a minimum annual energy savings
22 goal for utilities equal to 1.5 percent of (CIP eligible or non-CIP-exempt) gross annual
23 retail sales. The approved energy savings goal is calculated based upon the most recent
24 three-year weather normalized average, excluding sales to CIP-exempt customers. For
25 Minnesota Power, the 2020 approved kWh savings goal equates to 2.09 percent of CIP
26 eligible retail sales. Minnesota Power exceeded both the minimum and calculated
27 savings goals for 2020 by achieving 2.57 percent savings as a percentage of adjusted
28 sales, despite a year with significant challenges during the COVID-19 pandemic. This
29 is an ongoing success story for both Minnesota Power and our customers as we have
30 exceeded our CIP goals every year since 2010, when the 1.5 percent energy-savings
31 goal went into effect, and continue to expand energy savings. This strong performance

1 with energy conservation programs has helped keep customers' total bills lower in a
2 rising rate environment.

3
4 **Q. Is Minnesota Power supporting Commission policy goals around transportation
5 electrification?**

6 A. Yes. Minnesota Power offers several programs designed to reduce the barriers to EV
7 adoption while optimizing system benefits. Specifically, the Company offers rates for
8 both commercial and residential EV charging, a smart charge rewards program to
9 incentivize off-peak charging, rebates to reduce the upfront cost of purchasing EV
10 chargers, and an EV education and outreach program to provide customers with tools
11 and resources to increase general awareness and acceptance of EVs. The Commission
12 also recently approved a proposal from the Company to install 16 new EV charging
13 stations across its service territory to increase accessibility of EV charging in rural
14 Minnesota.²⁵

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

18 A. Yes. The Company has undertaken a broad array of resource management efforts,
19 conservation promotion programs, pricing tools, advanced rate design initiatives, and
20 education and outreach efforts consistent with the State's interest in environmental
21 protection. Minnesota Power is proposing to redesign the dual fuel program to support
22 beneficial electrification through improved interruptible service, evolving its demand
23 response programs, and investing in customer focused infrastructure that enables
24 complex rate designs that will support increased integration of renewable energy and
25 customer participation in smart energy management.

26

²⁵ *In the Matter of Minn. Power's Elec. Vehicle Charging Infrastructure Inv.*, Docket No. E015/M-21-257, ORDER APPROVING PROPOSAL AS MODIFIED, AUTH. DEFERRED ACCT., AND REQUIRING REPORTING (Oct. 22, 2021).

1 3. Community

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

4 A. The Company's basic and most critical function is providing safe, reliable, economic,
5 and environmentally responsible energy to customers. In doing so, we improve the
6 safety, security, and quality of life for the region. Minnesota Power also greatly values
7 the communities it serves and contributes to the overall health of its region through a
8 number of efforts, including by providing jobs and community support, economic
9 development efforts, and overall service to its communities. Because the Company
10 considers these to be important and valuable contributions to northern and central
11 Minnesota, I highlight these community and regional benefits to the State of Minnesota
12 in this section of my testimony.

13
14 **Q. How does the Company support the health of the regional economy?**

15 A. Minnesota Power currently employs approximately 1,000 people and provides an
16 annual payroll of approximately \$68 million (Total Company). The Company is one of
17 northeastern Minnesota's only publicly traded corporations with a local headquarters.
18 Therefore, Minnesota Power contributes to the regional economy as a large employer
19 and solid financial contributor, as well as by maintaining a strong philanthropic
20 presence.

21
22 In addition to the Company's direct contribution to the regional economy, Minnesota
23 Power has also provided economic development support to the communities it serves
24 for nearly three decades. The Company actively engages with community partners on
25 business expansion projects to encourage business startups, expansions and locations,
26 and workforce attraction. Specifically, the Company has worked to diversify the
27 regional economy to buffer economic downturns from any single industry through its
28 economic development efforts.

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

2 A. Community engagement is one of the Company's core values and it underscores
3 Minnesota Power's commitment to help the businesses and people of the region we serve
4 to prosper. Civic and community engagement by employees take many forms, including
5 contributions of time and talent to regional organizations like the United Way, direct
6 financial contributions to community organizations and for scholarships, and sharing
7 our expertise with students and community groups. In addition, this engagement comes
8 through employees serving on governing boards of local not-for-profit entities and
9 government appointments to public and quasi-public entities to support local and
10 regional services, infrastructure, and economic development/business growth entities.
11 Minnesota Power employees are located throughout our service territory in northeastern
12 Minnesota, serving numerous roles that are integral to the communities where our
13 employees live and work.

14
15 Additional information about Minnesota Power's community involvement can be found
16 in the Company's 2020 Corporate Sustainability Report, available online at
17 [https://www.allete.com/Content/Documents/Sustainability/2020/ALE-Sustainability-](https://www.allete.com/Content/Documents/Sustainability/2020/ALE-Sustainability-Report.pdf)
18 [Report.pdf](https://www.allete.com/Content/Documents/Sustainability/2020/ALE-Sustainability-Report.pdf).

19
20 This report highlights the wide array of volunteerism, philanthropy, and leadership we
21 provide to communities across our service area. Specifically in 2020, the Corporate
22 Sustainability Report outlines ALLETE's focus on responding to the impacts of the
23 COVID-19 pandemic through its corporate giving. These efforts included supporting
24 the Feeding Our Communities campaign to fight hunger by supporting local food banks
25 and donations to support a number of non-profit organizations on the front lines of the
26 pandemic in northern Minnesota.

