Montana Public Service Commission
Docket No. 2024.05.053
Electric and Natural Gas Rate Review

DIRECT TESTIMONY

OF JASON C. MERKEL

ON BEHALF OF NORTHWESTERN ENERGY

TABLE OF CONTENTS

Witness Information

Q. Please identify yourself, your employer, and your job title.

A. My name is Jason C. Merkel. I am NorthWestern Corporation d/b/a NorthWestern Energy's ("NorthWestern" or "Company") Vice President of Distribution.

Q. Please provide a description of your relevant employment experience and other professional qualifications.

A. I have held my current position since 2022 and have primary responsibility for electric and natural gas distribution operations across Montana, South Dakota, and Nebraska. Prior to this role I was the General Manager of NorthWestern's Distribution Operations and Construction. I began my utility career with the Company in 1992 and have served in various engineering roles including in natural gas production and transmission, hydro generation, and in the natural gas and electric distribution departments of the Company.

I graduated from Montana College of Mineral Science and Technology with a Bachelor of Science in Engineering Science.

Purpose of Testimony

Q. What is the purpose of your testimony in this proceeding?

A. The safety of our customers and our employees is our number one priority. The purpose of my testimony is to provide an overview of the role of NorthWestern's distribution system, electric and natural gas, in providing safe and reliable service for our customers. I provide an update on NorthWestern's wildfire mitigation activities to date and strategies going forward. I describe the operational benefits we have seen and expect to see from our Advanced Metering Infrastructure ("AMI") project. I also provide an update on NorthWestern's acquisition and operations of Sleepy Hollow Oil and Gas, LLC ("Sleepy Hollow").

Role of Distribution Operations - Electric

Q. Please provide a general description of NorthWestern's electric distribution operations in Montana.

A. NorthWestern operates an electric distribution system that at the end of 2023 included approximately 13,271 miles of overhead power lines and approximately 5,403 miles of underground power lines. These electric systems also have 351 substations, with 301 and 50 supporting distribution and transmission systems, respectively. In addition to operating and maintaining the distribution systems, Distribution Operations also provides the workforce to respond to the field operation needs for the electric transmission

system. The transmission operations, planning (maintenance and capacity), and oversight of the transmission systems is the responsibility of Transmission Operations. The transmission system is described in the Direct Testimony of Michael R. Cashell. These systems serve approximately 405,500 electric customers in 221 Montana communities.

One extremely unique aspect of our electric system is that it is a vast service territory with relatively few customers compared to other utilities. We actually have more distribution and transmission poles on our system than we do electric customers. This presents challenges for the employees of Distribution Operations in responding to the needs of customers. Many of these challenges are often overcome through the dedication and commitment of our employees. Responding to customer needs will typically require travel of substantial distances. Praise is common with regards to NorthWestern's people, not only what they do while on the job, but also with their contributions as volunteers, coaches, team bus drivers, town council, mayors, etc., in the many communities we serve.

Q. What are the key drivers that NorthWestern considers with respect to its operations?

A. Our customers' expectations are the key drivers, and they are ever increasing. Customers expect affordable service that is available when and

where it is needed, that is, increasingly reliable service that provides them greater flexibility, with systems that continue to operate safely.

Q. How is NorthWestern meeting the increased demands of customers with respect to its operations?

A. The continuing addition of technology to our systems is foundational to our ability to meet the increasing demands of customers.

Distribution system technology provides for efficiencies in operations, opportunities for improved operational effectiveness, and improved safety. To meet today's customer demands, the system requires technology to continually improve in real-time situational awareness of operating systems, allowing for more immediate and automated response to adjust our systems and is especially critical given challenges due to the vastness of our service territory.

The continued development of our Distribution Operation Control has improved operational visibility and our ability to remotely control distribution line devices without the need for field personnel to be at the site in order to adjust the operation of the system. This system visibility and enhanced remote control provides improved system safety and enhances controls to mitigate wildfires. Immediate notification of outages and system interruptions

provided by AMI is monumental in managing outage information for customers and prioritizing and optimizing timely outage event response.

Q. What obstacles does NorthWestern face in meeting the growth demands of customers, from a distribution operations perspective?

