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Direct Testimony and Schedules
Brandon T. Cramer

Before the South Dakota Public Utilities Commission
State of South Dakota

In the Matter of the Application of Northern States Power Company
for Authority to Increase Rates for Electric Service in South Dakota

Docket No. EL25-____
Exhibit___(BTC-1)

Distribution

June 30, 2025

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I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND OCCUPATION.

A. My name is Brandon T. Cramer. I am the Director (Interim Regional Vice President), Distribution Operations for Xcel Energy Services Inc. (XES), the service company affiliate of Northern States Power Company, a Minnesota corporation (NSPM or the Company) and an operating company of Xcel Energy Inc. (Xcel Energy).

Q. PLEASE DESCRIBE YOUR QUALIFICATIONS AND EXPERIENCE.

A. I joined the Company in 2012 and have worked in various roles within Operations throughout my career at Xcel Energy. I am currently the Director of Distribution Operations providing interim support as the Regional Vice President of Distribution Operations. I am responsible for providing overall strategic leadership to the organization including construction, operations, maintenance, design, contracting, and special projects. I am also responsible for developing, recommending, and implementing business strategies and associated annual long-term business plans to effectively utilize resources and position the organization to meet future business needs. My Statement of Qualifications is attached as Exhibit___(BTC-1), Schedule 1.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. My testimony supports the prudence of the revenue requirement increases attributable to the Distribution function driving the need for this rate case as described by Company witness Allen D. Krug. The Company has made significant capital additions in the distribution system that have been placed in service since 2021.

Q. PLEASE PROVIDE A SUMMARY OF YOUR TESTIMONY.

A. I begin my testimony by discussing the Distribution function's capital expenditures, including key programs and projects, and how those support Xcel Energy's provision of safe and reliable service at reasonable costs. The Distribution organization is responsible for operating, maintaining, and constructing the distribution system that is the critical final link in delivering electricity to our customers to power their homes and businesses. Much of Distribution's investments and efforts are focused on maintaining the reliability, resiliency, and health of our existing distribution facilities. In order to maintain these facilities, we regularly evaluate the health of the key components of our distribution system and make the necessary investments to ensure these facilities are safe and reliable. This includes an evaluation of the condition, age, and performance of the key components of our system such as poles, underground cables, and substation transformers. We also must make significant investments to support system capacity needs due to increased loads, update existing infrastructure, respond to severe weather events, and carry out projects in response to public works projects.

From 2021 to 2024, the Company's distribution capital investments increased significantly, which was in large part a result of investment in asset health and reliability (including significant storm recovery and repairs), the ongoing Meter Replacement project, investments to support increased capacity (including the new Great Plains substation on the west side of Sioux Falls and the addition of a second transformer and related feeder installation at the Louise substation in Sioux Falls), increased equipment costs, and supply chain constraints. The Company's ongoing investments have resulted in improving reliability, and I

conclude the capital portion of my Direct Testimony by presenting the data showing those improvements.

I then present Distribution's historical and forecasted operations and maintenance (O&M) expenditures and how they support Distribution's key mission of supporting system reliability. The Company's distribution's O&M expenditures include the maintenance of existing assets, the programmatic annual inspections of poles, vegetation management, and damage prevention through locating underground electrical facilities. Despite inflationary pressure, the Company has kept O&M spending relatively stable between 2021 and 2024.

Finally, I provide an update on the Company's ongoing Meter Replacement project. The Company has chosen modern, Advance Metering Infrastructure (AMI) meters with Distributed Intelligence (DI) functionality, and we continue to make related improvements to our distribution communications and control systems. Implementation of the Meter Replacement project continues to require capital investments, and I present specific figures, including forecasted spending.

Q. HOW HAVE YOU ORGANIZED YOUR TESTIMONY?

A. My testimony is organized into the following sections:

- *Section I* – Introduction
- *Section II* – Distribution Functions
- *Section III* – Distribution Capital Investments
- *Section IV* – Distribution Operations and Maintenance Expenditures
- *Section V* – Meter Replacement Project

- *Section VI* – Proposed Tariff Revisions
- *Section VII* – Conclusion

II. DISTRIBUTION FUNCTIONS

Q. PLEASE PROVIDE AN OVERVIEW OF THE COMPANY'S DISTRIBUTION SYSTEM IN SOUTH DAKOTA.

A. The Company's distribution system serves approximately 109,000 electric customers across South Dakota. The distribution system is the final link that provides electricity to our customers' homes and businesses, safely and reliably. The Company's distribution system in South Dakota includes 19 distribution substations, 5 step-down substations served from distribution feeders, and 2,180 line miles of distribution lines.

Q. WHERE ARE THOSE DISTRIBUTION SUBSTATIONS LOCATED?

A. Our distribution substations and step-down distribution substations served from transmission are located in the cities of Alexandria, Bridgewater, Canistota, Canton, Centerville, Dell Rapids, Emery, Lennox, Louise, Marion, Salem, and Sioux Falls (including the new Great Plains Area substation on the west side of Sioux Falls, in service since 2023).