27
28 **Q. What efforts has the Company undertaken in regards to increasing diversity,
29 equity, and inclusion?**

30 A. Minnesota Power contends that equity — in all of its forms — plays a critical role in
31 ensuring security, comfort, and quality of life for customers and in the overall health of

1 our communities. Minnesota Power has been a forerunner in several key areas,
2 including gender diversity in leadership and veteran outreach and support. ALLETE
3 currently has a corporate board of directors in which seven of our 11 directors, including
4 the board chair and lead director, are female. And in 2020, the Minnesota Census of
5 Women in Corporate Leadership recognized the Company for its commitment to gender
6 diversity on its board of directors. Additionally, the State of Minnesota designated the
7 Company as a Yellow Ribbon Company in 2016 for its support of military service
8 members, veterans, and their families, both within the Company and in the communities
9 it serves.²⁶ Minnesota Power was the first company headquartered north of the metro
10 area to receive this designation. In 2020, ALLETE’s president and CEO committed to
11 further advancing diversity, equity, and inclusion (“DE&I”) efforts along with other
12 Edison Electric Institute companies.

13
14 Throughout 2021, Minnesota Power leaders developed a framework to strengthen DE&I
15 efforts and identified three key areas where the Company will take action: workforce,
16 supply chain, and Minnesota Power as a community citizen. Additional information on
17 Minnesota Power’s DE&I efforts can be found in the Direct testimonies of Company
18 witnesses Laura E. Krollman and Mr. Gunderson.

19
20 **Q. Is the Company also supporting workforce and economic transitions in the**
21 **communities affected by the move away from coal generation?**

22 A. Yes. As Fresh Energy noted earlier this year, “Minnesota’s transition away from fossil
23 fuels creates very real local and regional challenges as fossil fuel jobs disappear and
24 power plant host communities suffer losses to their local tax base.”²⁷ Minnesota Power
25 has long recognized this potential dynamic and worked with its stakeholders in Cohasset

²⁶ More information on Minnesota Power’s DE&I efforts can be found in ALLETE’s 2020 Corporate Sustainability Report available at the following link: <https://www.allete.com/Content/Documents/Sustainability/2020/ALE-Sustainability-Report.pdf>.

²⁷ Justin Fay, *Taking stock of meaningful progress at the Minnesota Legislature*, FRESH ENERGY: 2021 LEGISLATIVE SESSION, <https://fresh-energy.org/taking-stock-of-meaningful-progress-at-the-minnesota-legislature> (June 23, 2021).

1 and surrounding communities to develop a Just Transition of the workforce, economic
2 base, and other support for these communities.

3
4 In particular, the Company has been an active participant in the Midwest Governors
5 Association’s (“MGA”) initiative, “Preparing Midwestern Communities for Power
6 Plant Closures,”²⁸ which focuses on bringing Midwestern policy leaders together to
7 create economic opportunity in the energy sector. This effort is a focal point of
8 Minnesota’s Governor and MGA current Chair Tim Walz’s agenda. Within the scope
9 of the initiative is assessing the problem of closures, developing solutions to the
10 problems, and developing plans to support the effected communities and their
11 workforce. The effort brings together utilities, community leaders, workers, and energy
12 advocates.

13
14 Minnesota Power is also co-funding a regional application with the Department of Iron
15 Range Resources & Rehabilitation for the federal Economic Development
16 Administration's "Build Back Better Regional Challenge" that focuses on three
17 Minnesota Power host communities (Cohasset, Hoyt Lakes, and Taconite Harbor). The
18 application is a collaboration with a wide array of community partners to attract
19 transformational federal investment in these communities to accelerate economic
20 recovery and enhance economic resiliency into the future.

21
22 **B. Economic Changes Since the Last Completed Rate Case**

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

24 A. Previously, I addressed changes made to our generation fleet and customer programs
25 since the last completed rate case, filed in 2016. In this section of my testimony, I
26 discuss the changes the Company has experienced regarding customer load and the
27 overall financial position of the Company over the same time period.

28

²⁸ Midwestern Governors Ass’n, *Preparing Midwestern Communities for Power Plant Closures*,
<https://midwesterngovernors.org/power-plant-closures/> (last visited Oct. 30, 2021).

1 1. Sales Changes

2 **Q. How has the Company been impacted by customer changes since the last rate case?**

3 A. Minnesota Power is and has been heavily impacted by downturns in the taconite and
4 paper industries due to the Company’s unique customer mix and industrial customer
5 concentration.²⁹ In fact, in December 2017, Blandin Paper permanently shut down its
6 Paper Machine #5 in Grand Rapids, Minnesota, which was approximately a material
7 MW reduction in load for Minnesota Power. More recently in April 2020, U.S. Steel
8 Corporation stated it would idle its Keetac facility in response to the sudden and
9 dramatic decline in business conditions resulting from the COVID-19 pandemic.
10 Keetac resumed production in December 2020 after nearly eight months of idling. In
11 June 2020, Verso Corporation indefinitely idled its Duluth paper mill. The idling of
12 Keetac and Verso resulted in a loss of approximately one million kWh in sales on an
13 annual basis, which is roughly equivalent of losing Minnesota Power’s entire residential
14 customer class. The idling of Keetac and Verso resulted in a reduction of approximately
15 \$32 million of electric revenue annually (net of associated expense savings such as fuel
16 costs).³⁰ These changes underscore the ongoing business risks facing the Company,
17 which are reflected in our credit ratings.

18
19 **Q. How have Minnesota Power’s retail and resale energy sales changed since the 2016**
20 **Rate Case?**

21 A. In the 2016 Rate Case, the Commission approved a 2017 test year retail sales forecast
22 that was about 256,000 MWh (2.8 percent) higher than Minnesota Power’s
23 supplemental test year projections. In turn, actual sales in 2017 were about 471,000
24 MWh (5.2 percent) below the level established in rates.

25
26 Further, as Company witnesses Benjamin S. Levine and Ms. Pierce describe in their
27 Direct Testimony, since the 2016 Rate Case, Minnesota Power has experienced

²⁹ Revenue from industrial customers was approximately 62 percent of Minnesota Power’s total retail revenue in 2020. See Form FERC Form 1 for ALLETE, Inc. (2020).