A. Customer expectations require continued investments to ensure adequate capacity is available to support growth and new connections to the distribution systems.

Much of the new customer growth is now occurring beyond the urban fringe, into and beyond the suburban areas and requires significant expansion of our distribution system to connect new customers. This "sprawl" build trend is also a cost driver. New infrastructure needed to support new connections in urban sprawl requires longer line extensions associated with each connect, with increases by almost 20% in recent years.

As part of NorthWestern's commitment to reliable and affordable service to our customers, NorthWestern continues to seek efficiencies to assist with offsetting the challenges of increasing material and labor costs. These include continued improvements in project coordination, the use of more effective tools and equipment to perform the work, and providing customers with more options to coordinate electric system installs with other needed infrastructure (water, sewer, communications, streets, etc.) in major

developments. Continued focus on procedural improvement to reduce timelines in providing estimates for new connections results in reduced lead times to provide customers with project quotes from what was weeks to what is now days for single customer. Reducing the period between a customer's initial request for service to the time of install can potentially reduce a customer's home construction costs by avoiding scheduling delays and providing the opportunity for available power to aid in their building construction.

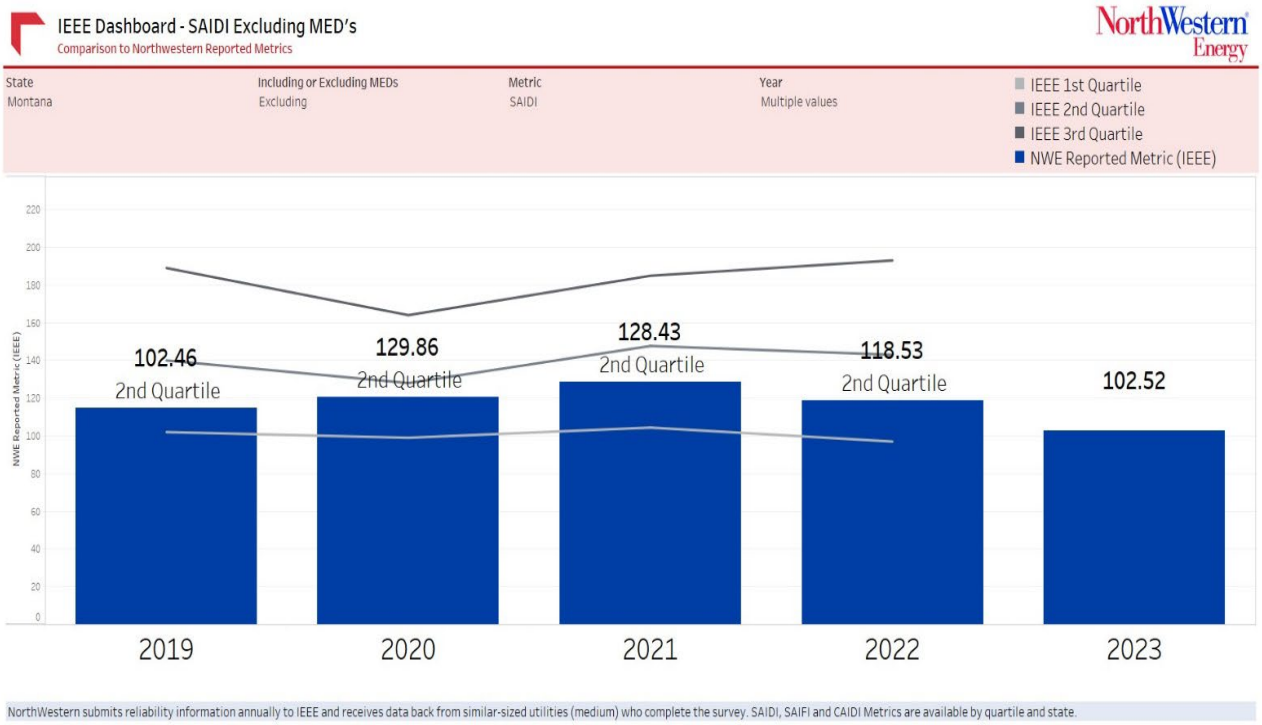
Q. How is NorthWestern meeting the reliability demands of customers?