Q. WHAT ARE THE RESPONSIBILITIES OF THE DISTRIBUTION BUSINESS UNIT?

A. The Distribution organization's investments and work directly impact the daily lives of our customers. The key functions of the Distribution organization include operating the distribution system, restoring service to customers after outages, performing routine maintenance, constructing new infrastructure to

serve new customers, and making upgrades necessary to enhance the performance and reliability of the distribution system.

The work performed by Distribution is essential to ensuring that the electric service our customers receive is safe, reliable, and affordable. Our work includes new construction to extend service to new customers or increasing the capacity of the system to accommodate new or increased load, repairing facilities damaged during severe weather to restore service to customers quickly, and performing regular maintenance and repairs on poles, wires, underground cables, metering, and transformers.

Our organization is also responsible for the primary implementation and support for the Company's ongoing Meter Replacement project, which I discuss in Section V of my Direct Testimony.

Q. PLEASE DESCRIBE THE STRUCTURE OF THE DISTRIBUTION BUSINESS UNIT.

A. To serve South Dakota customers, Distribution divides its work into five functional areas:

- *Distribution Operations*. Responsible for the design, construction, and maintenance of the distribution system, as well as monitoring and operating the system from the Electric Control Center, responding to electric distribution trouble calls, and coordinating emergency response;
- *Engineering*. Responsible for technical support and system planning, including addressing distribution-related customer service issues;
- *Business Operations*. Responsible for several areas, including vegetation management, outdoor lighting, facility attachments, and the builders call-line;

- *Strategy and Governance*. Responsible for business planning, scheduling, consulting, analytical services and performance governance and management; and
- *Meter Replacement Project and Metering*. Responsible for implementing the Meter Replacement project and metering.

Q. HOW MANY EMPLOYEES WORK IN THE DISTRIBUTION BUSINESS UNIT?

A. Across the Northern States Power Minnesota operating company (which encompasses our South Dakota operations), there are 747 full-time employees performing the functions of the Distribution business unit. Of those 747, 60 are based in the Sioux Falls Service Center and/or directly support operations in the region covered by the Sioux Falls Service Center, which includes adjacent portions of Minnesota. Approximately 81 percent of those 60 employees (49 full-time employees) are in bargaining units. Additionally, employees of XES provide support to all Xcel Energy operating companies. The budget of each operating company—including that of NSPM—assumes support by a certain number of employees of the Service Company based on the number of line miles in the service territory. There are currently 203 full-time distribution employees in the Xcel Service Company. NSPM assumes support of 71 full-time Service Company employees (based on NSPM containing 35 percent of total Xcel Energy Distribution line miles). Finally, certain employees of the Gas Engineering and Operations business area support the electric utility's work.

III. DISTRIBUTION CAPITAL INVESTMENTS.

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

A. In this section of my Direct Testimony, I describe the capital investments the Distribution business unit makes to deliver safe, reliable electric service to our South Dakota customers.

Q. HOW IS THIS SECTION OF YOUR TESTIMONY ORGANIZED?

A. First, I provide a broad overview of the types of capital investments the Distribution business unit makes and the process for planning and implementing those investments. Next, I discuss Distribution business unit capital investments made since 2021, which the Company is proposing to add to the rate base, and which are a driver for the broader rate case.

Q. BEFORE GETTING INTO SPECIFIC INVESTMENTS AND CATEGORIES, CAN YOU PROVIDE AN OVERVIEW OF SOME OF TRENDS IMPACTING THE NEED FOR DISTRIBUTION SYSTEM INVESTMENTS?

A. The Company must continually invest in the distribution system to maintain reliability and resilience and respond to increasing customer demands. These investments include new infrastructure and the replacement of aging and damaged assets. The Company makes distribution investments every year; however, there are also some factors driving the scale of distribution investments in this particular rate case. Specifically, these factors are: (1) the installation of the new AMI meters, with most of those capital additions occurring in 2024 and 2025; (2) increases in the costs of distribution system components, which added to the cost of investments across various categories; (3) significant storm damage in 2022; and, (4) growth in our South Dakota

service area, particularly in the Sioux Falls area. Expanding on that last point, growth in the Sioux Falls area impacts the need for investments to increase the capacity to serve new load and requires investments to connect new customers.

A. Types of Distribution Capital Investments

Q. WHAT TYPES OF CAPITAL INVESTMENTS DOES THE DISTRIBUTION BUSINESS MAKE TO PROVIDE SAFE AND RELIABLE SERVICE FOR SOUTH DAKOTA CUSTOMERS?

A. The Distribution business unit makes capital investments to maintain, and where possible enhance, the reliability and functionality of the distribution system, increase the capacity of the distribution system, extend service to new customers, and relocate facilities in response to road construction or other governmental projects. Also, in partnership with other areas of the Company, Distribution makes capital investments in support of the Meter Replacement project.