³⁰ In Docket No. E015/M-20-814, Minnesota Power filed a Petition for Approval to Track and Defer Lost Large Industrial Customer Sales Resulting From the COVID-19 Pandemic. On May 13, 2021, the Commission issued an Order denying the request.

1 significant lost sales to retail, wholesale, and bilateral sales counterparties. Specifically,
2 residential and commercial sales have continued a decade-long steady decline due to
3 conservation and limited growth in new customers. In 2020, COVID-19 caused a sharp
4 decrease in overall residential and commercial sales. The residential class consumed
5 about 30,000 MWh (2.8 percent) more in 2020 due to many customers spending more
6 time in their home, but this was more than offset by a 5.3 percent (63,000 MWh)
7 contraction in commercial energy sales (on a weather-normalized basis).

8
9 Sales to mining customers were quite strong prior to COVID-19. In fact, 2018 taconite
10 production was one of the strongest years on record, but actual sales to mining
11 customers were still notably lower than the level set in the Company's 2016 Rate Case.
12 While the Company recently expanded sales to Silver Bay Power Company following
13 the idling of their coal-fired generation in late 2019, the paper sector has experienced
14 significant, permanent loss of customer loads previously mentioned above. Blandin
15 indefinitely idled its Paper Machine # 5 in December of 2017, and Verso idled its
16 production at the Duluth Mill in June of 2020. The Duluth Mill has since been
17 purchased by ST Paper, but ST Paper is converting the mill to a new kind of production
18 and therefore is expected to take electric service at significantly lower levels for the next
19 several years and will no longer utilize steam service from Minnesota Power.

20
21 The energy needs of the Company's wholesale customers, including Minnesota
22 municipal customers and Superior Water Light and Power, have also decreased due to
23 the expiration of Minnesota Power's resale full-requirements power supply contract
24 with Brainerd Public Utilities and the closure of the Husky refinery in Superior,
25 Wisconsin, following the facility explosion on April 26, 2018.³¹ Further, the
26 cancellation of Xcel Energy's contract with Laurentian Energy Authority in July 2018
27 resulted in lost sales to Hibbing and Virginia Public Utilities due to their use of self-
28 generation that was previously sold to Xcel Energy.

³¹The refinery has since been purchased by Cenovus Energy Inc. and is expected to restart in 2023
<https://www.fox21online.com/2021/01/28/husky-to-receive-more-funding-for-rebuild-projecting-2023-restart/>.

1 Overall, both industry- and business-specific changes among our customers, along with
2 broader macroeconomic downturns, have served to reduce customer sales. Company
3 witnesses Mr. Levine and Ms. Pierce discuss the changes to retail and resale sales and
4 off-system power sale contracts, respectively, in their Direct Testimony.
5

6 **Q. Can you describe in more detail why Minnesota Power is not able to mitigate the**
7 **loss of industrial sales and revenue in 2020?**

8 A. Yes. As a result of Minnesota Power's uniquely high industrial customer concentration,
9 economic cycles like that which occurred in 2020 have drastically larger impacts to
10 Minnesota Power's revenue than a typical utility would experience. The modest
11 increase in Minnesota Power's residential sales due to COVID-19 (about 30,000 MWh)
12 was only enough to offset about 2.5 percent of the combined industrial and commercial
13 sales loss. By contrast, EIA data shows the average U.S. Investor-Owned Utility was
14 able to offset nearly one third of the industrial and commercial sales losses with
15 increased sales to the residential sector.
16

17 Additionally, the opportunity to mitigate the risk of loss of industrial customer load
18 through wholesale market sales is nowhere near as meaningful as it was a decade ago.
19 As described by the Direct Testimony of Company witness Ann E. Bulkley, since
20 Minnesota Power's last fully litigated rate case, cash flows have been negatively
21 affected by the fluctuation in industrial customer sales and the inability to replace those
22 sales in the MISO market. As described by the Direct Testimony of Company witness
23 Ms. Pierce, the current low cost wholesale market environment presents a significant
24 financial risk to the Company as options for replacing retail customer capacity and
25 energy sales revenue are limited. This inability to recover 100 percent of the lost large
26 industrial customer base rate revenue creates a difficult cost recovery equation for
27 Minnesota Power in meeting its ongoing fixed-cost requirements.
28

1 2. Financial Position of the Company

2 **Q. Please provide an overview of the Company's financial position since its last**
3 **completed rate case.**

4 A. As further explained in Mr. Cutshall's Direct Testimony, since the Company's 2016
5 Rate Case, ALLETE has experienced a reduction in its credit rating from both Moody's
6 & Standard & Poor's; experienced the impacts of the Tax Cuts and Jobs Act; navigated
7 customer load fluctuations, reductions, and loss; cut costs extensively; and weathered
8 the impacts of the COVID-19 pandemic.

9
10 **Q. What did Minnesota Power do to address these issues?**

11 A. Minnesota Power has worked hard to weather these economic cycles through a
12 combination of prudent business management, cost cutting, off-system energy sales,
13 and additional efforts to add new customers and meet the needs of our current
14 customers. Specifically, Minnesota Power has managed our employee levels and
15 compensation costs such that salaries and wage expenses used to develop the 2022 test
16 year are lower than those the Company incurred in 2010, during the tail end of the Great
17 Recession. Company witnesses Mr. Cutshall and Joshua G. Rostollan address these
18 efforts in more detail. However, while we are proud that Minnesota Power has managed
19 to maintain these low O&M levels for more than a decade, despite the need for
20 significant capital investments for the transformation of our power supply, rising market
21 costs of employee compensation and benefits, and overall marketplace inflation, they
22 are not sustainable. There is little more to cut, and we continue to face the risks of future
23 economic downturns or changes in our industrial customers' industries, in addition to
24 higher demands on both people and infrastructure from growing customer expectations,
25 increasingly frequent extreme weather events, and overall system transformation needs.