Q. CAN YOU EXPAND ON EACH OF THESE CATEGORIES OF INVESTMENT?

A. Yes. The majority of our investments are made to maintain the health and reliability of our facilities through replacement of aging or damaged equipment. By making these investments, we maintain and enhance reliability of service for customers. As I discuss further below, since our last South Dakota rate case, we made investments in poles, feeder lines, substation transformers, and replacement of underground cables—all to maintain the health of these key components of our system and thereby provide reliable service for our South Dakota customers. Notably, we incurred significant costs due to recovery and repairs from the Black Derecho and Green Derecho storms that caused damage in May and July of 2022. When necessary, we also make improvements to

provide increased distribution system capacity. These capacity investments increase the ability of the distribution system to handle system load growth and to serve load when other elements of the distribution system are out of service. Projects in this category include installing new or upgraded substation transformers and distribution feeders.

The Company also makes capital additions to relocate utility infrastructure in public rights-of-way when mandated to do so to accommodate public works projects such as a road widening or realignment projects. Such mandate projects typically result in updated distribution infrastructure that benefits the system and customers. The Company also invests in the tools, equipment, and fleet that its personnel need to perform their jobs.

Additionally, Xcel Energy continues to make strategic investments in the Company's ongoing Meter Replacement project, which is discussed in Section V below.

Q. PLEASE SUMMARIZE THE PROCESS THE COMPANY USES TO DETERMINE WHAT INVESTMENTS TO MAKE.

A. On an ongoing basis, the Company identifies necessary routine and non-routine investments in the distribution system. The Company divides expenditures into routine and non-routine categories depending upon whether we expect the expenditure to re-occur. Regarding routine projects, Distribution makes those capital additions necessary as a regular, common part of maintaining a properly functioning distribution system. For non-routine projects, Distribution identifies risks to the distribution system and possible discrete capital additions to mitigate those risks. Possible discrete projects are scored to determine a

priority order. The Company uses that priority order to guide its investments as the amount of capital varies from year to year. At the same time, the Company remains flexible so that if an emergency occurs during a given year, such as the severe storms in 2022, the Company can adjust the priority of projects on the approved list. In summary, we meet identified needs and requirements, adjust to changing circumstances, and prudently promote the long-term health of the distribution system.

Q. HOW ARE DISTRIBUTION'S CAPITAL ADDITIONS ALLOCATED TO THE SOUTH DAKOTA JURISDICTION?

A. As the last mile of service, Distribution's activities accrue benefits that are more localized in nature than other Company functions such as Energy Supply, Transmission, and Business Systems (Information Technology) which support the entire NSP System. Consequently, Distribution's capital and O&M costs tend to be differently allocated than system-wide resources.

Distribution's capital additions are, in general, directly assigned to the South Dakota jurisdiction—just as Distribution's capital additions in North Dakota and Minnesota are directly assigned to those jurisdictions. For example, all of the costs of a Distribution capital addition at a substation in the Sioux Falls area would be direct assigned to the South Dakota jurisdiction. This is because the distribution capital additions support local electric service in the particular jurisdiction.

With the Company's Meter Replacement project, we also utilize allocators for certain initiative costs rather than merely directly assigning them. We take this approach because some elements of the project are more akin to networks that

provide broad-based support for the distribution system, rather than being local in nature. Company-wide deployment of these technologies and software to support them are, therefore, treated more like information technology investments rather than local investments in distribution.

Q. PLEASE DESCRIBE HOW DISTRIBUTION'S CAPITAL INVESTMENTS BENEFIT SOUTH DAKOTA CUSTOMERS.

A. Distribution's capital investments support various initiatives, activities, and responsibilities. For example, these investments keep assets working properly, provide customers with reliable service, serve new load, support new capacity, accommodate public works projects, and provide employees with the tools and equipment they need to perform their job responsibilities.

Q. HOW DO CAPITAL INVESTMENTS KEEP ASSETS WORKING PROPERLY AND PROVIDE CUSTOMERS WITH RELIABLE SERVICE?

A. Distribution invests capital to replace infrastructure that may experience or be particularly susceptible to failure and, as a result, negatively impact service reliability and increase O&M expenditures needed to repair the equipment. Projects in this category include replacement of underground cable, poles, overhead lines, substation equipment, transformers, and switchgear that have reached the end of their life. This category also captures replacements due to storms and public damage. Distribution designates capital additions in this category as Asset Health and Reliability projects.

Q. HOW DO CAPITAL INVESTMENTS SERVE NEW LOAD?

A. Distribution invests capital to build new overhead and underground extensions and services associated with extending service to new customers. Capital

projects required to provide service to new customers include the installation or expansion of feeders, primary and secondary extensions, and service laterals that bring electrical service from an existing distribution line to a new home or business.

Q. HOW DO CAPITAL INVESTMENTS SUPPORT NEW CAPACITY?

A. Distribution's investments in support of capacity increase the ability of the distribution system to handle system load growth and to serve load when other elements of the distribution system are out of service. Projects in this category include installing new or upgraded substation transformers and distribution feeders.

Q. HOW DO CAPITAL ADDITIONS ACCOMMODATE PUBLIC WORKS PROJECTS?

A. When a unit of government widens a road, for example, the Company makes a capital investment to relocate utility infrastructure in public rights-of-way. These mandate projects typically result in updated distribution infrastructure.

Q. HOW DO CAPITAL ADDITIONS PROVIDE EMPLOYEES WITH THE TOOLS AND EQUIPMENT THEY NEED TO PERFORM THEIR JOB RESPONSIBILITIES?

A. Distribution makes capital investments in tools, equipment, communication equipment, and costs to locate existing utility lines. Distribution also invests in replacing fleet vehicles that have reached the end of their useful lives.

B. Overview of Capital Additions Through 2024

Q. PLEASE PROVIDE AN OVERVIEW OF THE COMPANY'S NON-METER REPLACEMENT DISTRIBUTION PLANT ADDITIONS FROM 2021 TO 2024.

A. Table 1 below reflects Distribution capital additions placed in service from 2021 through 2024, broken down by category.

Table 1
Distribution Non-Meter Replacement Project Capital Additions
2021-2024 (Dollars in Millions)

State of SD Electric Jurisdiction Plant Additions (includes AFUDC)	2021	2022	2023	2024
Asset Health & Reliability	9.4	29.5	11.9	9.2
New Business	9.1	11.8	13.8	15.1
Capacity	0.7	1.7	10.6	16.9
Mandates	2.4	3.5	1.5	3.5
Tools and Equipment	0.4	0.8	0.7	1.0
Total	22.0	47.3	38.5	45.7

Q. WHAT TRENDS DOES THIS TABLE ILLUSTRATE IN THE COMPANY'S NON-METER REPLACEMENT PROJECT DISTRIBUTION CAPITAL ADDITIONS FROM 2021-24?

A. The table illustrates that we made significant investments in refreshing the system since our last rate case.

One notable feature is that asset health and reliability investments spiked in 2022 due to storm damage recovery and repairs. The Company expended $20,363,422 on storm damage repairs following significant derecho storm events in May and July of 2022.

Other significant factors include the new Great Plains substation on the west side of Sioux Falls (total expenditure of $8,122,885 in 2023 and 2024 combined), and the addition of a second transformer and related feeder installation at the Louise substation in Sioux Falls (total expenditure of $6,431,986 in 2024). These projects contributed to the increased capacity investment figures for 2023 and 2024.

Also notable is the increase in New Business expenditures in 2022 and 2023, which reflects growth in the Sioux Falls area. Higher costs for service transformers also contribute to the increase in New Business. Because of previous supply chain issues, transformers that were ordered in 2021 and 2022, which were expected to arrive in 2022 and 2023, are still being delivered. Additionally, the per-unit cost of service transformers has increased dramatically, as reflected in Table 2 below. This price increase makes it more expensive for the Company to serve new customers.

Table 2
Per-Unit Cost of Service Transformers

Manufacturer Invoice Pricing (Avg $ per Unit)	
	NSPM
	[PROTECTED DATA BEGINS…
2020 Actual	
2021 Actual	
2022 Actual	
2023 Actual	
2024 Actual	
2025 Plan	
	…PROTECTED DATA ENDS]

Q. OTHER THAN THE GREAT PLAINS AND LOUISE SUBSTATION PROJECTS, ARE THERE OTHER CAPACITY ADDITIONS THAT YOU WOULD LIKE TO HIGHLIGHT?

A. Yes. The Company has also made investments in feeder load monitoring. This involves installing supervisory control and data acquisition (SCADA) equipment at substations at which it was not already present or was only partially present. With feeder load monitoring, the Company can collect hourly feeder loading data over the entire year, which is then used for improved capacity planning and reliability analyses. The Company made feeder load monitoring capital additions of $1.85 million in 2024.

Q. ARE THERE OTHER DISCRETE PROJECTS YOU WOULD LIKE TO HIGHLIGHT?

A. Yes. There are also some significant, discrete capital projects in the Asset Health and Reliability and Mandates categories.

Q. PLEASE START WITH ASSET HEALTH AND RELIABILITY.

A. In addition to categories of work the Company performs across the system consisting of many smaller projects, Asset Health and Reliability investments can also include some larger projects. One significant project in South Dakota between 2021 and 2024 was the WSF063 Feeder Replacement project. This project involved replacing an underground feeder that runs along Kiwanis Avenue and 41st Street in Sioux Falls. The Company experienced nine cable failures between 2008 and 2023, and this drove the cable replacement project. This project involved capital additions of $2.18 million.

Q. WHAT ABOUT SIGNIFICANT, DISCRETE MANDATE PROJECTS?

A. There are two particularly significant mandate projects between 2021 and 2024. They are: (1) the relocation of the SAL310 feeder between Fedora and Artesian in response to the State of South Dakota widening highway 34, and (2) the relocation of an overhead line that was in the way of a new roundabout constructed in Harrisburg. The capital additions for these two projects between 2021 and 2024 were $1.1 million for the SAL310 feeder relocation and $0.6 million for the Harrisburg roundabout project.

Q. SINCE THE LAST RATE CASE, DID THE COMPANY MAKE ANY CAPITAL INVESTMENTS BROADLY ACROSS THE DISTRIBUTION SYSTEM IN SOUTH DAKOTA?