26
27 Further, as Company witness Ms. Pierce explains, Minnesota Power also utilizes a
28 power marketing strategy to optimize the revenue from its assets and maximize the
29 value returned to its customers. This strategy was successful for over a decade, in
30 particular due to a successful ten-year Large Market Contract that alone provided a
31 majority of the margins returned to Minnesota Power customers. However, that contract

1 has now expired. In addition to the ongoing trend of low market prices described above,
2 Minnesota Power's remissioning, retirement, and idling of 600 MW of coal-fueled
3 generating facilities in the past several years leaves fewer dispatchable assets to source
4 long-term wholesale sales. As a result, reducing customer costs through marginal cost
5 sales to the wholesale power market is no longer adequate to replace lost customer
6 revenue, and the Company is requesting a significantly lower off-system sale margin be
7 reflected in the Company's revenue. Company witness Ms. Pierce discusses these
8 strategies in her Direct Testimony.

9
10 **Q. What was the net outcome of the Company's 2016 Rate Case?**

11 A. Combining the outcome of the 2016 Rate Case with the outcome of the EITE docket
12 that was largely decided concurrently, the amount of costs Minnesota Power was able
13 to recover actually went down compared to the levels set in the Company's 2010 rate
14 case. While the 2016 rate case revenue deficiency approved by the Commission was
15 \$12.0 million (+ 1.86 percent), the combined outcome of the rate case and EITE docket
16 was a revenue decrease of -\$3.5 million or -0.55 percent.

17
18 **Q. How does O&M expense used to develop the 2022 test year compare to previous
19 years?**

20 A. The Company has managed its operations such that the O&M expense used to develop
21 the 2022 test year are lower than its O&M expense in 2010, while inflation alone has
22 increased costs on average 1.7 percent annually over the same period, as Mr. Rostollan
23 describes further in his testimony.

24
25 As noted previously, Minnesota Power has prudently maintained the same O&M levels
26 for over a decade despite the need for significant capital investments, growing customer
27 expectations for new programs and services, the transformation and decarbonization of
28 our system through our *EnergyForward* strategy, rising market costs of employee
29 compensation and benefits, and overall marketplace inflation. Despite aggressive and
30 unsustainable cost reductions over the last several years, Minnesota Power has made
31 great strides in meeting the policy goals of the State of Minnesota.

1 **Q. Has Minnesota Power earned its allowed rate of return in these years?**

2 A. No. In Minnesota Power's 2016 Rate Case, the Commission found that an equity ratio
3 of 53.81 percent and a 9.25 percent ROE were appropriate, resulting in an overall rate
4 of return of 7.06 percent. Since Minnesota Power's 2019 Rate Case was withdrawn
5 prior to going through the entire rate case process, Minnesota Power's authorized capital
6 structure and rate of return have remained unchanged from the 2016 Rate Case.
7 However, Minnesota Power's 2020 unadjusted MN Jurisdictional rate of return was
8 6.38 percent, and the projected 2021 unadjusted MN Jurisdictional rate of return is
9 5.97 percent. These returns are materially below the authorized level due to incurred
10 costs that were not included in rates, as well as a loss of load compared to the sales
11 forecast approved in the last rate case. These issues are expected to continue in the 2022
12 test year and purchased power expenses are materially increasing due to the start of a
13 long-term capacity purchase with Manitoba Hydro to deliver renewable hydro power.
14 Without rate relief, the Company's 2022 test year MN Jurisdictional rate of return is
15 projected to be only 3.86 percent.

16
17 **Q. At what level have Moody's and S&P set the Company's credit ratings and outlook**
18 **since the 2016 Rate Case?**

19 A. As discussed further in Mr. Cutshall's Direct Testimony, after the 2016 Rate Case
20 decision was announced on January 30, 2018, both Moody's and S&P downgraded
21 ALLETE and revised ALLETE's credit ratings to a negative outlook. The downgrades
22 were attributed to several factors, including the outcome of the 2016 Rate Case, the
23 enactment of the Tax Cuts and Jobs Act of 2017, and Minnesota Power's ongoing
24 financial and business risk associated primarily with its high concentration of iron
25 mining and paper mill customer load. In other words, our good work on behalf of
26 customers has not mitigated the difficult effects of our current rate structure and
27 business risks on the Company. Additionally, these risks are not offset by the ability to
28 sell power in the MISO region, as I described above.

29

1 **Q. How has the credit rating downgrade affected the Company overall?**

2 A. As described in more detail by Mr. Cutshall, in general, credit ratings affect a company's
3 ability and cost to issue debt: the stronger a company's credit ratings, the greater the
4 number of willing investors and the less fees and interest a company will need to pay in
5 order to issue debt. A company's creditworthiness is also directly correlated to its cost
6 of equity. Overall, ALLETE's credit ratings downgrade resulted in a higher cost of
7 debt, decreased its attractiveness to investors, and increased its overall business risk.
8 These downgrades add to the challenges the Company faces in today's efforts to
9 continue its utility transformation.

10
11 **C. Relevance to the Rate Case**

12 **Q. How does the prior discussion regarding policy achievements and economic**
13 **changes for the Company factor into the request for cost recovery and a reasonable**
14 **rate of return in this proceeding?**

15 A. The fundamental purpose of a rate case is to establish rates that are just and reasonable,
16 based in large part on a review of the prudence of Company expenditures. Minnesota
17 Power respectfully submits that when, as here, the utility has made significant
18 investments to meet and exceed state policy goals; has undertaken substantial cost
19 cutting to ensure that its business is managed efficiently; is working to enhance
20 customer service quality and reliability; is a responsible and supportive regional citizen
21 and employer; and is proposing rates that are affordable — especially relative to
22 comparable utilities — then the expenditures to achieve those results should be
23 considered reasonable and prudent investments.

24
25 While Minnesota Power has made incredible strides in transforming its energy system,
26 there is still more to do to transition to a carbon free future. A financially healthy utility
27 is a critical component of the regulatory compact, and a fair outcome in this rate case
28 will ensure Minnesota Power has the sound financial foundation from which continued
29 energy system transformation can occur. This requires both a reasonable authorized
30 rate of return, as well as the recovery of reasonable costs in order to have the opportunity
31 to earn that rate of return. Even in a robust economy with record low unemployment,

1 full customer production and substantial internal cost reductions made by the Company,
2 current rates and revenues have been insufficient for Minnesota Power to attain its
3 authorized rate of return for the past several years, and the gap between actual and
4 authorized rate of return will grow wider going forward.
5

6 **Q. Why is Minnesota Power’s financial position since the 2016 Rate Case relevant to**
7 **this proceeding?**

8 A. Minnesota Power’s financial position is relevant to this proceeding because it speaks to
9 the challenging conditions the Company has endured. Without reasonable rate relief,
10 the Company’s financial metrics and overall financial integrity will continue to be
11 challenged as we reach a critical inflection point in our system’s transformation to a
12 power supply that goes beyond 50 percent renewable. Additionally, a supportive
13 regulatory framework is instrumental to avoid a further decline to the Company’s credit
14 rating, which would place ALLETE’s S&P rating one notch above a “junk” rating and
15 just one notch higher at Moody’s. If credit supportiveness from the Minnesota
16 regulatory framework continues to decline, ALLETE could be downgraded even
17 further.
18

19 **Q. What does this mean for the Company going forward?**

20 A. There is much less room to maneuver going forward, with industrial customer volatility
21 combined with reduced opportunity to offset retail sales losses through MISO or off-
22 system power sales contracts. In periods when the Company’s taconite customers idle
23 production, as happened in 2001, 2008-2009, 2015-2016, and early 2020, the
24 Company’s opportunity to earn its authorized return is even lower. Additionally, the
25 Company will not have the same ability to accelerate O&M cuts again. Minnesota
26 Power cannot afford to reduce employees further and does not believe that current levels
27 are sustainable, nor that current levels — let alone further reductions — are in the best
28 interest of its workforce, the regional economy, or its customers. Minnesota Power asks
29 the Commission to factor all of these considerations into its deliberations, and in
30 particular, into its review of cost recovery and rate of return in this proceeding, which

1 in turn affect the Company's ability to serve customers and access capital in the market
2 at reasonable costs to customers.

3
4 **Q. How should this discussion affect the determination of the Company's authorized
5 rate of return?**

6 A. Minnesota Power requests that the Commission examine Minnesota Power's alignment
7 with state policy goals and progress on virtually all fronts, the effects that the last rate
8 case outcome had on the Company and its employees, the significant efforts of
9 Minnesota Power to support recovery of prudent costs that are necessary for provision
10 of utility service, and the Company's need to maintain its current credit rating. The
11 Commission has recently considered similar factors in several cases establishing the
12 authorized rate of return available to Minnesota utilities. In conjunction with the
13 thorough cost of equity modeling submitted by Company witness Ms. Bulkley and the
14 capital structure analysis provided by Company witness Mr. Cutshall, these factors
15 further support the Company's requested overall rate of return of 7.5 percent.
16 Additionally, the Company seeks the opportunity to recover its costs of providing
17 service so that it ultimately has a reasonable opportunity to earn its authorized rate of
18 return.

19
20 **IV. INTRODUCTION TO THIS FILING**

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

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

24
25 **A. Revenue Requirements**

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

28 A. Minnesota Power's requests recovery of its overall 2022 test year revenue requirement
29 of \$724.3 million (MN Jurisdictional), which is an overall rate increase of \$108.3
30 million (MN Jurisdictional), or 17.58 percent. These amounts are based on the
31 Company's projected O&M expense and capital budgets for the 2022 test year, an ROE

1 of 10.25 percent, and an overall rate of return of 7.5 percent. The Direct Testimony of
2 Company witness Amanda L. Turner provides a detailed account of the Company's
3 revenue deficiency.
4

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

6 A. The primary drivers of the revenue deficiency are a combination of declining sales,
7 capital investments, and the need to improve our rate of return and recover a greater
8 portion of our total costs. Since the 2016 Rate Case, the Company has experienced
9 significant lost sales to retail, wholesale, and bilateral sales counterparties as described
10 above. We have also made substantial investments in transforming our generation fleet,
11 as well as transmission and distribution system work.
12

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

15 A. No. As discussed previously, the Company has already made significant cost reductions
16 following the 2016 Rate Case, and it can no longer sustain the lower expense levels.
17 This is particularly important as the Company positions to continue meeting and
18 exceeding state energy policy goals. The Company has also continued its prudent O&M
19 and capital expenditures in its operations to improve reliability and customer experience
20 as described later in this testimony and by Company witnesses Todd Z. Simmons and
21 Mr. Gunderson.
22

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

24 A. Minnesota Power seeks an overall rate of return of 7.5 percent, reflecting a rate of return
25 on equity of 10.25 percent. The Direct Testimony of Company witnesses Ms. Bulkley
26 and Mr. Cutshall further describe the reasonableness of the rate of return requested in
27 this proceeding relative to the Company's unique risk factors and exemplary
28 performance.
29

1 **B. Cost and Risk Mitigation Efforts**

2 **Q. Does this requested revenue requirement reflect any current Company efforts to**
3 **mitigate rate increases for all customer classes?**

4 A. Yes, several. In addition to the continuing benefits of the efforts described earlier in my
5 Direct Testimony, the Company has also taken several recent steps to reduce the effects
6 of any rate increase on customers.