A. Yes, in addition to discrete investments in larger projects, the Company also made a variety of investments to enhance the reliability and performance of the distribution grid throughout our South Dakota service territory.

Q. PLEASE SUMMARIZE THOSE INVESTMENTS.

A. As mentioned above, the Company made significant repairs following storm damage in 2022. The Company has also made significant investments in the replacement of underground cable (including both tap cable and mainline cable), as well as pole replacement, projects involving the rebuilding of segments of overhead distribution lines, our Feeder Performance Improvement Plan (FPIP), and end-of-life replacements of substation equipment.

Q. PLEASE DESCRIBE THE COMPANY'S INVESTMENTS IN POLE REPLACEMENT.

A. The Company invests in rebuilding, replacement, and renewal of poles to enable them to withstand weather events, continue to provide a sturdy underpinning

for the distribution grid, and prevent safety hazards for customers or Company employees. The NSPM distribution system has approximately 500,000 wooden poles in service of which 36,700 are in South Dakota.[1] These poles have a service life 50 years on average; those poles at the end of their service life have the highest rate of failure. Pole rot at the base of the pole can be a cause of pole failure, especially during storms. Pole failures create outages and so maintaining the integrity of the Company's poles is important for the maintaining the reliability of the distribution system.

To identify poles in need of replacement, the Company employs a 12-year assessment cycle. The Company assesses approximately 1/12 of its overall inventory of poles across South Dakota, North Dakota, and Minnesota annually. However, the number of poles assessed in South Dakota can vary significantly from year to year, and so, consequently, can the number of pole replacements that are necessary. The poles reported as non-compliant through assessment are replaced within 12 months or less, depending on the prioritization.

Capital additions for pole replacement totaled $11.3 million from 2021 to 2024.

Q. PLEASE DESCRIBE THE COMPANY'S INVESTMENTS TO ENHANCE RELIABILITY OF CABLE THROUGHOUT THE DISTRIBUTION SYSTEM.

A. Historically, South Dakota customers have experienced reliability issues due in part to failing 500 MCM[2] unjacketed cable. This is an issue experienced

[1] There are also 542 poles in South Dakota not owned by the Company to which Company distribution lines are attached. This does not include transmission poles to which distribution lines are attached.
[2] MCM stands for circular mill. It is a unit of measurement used to describe the size of electrical wires.

throughout the electric utility industry. The technology and manufacturing of cable has improved over the years and a jacket around the concentric neutrals provides much better protection from soil and environmental corrosion extending the useful life of the cable. In response to that advancement, the Company has taken a proactive approach to improving reliability by replacing unjacketed cable with jacketed cable. Over the last five to seven years, the Company has proactively replaced old unjacketed cable. Similarly, the Company has prioritized the replacement of underground residential distribution cable that was originally installed in the 1970s and has been failing in recent years. Additionally, the Company has invested in underground extensions, conversions, reinforcements, and rebuilds. These investments in undergrounding created benefits for our customers of increased reliability—since wires underground are less impacted by storms and animals than overhead wires—and improved aesthetics. The Company has invested in this initiative consistently, making capital additions totaling $10.2 million from 2021 to 2024.

Q. PLEASE DESCRIBE THE OVERHEAD LINE REBUILDING INVESTMENTS.

A. These projects involve rebuilding segments of distribution lines that are reaching the end of their useful lives. When segments are rebuilt, the work is done to our latest design standards. The end result is a more robust and resilient system compared to if the older equipment was kept in place. The Company has invested $9.3 million in overhead line rebuilding routines between 2021 and 2024.

Q. WHAT IS THE FEEDER PERFORMANCE IMPROVEMENT PROGRAM?

A. The FPIP involves using reliability data to identify feeders for possible upgrades or installation of protective equipment. Feeders are identified based on data

regarding interruptions to customer service. Then, the feeders that have been identified are evaluated to determine possible correction action opportunities. The budget is prioritized to maximize improvements to service. NSP made $1.5 million in FPIP capital additions between 2021 and 2024.

Q. WHAT ARE END OF LIFE REPLACEMENTS OF SUBSTATION ASSETS?

A. Our substations contain a variety of equipment. For example, switches, breakers, and regulators, to mention just a few. The Company makes investments to replace aging equipment to improve reliability and system resiliency. Between 2021 and 2024, the Company made $3.2 million in end of life substation equipment capital additions.

C. Overview of Known and Measurable Capital Additions

Q. PLEASE PROVIDE AN OVERVIEW OF THE COMPANY'S DISTRIBUTION PLANT ADDITIONS DURING THE 24-MONTH KNOWN AND MEASURABLE PERIOD.

A. Table 3 reflects the known and measurable distribution capital additions that will be placed into service in 2025 and 2026, broken down by category. I will discuss these capital additions below, and they are also set forth in Exhibit 11 to the Direct Testimony of Company Witness Laurie Wold. There are also known and measurable additions for the meter replacement project, which are referenced in Section V below.