7
8 First, on August 31, 2020, Minnesota Power submitted a petition for Commission
9 approval to begin selling land holdings along traditional hydro reservoirs that are no
10 longer necessary for maintaining hydro operations. As an effort to ensure energy
11 affordability for all customers, the Company proposed that all proceeds go back to
12 customers to mitigate rates. The Company’s petition was approved by the Commission
13 at its October 14, 2021 agenda hearing.

14
15 Second, a key driver of this case is Minnesota Power’s upcoming PPA with Manitoba
16 Hydro to take the next step in our *EnergyForward* planning. Under the Company’s
17 original 250 MW, Minnesota Power was set to begin making capacity payments to
18 Manitoba Hydro on June 1, 2020, when the Great Northern Transmission Line
19 (“GNTL”) went in-service and energy from the PPA began flowing on the line.
20 However, because Manitoba Hydro had permitting delays on its portion of the
21 international power line, the parties negotiated contingencies in the event Manitoba
22 Hydro was not in-service at the same time as GNTL. As part of those contingencies,
23 the parties agreed to delay capacity payments under the 250 MW PPA until January 1,
24 2022. This delay has served customers well, as it has supported Minnesota Power’s
25 efforts to avoid seeking a rate increase until it was critical to do so.

26
27 **Q. How is the Company mitigating rate increases for low-income residential**
28 **customers?**

29 A. As Minnesota Power looks to continue to decarbonize its system, encourage beneficial
30 electrification, and ensure affordability for low-income customers, changes to
31 residential rate design were thoughtfully considered — particularly for low-income

1 customers. The Company conducted the most extensive stakeholder process it had ever
2 initiated to evaluate residential rate design and consulted stakeholders — including with
3 the Citizens Utility Board, the City of Duluth, the City of Royalton, Ecolibrium3,
4 Energy CENTS Coalition, Fresh Energy, the Fond du Lac Band of Lake Superior
5 Chippewa, the Office of Attorney General, and the Department (participating in an
6 observer status only). A key takeaway from the multi-year stakeholder process was
7 agreement that any rate design shift should maintain similar benefits for low-income,
8 low-usage customers as they receive under the current inverted block rate structure. In
9 its August 27, 2021 Order in Docket No. E015/M-20-850, the Commission approved
10 the Company’s proposed low-income, usage qualified discount that would continue
11 through the rate design transition to achieve this goal.
12

13 **Q. How is the Company managing rates for its commercial customers?**

14 A. As previously noted, Minnesota Power’s commercial customers have rates that are
15 similar to the state average; however, this class of customers has historically enjoyed
16 the most energy savings from Minnesota Power’s class-leading energy conservation
17 programs. The Company’s partnership with these customers to meet and exceed energy
18 conservation goals over the last decade has helped reduce their energy usage more than
19 any other class of customers that participate in this important program, reducing the
20 total energy bill for these businesses. For example, on average over the past five years,
21 non CIP-exempt commercial and industrial customers accounted for 55 gigawatt-hours
22 of first year savings achieved through energy efficiency programs each year and
23 accounted for 80 percent of total energy conservation savings over the past five years.
24

25 **Q. Is Minnesota Power addressing rate mitigation for large industrial customers as
26 well?**

27 Yes. Minnesota Power’s strategic accounts management team works directly with our
28 large power customers to optimize their operational energy usage within the Company’s
29 approved tariffs and the customers’ approved electric service agreements (“ESAs”).
30 Minnesota Power also filed a package of rate mitigation ideas in Docket No. E015/20-
31 492 on August 31, 2020 to highlight numerous initiatives to maintain affordable rates

1 for customers, including some specifically for its large power customers. As a step to
2 assist its largest industrial customers, Minnesota Power proposed extending the EITE
3 rate until final rates are implemented in this rate case. In its June 30, 2020 Order
4 resolving Minnesota Power’s 2019 rate case filing with conditions, the Commission
5 directed the Company to maintain the current EITE customer rider rate discount through
6 February 1, 2021.³² In the same Order, the Commission also directed Minnesota Power
7 to work with stakeholders to bring forward a proposal by August 31, 2020 to extend the
8 EITE rate discount. In its January 19, 2021 Order, the Commission granted the petition
9 to extend the EITE rates from February 1, 2021 until final rates are implemented in this
10 rate case.³³

11
12 This year, Minnesota Power also received approval for its new Demand Response
13 Product C offering for large industrial customers in Docket No. E015/M-21-28.
14 Participating industrial customers will receive revenue for committing their demand
15 response capacity over the next six years, effectively lowering their rates by \$1 to \$3
16 per MWh over the period.

17
18 **Q. Why is the Company’s overall rate request reasonable?**

19 A. Minnesota Power continues to deliver on state energy policy goals as a leader in
20 renewable energy supply; by exceeding the state energy conservation goal every year
21 since its inception in 2010; by reducing carbon dioxide emissions by 50 percent from
22 2005 levels; and by idling, retiring, or remissioning seven of its nine coal-fired
23 generators. In addition, the Company has improved its low-income customer programs
24 and launched tools to enhance the customer experience. Minnesota Power also leads
25 the state in efforts to support future grid and customer enhancements and is in the
26 process of implementing a system to support advanced time of day rates. The Company
27 has continually executed its major projects on or under budgetary estimates, including

³² *In the Matter of Minn. Power’s Revised Petition for a Competitive Rate for Energy Intensive Trade-Exposed (EITE) Customers and an EITE Cost Recovery Rider*, Docket No. E015/M-16-564, INITIAL ORDER APPROVING PETITION AND RESOLVING RATE CASE WITH CONDITIONS at 4 (June 30, 2020); *In the Matter of the Application of Minn. Power for Auth. to Increase Elec. Serv. Rates in Minn.*, Docket No. E015/GR-19-442, INITIAL ORDER APPROVING PETITION AND RESOLVING RATE CASE WITH CONDITIONS at 4 (June 30, 2020).