Table 3
Known and Measurable Capital Additions
(Dollars in Millions)

Category	2025	2026
Asset Health & Reliability	$17.6	$12.1
New Business	$17.3	$14.4
Capacity	$23.2	$0.7
Mandates	$3.3	$1.9
Total	$61.4	$29.1

Q. WHAT CONCLUSIONS DO YOU DRAW FROM TABLE 3?

A. Table 3 indicates that the Company is continuing to make substantial investments in its South Dakota distribution system.

Q. PLEASE DESCRIBE THE INVESTMENTS AND ASSOCIATED ADDITIONS THAT ARE INCLUDED IN NEW BUSINESS.

A. The Company is continuing to make investments to serve new customers. The cost of these investments is significantly impacted by the increased costs to acquire service transformers, which I discussed above in reference to 2021 to 2024 capital additions. As Table 3 above illustrates, the cost of this necessary equipment has increased dramatically since the Company's prior rate case.

Q. ARE THERE LARGER, DISCRETE PROJECTS INCLUDED IN THESE INVESTMENTS?

A. Yes. A few of these involve completing and in-servicing the final portions of projects that I discussed already above. These include the relocation of overhead lines in response to the roundabout in the City of Harrisburg and completion of Louise substation capacity project that involves the new substation transformer and feeder. The 6th Street bridge mandate project, which

involves relocating overhead distribution lines, is also included in the known and measurable additions.

Q. ARE THERE OTHER, LARGER DISCRETE CAPITAL ADDITIONS THAT YOU WOULD LIKE TO HIGHLIGHT?

A. Yes. The Company has some additional, larger projects that will come into service in 2025 and 2026. These are the Grant Substation to Canistota project, which involves relocating the existing distribution circuits to newer poles and a relocation project in downtown Sioux Falls necessitated by the City's reconstruction of Phillips Avenue between 8th and 10th streets. The Company is also in the process of relocating the South Sioux Falls substation in connection with an upgrade to the transmission system in the area from 69kV to 115kV and is purchasing land as part of that project.

Q. WHAT ABOUT CAPACITY PROJECTS?

A. In response to load growth in the Sioux Falls area, the Company is adding an additional substation transformer to the South Renner substation and installing two additional 34.5kV feeders. We will also be extending feeder WSF063, which will help reduce loading on feeder WSF0665, which has been experiencing overloads during peak conditions.

Q. YOU HAVE BEEN DISCUSSING LARGER, DISCRETE PROJECTS, BUT DOES THE COMPANY HAVE OTHER CAPITAL ADDITIONS IN THE KNOWN AND MEASURABLE ADDITIONS?

A. Yes. The Company budgets for smaller mandates and capital projects across its budget categories, including asset health and reliability investments of the types I discussed above.

D. Reliability Results

Q. YOU HAVE DESCRIBED PARTICULAR INVESTMENTS IN THE DISTRIBUTION SYSTEMS AND GENERALIZED INVESTMENTS THROUGHOUT THE DISTRIBUTION SYSTEM. HAVE THE COMPANY'S DISTRIBUTION INVESTMENTS PROVIDED RELIABILITY BENEFITS FOR CUSTOMERS?

A. Yes. As detailed below, the Company's investments in the distribution system have increased the reliability of service to customers.

Q. HOW DOES THE COMPANY TRACK DISTRIBUTION SYSTEM RELIABILITY?

A. The most common industry metrics for tracking reliability performance are the System Average Interruption Duration Index (SAIDI) and the System Average Interruption Frequency Index (SAIFI), which are tracked both on all days and on a normalized basis to exclude major storm events.

Q. WHAT IS THE TREND OF THE COMPANY'S SAIDI AND SAIFI METRICS?

A. The Company's SAIDI and SAIFI performance has varied over time. However, the SAIDI performance over the last five years has been favorable as compared to the previous five years, while the SAIFI performance has remained relatively flat. The Five-Year Average comparison is a 9.5 percent improvement in SAIDI, compared to the previous five-year average. The following table provides details:

Table 4
State of South Dakota System Level Indices – IEEE State Normalized

	Company SAIDI	EIA Regional SAIDI	Company SAIFI	EIA Regional SAIFI
2015	89.62	95.6	0.90	1.0
2016	83.76	95.1	0.79	0.94
2017	55.74	90.3	0.52	0.86
2018	58.57	91.1	0.48	0.88
2019	62.57	95.4	0.58	0.90
2020	56.22	87.6	0.62	0.86
2021	57.62	88.9	0.62	0.84
2022	57.93	90.1	0.54	0.87
2023	81.48	84.6	0.9	0.81
2024	63.63	N/A	0.7	N/A
2015-2019 Average	70.05	93.5	0.65	0.92
2020-2024 Average	63.38	87.8	0.68	0.85

Q. WHAT ELSE DOES TABLE 4 TELL YOU ABOUT THE COMPANY'S RELIABILITY PERFORMANCE?

A. The Company continues to be a leader in terms of reliability performance. The Company's SAIDI performance of 81.48 in 2023 was the highest in the recent period but still compares very favorably to the regional average (84.6) and national average (123.9) as published in the federal Energy Information Administration's 2023 Electric Power Annual Report.[3] Table 4 demonstrates that, from 2020 to 2024, the Company continues to enhance the reliability of the distribution system. While there can be reliability challenges in individual years, the long-term trend indicates that the Company's continued investment

[3] Tables 11.4 (SAIDI) and 11.5 (SAIFI) https://www.eia.gov/electricity/annual/

in the distribution system and our dedication to the customer experience is yielding reliability benefits.

IV. DISTRIBUTION OPERATIONS AND MAINTENANCE EXPENDITURES

Q. WHAT DO YOU ADDRESS IN THIS SECTION OF YOUR TESTIMONY?

A. First, I provide a broad overview of the types of Distribution operations and maintenance (O&M) expenses and the process for planning and implementing that work. Next, I present Distribution's 2021-2024 O&M expenditures, including key drivers and trends.

A. Nature of and Process for Distribution O&M Expenses

Q. FOR WHAT TYPES OF ACTIVITIES DOES DISTRIBUTION INCUR O&M EXPENSES?

A. Distribution's O&M expenditures fall into four categories. First, Distribution makes O&M expenditures on existing pole and wire assets, including equipment maintenance, underground cable fault repair, storm repair, and inspections. Second, Distribution makes programmatic annual inspections of poles and replacement of poles as necessary. Third, the Company manages vegetation to maintain proper line clearances and distribution pole right-of-way and address vegetation-caused outages. Fourth, the Company prevents damage by locating underground electric facilities.

Q. PLEASE DESCRIBE THE COMPANY'S WORK TO MANAGE VEGETATION.

A. The Company and its contractors prune, remove, mow, and apply herbicide to trees and tall-growing brush on and adjacent to the Company's rights-of-way to limit preventable vegetation-related interruptions.

Q. WHY IS IT IMPORTANT FOR THE COMPANY TO HAVE AN EFFECTIVE VEGETATION MANAGEMENT PROGRAM?

A. An effective Vegetation Management program is essential for providing reliable service to our customers. Tree-related incidents are among the top causes for electrical outages on our NSPM distribution system as well as the South Dakota jurisdiction. Meeting our vegetation management goals will minimize tree-related interruptions and promote public and employee safety.

Q. PLEASE DESCRIBE THE COMPANY'S DAMAGE PREVENTION PROGRAM.

A. The Company makes expenditures to locate underground electric facilities and mark those locations. These efforts help excavators and customers locate underground electric infrastructure to avoid accidental damage and safety incidents. The budget for Damage Prevention is based on several factors: 1) internal labor costs based on approved headcount and labor rates from the collective bargaining process, 2) miscellaneous costs (materials, fleet, other) based on historical actuals, and 3) contract pricing of our Damage Prevention service providers multiplied by the forecasted number of tickets.

Q. DOES THE COMPANY USE CONTRACTORS FOR ITS VEGETATION MANAGEMENT AND DAMAGE PREVENTION PROGRAMS?

A. Yes, the Company utilizes contractors extensively to implement our Vegetation Management and Damage Prevention programs. These programs require

performance of specialized tasks (e.g., tree trimming, pole inspections, underground facility locating) by a seasonal workforce. Accordingly, the Company has determined that the use of contract labor is more cost effective and efficient than utilizing full-time employees. With contractor labor, the Company can competitively bid out these services to obtain well-trained and established work forces specializing in these areas. In addition, by contracting these services, the Company has the flexibility to easily ramp up and down the number of contractors that it needs to respond to different volumes of workloads. This flexibility is important given the seasonal nature of this work. If the Company were to hire employees for these positions, we would have to find a way to deploy this workforce to other areas during the winter months when these tasks are not performed at the same volume as in the summer and/or as overall annual work volumes change due to the economy or other factors.

Q. HOW ARE DISTRIBUTION O&M EXPENDITURES ALLOCATED?

A. Similar to our capital additions, Distribution's O&M expenses are generally direct assigned to the South Dakota jurisdiction to the extent they are solely serving that jurisdiction. For example, costs of vegetation management in Sioux Falls area are assigned fully to the South Dakota jurisdiction. That said, certain Distribution O&M expenses are incurred on a Company-wide basis—for example, management costs, environmental services, planning, and certain engineering functions. These O&M expenses are allocated to the South Dakota jurisdiction using an allocation methodology.

B. O&M Expenses from 2021 to 2024

Q. WHAT DO YOU ADDRESS IN THIS SECTION OF YOUR TESTIMONY?

A. I present Distribution's expenditures on O&M, including key drivers and trends.

Q. PLEASE DESCRIBE DISTRIBUTION'S HISTORIC PATTERNS OF O&M SPENDING SINCE THE COMPANY'S LAST SOUTH DAKOTA RATE CASE.

A. Overall O&M spending has remained consistent since the 2021 test year used in the prior rate case.

Table 5
South Dakota – Electric Distribution O&M Expenses 2021 – 2024
(Dollars in Millions)

2021	2022	2023	2024
$7.0	$7.6	$7.1	$7.3

Q. WHAT DOES THIS TABLE SHOW?

A. Since 2021, Distribution has historically spent around $7.0 – $7.6 million on O&M annually in support of maintaining and enhancing the reliability of the South Dakota distribution system. Our $7.3 million in O&M expenses for Distribution for the 2024 test year falls within this range. During this period, there was inflationary pressure and significant additions to our Distribution system, as I discussed above. However, the Company successfully managed costs and kept Distribution O&M costs within this range.