³³ *Id.*

1 the Bison Wind Farms, BEC4 Emissions Control Project, and the completion of the
2 GNTL, which went into service in 2020. On top of all of these performance attributes,
3 Minnesota Power operates with a customer risk profile that is significantly above
4 average, with the ninth highest industrial customer concentration out of 179 investor
5 owned utilities, and is by far the highest concentration of any utility in the State of
6 Minnesota. Finally, the Company is entering this proceeding with the lowest rates for
7 the average residential customer in the state, reflecting years of cost containment on
8 behalf of customers.

9
10 The recommended capital structure and rate of return in this request are needed to
11 support and maintain adequate investment-grade corporate credit ratings and financial
12 integrity necessary for Minnesota Power to continue to provide quality electric service.
13 As a result of the Company's recent performance against all the metrics described above
14 and its continued efforts to demonstrate its strong management, customer service, and
15 partnership with all stakeholders, the request before the Commission is both reasonable
16 and prudent.

17
18 **C. Class Cost of Service and Rate Design**

19 **Q. Please describe Minnesota Power's approach to establishing a reasonable rate**
20 **design.**

21 A. Minnesota Power approaches rate design from an overall cost of service methodology,
22 in which rates are designed so that individual classes of customers pay an appropriate
23 and fair share of the costs associated with delivering safe and reliable electricity. Rate
24 design is further influenced by other factors such as affordability and competitiveness
25 as compared to state and national benchmarks. More information on revenue
26 apportionment and rate design, taking Company witness Stewart J. Shimmin's class cost
27 of service study ("CCOSS") results into account, can be found in the Direct Testimony
28 of Ms. Leah N. Peterson.

29

1 **Q. How does the significant transition of Minnesota Power’s energy system influence**
2 **rate design?**

3 A. As the Company has made investments to significantly reduce carbon emissions from
4 its electric supply, renewable energy supply has also advanced to exceed 50 percent of
5 customer energy requirements in 2021. Since renewable energy is variable by nature,
6 it is necessary for customer focused rate designs to support and incentivize controllable
7 customer load to better align with variable renewable generation. This alignment of
8 load with generation helps balance energy supply with demand in the most economical
9 manner for customers. Additionally, the low carbon intensity of the Company’s power
10 supply, which is expected to decline even further in the future, creates opportunities for
11 meeting state policy goals for carbon reduction through beneficial electrification.
12 Finally, the need to balance affordability and competitiveness with these advancements
13 in sustainability is important to maintain customer satisfaction with the sustainable
14 energy transformation. Minnesota Power’s rate designs are intended to maintain
15 affordable rates for low-income residential customers in addition to keeping rates
16 competitive for industrial customers whose high load factor operation serves to increase
17 the overall economic efficiency of the energy system. The Company also considers how
18 to use rate design to empower customers with more control over their energy usage, as
19 evidenced by its first-in-the-state transition to time varying rates for the residential
20 customer class. Together, these factors also influence efficient and effective rate
21 designs for Minnesota Power customers.

22
23 **Q. How is Minnesota Power modernizing rate design?**

24 A. As described in the discussion regarding state energy policy above, Minnesota Power
25 has been decarbonizing its power supply while supporting beneficial electrification and
26 the efficient utilization of the electric system. To meet policy goals, support customer
27 desires, and capture system efficiencies, Minnesota Power offers several rate design
28 proposals in this rate case, described further in the Direct Testimony of Company
29 witness Leah N. Peterson. These proposals include:

- 30 • Changes to the residential and commercial dual fuel and controlled access rates;
- 31 • Updates to its Rider for Large Power Incremental Production Service (“IPS”);

- 1 • Adding a non-standard residential rate rider for customers who opt-out of AMI
- 2 meter technology;
- 3 • Separating the Transmission Demand Charge on Large Power and Large Light and
- 4 Power customer bills;
- 5 • Adjusting the credit for Demand Response Product A; and
- 6 • Updating several riders that affect the Large Light and Power class.

7

8 **Q. Is the Company proposing any increase to fixed portions of its bill?**

9 A. Yes. Minnesota Power currently has the lowest residential fixed charge in Minnesota,

10 and it has not increased in 12 years. The Company is requesting an increase to the

11 monthly Service Charge for Residential customers. Minnesota Power proposes to

12 increase the Residential Service Charge to \$10.00 per month. The current Residential

13 Service Charge of \$8.00 has been in place since the effective date of final rates in

14 Minnesota Power's 2008 rate case, November 1, 2009.³⁴ Additionally, as described by

15 Ms. Leah Peterson, the increase to \$10.00 per month results in a significantly lower

16 monthly service charge than with all neighboring distribution cooperatives and is well

17 below the CCOSS levels, which indicate a Residential Service Charge of \$27.50 per

18 customer per month would be necessary to recover customer-related service connection

19 costs. The Company's proposed \$10.00 per month Residential Service Charge is

20 therefore a gradual increase moving directionally toward the basic cost of service

21 connection.

22

23 **Q. Does Minnesota Power include the EITE rate discount in its proposed final rates?**

24 A. No, subject to Commission approval, Minnesota Power proposes to cancel the EITE

25 Rider and rate discount effective with final rates.³⁵ Further, as described more fully in

³⁴ *In the Matter of Application of Minn. Power for Auth. to Increase Elec. Serv. Rates in Minn.*, Docket No. E015/GR-08-415, ORDER SETTING INTERIM RATE REFUND, AMENDING ORDER AFTER RECONSIDERATION, AND APPROVING COMPLIANCE FILING at 4 (Oct. 29, 2009).