V. METER REPLACEMENT PROGRAM

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

A. I provide an update on the Company's Meter Replacement program, which we explained in greater detail in the last rate case.

Q. WHAT IS THE COMPANY'S CURRENT IMPLEMENTATION SCHEDULE FOR THE METER REPLACEMENT PROJECT?

A. The AMI deployment, which has been ongoing in South Dakota since 2022, is on track to be completed in 2025. Through March of 2025, the Company has installed about 94,000 out of the 103,000 total anticipated meters.

Q. WHAT IS THE COMPANY'S FORECASTED INVESTMENT FOR THESE INVESTMENTS?

A. The Company's total investment per year in the South Dakota jurisdiction for the Meter Replacement project is provided in Table 6 below.

Table 6
Meter Replacement Capital Additions
NSPM – SD Electric (Dollars in Millions)

	2021	2022	2023	2024	2025	Total
ADMS	3.3	0.1	-	0.3	-	**3.7**
AMI	-	0.1	0.1	16.3	3.7	**20.2**
FAN	0.5	0.5	1.4	0.3	-	**2.7**
Total	**3.8**	**0.7**	**1.5**	**16.9**	**3.7**	**26.6**

*Subject to rounding differences.

Q. WHAT ARE KEY DRIVERS OF CAPITAL ADDITIONS FOR THE PROJECT?

A. The largest portion of the capital additions continues to be the installation of the advanced meters. Of approximately $26.6 million in Meter Replacement project additions and forecasted additions for South Dakota between 2021 and 2025, 76 percent consists of AMI costs.

Q. WHAT IS YOUR RECOMMENDATION WITH RESPECT TO THE METER REPLACEMENT PROJECT?

A. I recommend that the Commission approve the capital additions for the ongoing Meter Replacement project, including 2025 additions which are known and measurable.

VI. PROPOSED TARIFF REVISIONS

Q. WHAT DO YOU ADDRESS IN THIS SECTION OF YOUR TESTIMONY?

A. In this section of my testimony, I describe proposed changes to the South Dakota Electric Rate Book. Specifically, I discuss a proposed change to Section 6, General Rules and Regulations, and some proposed changes to Section 8, Customer Service Forms. The proposed tariff revisions are provided in Schedule 2 for convenience and are included in the complete package of proposed tariffs provided in Schedule 11 to Company witness Paluck's Direct Testimony.

Q. WHAT CHANGES IS THE COMPANY PROPOSING IN SECTION 6?

A. The Company is proposing to add language to Sheet 6-22 specifying that primary and secondary service types cannot be located on the same contiguous property.

Q. WHAT CHANGES IS THE COMPANY PROPOSING IN SECTION 8?

A. The Company is proposing updates to the following forms in Section 8:

- Underground Service Form, Sheet 8-17
- Underground Gas and/or Electric Distribution Agreement, Sheets 8-20 and 8-21

The proposed changes to these forms include references to other sections of the tariff or to our standards manual on the Company's website, and additional language to ensure customers are aware of potential costs related to relocation of services prior to proceeding with any construction on a customer's property.

The Company proposes changes to refer to the standards manuals on the Company's website, rather than including specific clearance distances or other safety-related requirement details in the tariff sheets. This approach promotes efficiencies because when standards are updated, those changes will not require corresponding requests for changes to tariff sheets. In this way, customers are always directed to the most current standards. Specific clearance requirements are found in the Xcel Energy Installation Utility Standards manual available on the Company's website.[4]

The Company also proposes additional language to help ensure customers are aware of customer responsibility for the costs of relocating any of the facilities as may be required due to customer-initiated construction projects on a customer's property. Even though this information is available elsewhere in the

[4] https://www.xcelenergy.com/staticfiles/xe-responsive/Admin/Managed%20Documents%20%26%20PDFs/Xcel-Energy-Standard-For-Electric-Installation-and-Use.pdf

Company's Electric Rate Book,[5] we propose inclusion in these agreements to help ensure that customers are aware of these requirements prior to planning or undertaking construction projects.

VII. CONCLUSION

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. I recommend that the Commission approve the Distribution capital investments and O&M expenditures presented in this rate case. These capital investments are needed to continue to provide safe and reliable service to our customers while replacing infrastructure that has reached the end of its life, responding to localized areas of demand growth, extending service to new customers, and relocating facilities as needed. To support these capital investments and to maintain our existing assets, our O&M expenditures are reasonable and necessary. The Meter Replacement investments will give customers greater information and control over their own energy usage while also promoting the reliability, efficiency, and security of the grid.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.

[5] See Electric Rate Book, Section 6, General Rules and Regulations, 5.3.B.1 (Special Facilities).