³⁵ The Company filed a letter in the EITE Rider Docket (Docket No. E015/M-16-564) dated October 7, 2019, requesting that the Commission grant a procedural extension to continue the EITE Rider until new final rates in the present rate case are effective.

1 the Direct Testimony of Company witness Ms. Peterson, Minnesota Power’s non-EITE
2 customers have not had to pay any surcharge associated with the EITE rate discount.
3

4 **Q. What is the overall result of the Company’s rate design proposals in this**
5 **proceeding?**

6 A. Minnesota Power has demonstrated its ability to remain customer-focused — as
7 evidenced by the number of rate mitigation efforts undertaken — while leading the State
8 in achieving Minnesota’s energy policy goals. However, a critical component of the
9 regulatory compact is ensuring both recovery of prudent costs and investments along
10 with a reasonable rate of return. Minnesota Power became the first utility in the State
11 to serve customers from a power supply portfolio that is half-renewable, while also
12 providing innovative and first-of-its-kind offerings like time varying rate design and
13 increased access to solar energy for low-income customers. Despite these milestones
14 achieved on behalf of the State of Minnesota and the customers it serves, Minnesota
15 Power has maintained the same O&M levels for over a decade while only resetting base
16 rates three times in 25 years.
17

18 The Company has executed its best efforts to ensure rates remain affordable for all
19 customers, and its residential customers currently enjoy some of the lowest electric rates
20 in the State. This proposed rate increase request includes prudently incurred costs and
21 thoughtful proposals to mitigate the unique risk serving the industries of northern
22 Minnesota creates. For Minnesota Power to continue decarbonizing its system and
23 offering innovative programming to customers at the pace it has, a holistically
24 reasonable outcome in this case that ensures the regulatory compact remains intact is
25 necessary.
26

27 **V. INTRODUCTION OF WITNESSES**

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

29 A. In this section of my testimony, I identify and introduce the other witnesses presenting
30 testimony on behalf of Minnesota Power in this proceeding.
31

1 **Q. Please introduce Minnesota Power’s other witnesses.**

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

- 4 • Patrick L. Cutshall, the Vice President and Treasurer of ALLETE, discusses
5 Minnesota Power’s recommended capital structure and overall rate of return.
6 Mr. Cutshall also discusses the Company’s proposals for recovery of test year
7 pension and other post-employment benefit costs and their related return on
8 accumulated contributions in excess of net periodic benefit cost;
- 9 • Ann E. Bulkley, Senior Vice President at Concentric Energy Advisors, Inc.,
10 provides expert testimony on the Company’s required return on equity and an
11 assessment of the Company’s proposed capital structure;
- 12 • Joshua G. Rostollan, Manager – ALLETE Financial Reporting and Budgeting,
13 provides an overview of the Company’s budgeting process, including the
14 reasonableness and reliability of the budgets. Mr. Rostollan further discusses
15 Minnesota Power’s cost allocation processes and employee expense review;
- 16 • Frank L. Frederickson, Vice President of Customer Experience, discusses
17 Minnesota Power’s customer focus, including products and services offered to
18 retail customers, the Company’s support for its customers and communities, and
19 the relationship between retail customer activity and the overall health of the
20 utility and projected sales and revenue. Additionally, Mr. Frederickson also
21 supports the Company’s proposed sales forecast true-up, and discusses
22 Minnesota Power’s wholesale customer sales;
- 23 • Benjamin S. Levine, Utility Load Forecaster Senior, provides details on the
24 Company’s test year sales forecast;
- 25 • Julie I. Pierce, Vice President of Strategy and Planning, provides information on
26 Minnesota Power's current power supply strategy;
- 27 • Todd Z. Simmons, General Manager – Generation Operations, describes how
28 the Company continues to transform its generating fleet with increasing
29 renewable resources while maintaining efficient, reliable, and cost-effective
30 services for customers. Additionally, Mr. Simmons supports the Generation
31 investments and O&M expenses affecting the 2022 test year;

- 1 • Daniel W. Gunderson, Vice President of Transmission and Distribution,
2 discusses the Company’s power delivery systems, including related capital
3 investments and O&M expenses affecting the 2022 test year;
- 4 • Laura E. Krollman, Director – Human Resources, discusses the compensation
5 and benefits provided to the employees of Minnesota Power, as well as the
6 workforce reductions and compensation cost savings implemented by the
7 Company since the last rate case;
- 8 • John D. Armbruster, Manager, Tax, provides testimony to address several tax
9 issues relevant to this rate proceeding, including deferred taxes, tax credits, and
10 property tax;
- 11 • Stewart J. Shimmin, Revenue Requirements Lead, presents Minnesota Power’s
12 2022 CCOSS, including the implementation of UIPlanner regulatory software.
13 Mr. Shimmin also discusses the process of jurisdictional separation of costs, the
14 functional assignment and classification of costs, the allocation of costs to
15 customer classes, CCOSS compliance matters, and Minnesota Power’s proposed
16 treatment of current cost recovery riders in this case;
- 17 • Amanda L. Turner, Costing and Pricing Analyst II, discusses Minnesota Power’s
18 revenue requirements analysis and revenue allocation. Ms. Turner also
19 addresses adjustments made in the Company’s general rate and interim rate costs
20 of service, and how the Company’s riders and trackers bear on the 2022 test year
21 cost of service; and
- 22 • Leah N. Peterson, Supervisor – Customer Business Analytics, will provide
23 testimony to support Minnesota Power’s proposed rates and rate design for the
24 2022 test year, addressing the distribution of increased revenue requirements
25 among the classes of service, the design of the Company’s proposed rates for
26 retail classes, and billing comparisons reflecting present and proposed rates.

27
28 **VI. CONCLUSION**

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

30 **A. Yes.**