A. Most importantly, the safety of our customers and of our employees is our priority. A reliable system is also a safe system. In addition to the technology deployment already discussed, investments towards maintaining asset health is foundational for reliable systems. Since the implementation of the Distribution System Infrastructure Project ("DSIP")[1] from 2013 to 2018, a plan specifically designed to stabilize the overall health of our assets, we have remained focused on maintaining the progress that was made during DSIP and implement programs to further optimize the performance of assets. Programs are implemented to address the life cycle of assets, respond to deficiencies determined through detailed inspections/assessments of assets, and by analysis of the performance of assets. This approach results in programs that are more predictive-based than time-based maintenance. The

[1] *See* Montana Public Service Commission Docket No. D2011.1.7.

predictive-based methodologies drive upgrades and repairs on the line segments, or portions of a circuit, that are weighted on the known problems and outages of that segment. Traditional or time-based methodologies would yield potentially unnecessary replacement/repairs to an entire circuit. The most commonly used metric to describe overall reliability is System Average Interruption Duration Index ("SAIDI"). In simple terms, it is the average amount of time a customer is out of power over a one-year period. Over the past five years, NorthWestern's SAIDI, excluding Major Event Days ("MED"), has averaged approximately 116 minutes – that is, a Montana customer served by NorthWestern would have been out of electricity for roughly two hours per year on average. The result is a system that is 99.98% reliable. The fact that NorthWestern has such a vast service territory with employees often required to travel long distances to respond to problems and outages makes this a great accomplishment. When compared to all electric utilities that participate in the Institute of Electrical and Electronics Engineers' (IEEE) reliability study, NorthWestern's Montana electric system on average falls into the 2nd quartile (see figure below). Some year-over-year variation can be expected due to the presence or absence of storm activity that does not meet the threshold of a MED, which will impact reliability results despite continued investments in distribution infrastructure.

Figure 1: Montana SAIDI



Q. What affects NorthWestern's ability to provide safe service?

A. The safety of our customers and our employees is our number one priority. The characteristics of our system, a uniquely broad service territory with relatively few customers, poses significant challenges to ensure our system is always in a safe condition. The sheer exposure of the number of miles of line needed in our service territory to provide service to a low customer density service territory creates more potential for risk from extreme weather and fire. Improved reliability reduces the potential for spark emitting electrical "faults" from occurring. "Faults" typically create outages and occur when a phase comes in contact with another phase, or anything that is at a different electric

potential (ground). A fault is also the ignition source for powerline-caused wildfires. To provide reasonable cost of service while managing this risk can create challenges.

Wildfire Mitigation Plan

Q. Please provide an update on NorthWestern's Enhanced Wildfire Mitigation efforts.

A. In its 2022 Montana Rate Review, NorthWestern presented an Enhanced Wildfire Mitigation Plan ("EWMP") that discussed its proposed efforts to accelerate and expand activities to further mitigate wildfire risk and proposed an Enhanced Wildfire Mitigation Plan Rider for the timely recovery of the costs associated with that plan. As part of the Settlement in 2022 Rate Review, Settling Parties agreed to deferred accounting treatment of expenses related to wildfire mitigation efforts incremental to the test year. This is discussed further by Elaine A. Rich and Cynthia S. fang. Since that settlement, the wildfire situation has continued to be a growing concern for utilities across the nation. Events such as the human tragedy and property losses that occurred in Maui, Texas, Colorado, etc. during the past year has only furthered the risk landscape that all utilities now must navigate. Consistent with the expectations in the conclusion of the 2022 EWMP, and to stay on pace with the rapidly evolving nature of wildfire risks and solutions to mitigate such risks, Northwestern released an updated its plan in April 2024, now referred as its Wildfire Mitigation Plan ("WMP"). Although the WMP has

evolved, the plan objectives remain the same. The objectives are: the reduction of ignition potential, system and environmental monitoring, enhanced vegetation management, and enriched public and communication outreach. The structure of the deferred expense accounting provided by the 2022 Rate Review settlement served as the mechanism to implement new programs for mitigating wildfire risk, while providing flexibility to adjust to the most relevant solutions to achieve plan objectives. The Direct Testimony of Brandi L. Hellwinkel further discusses NorthWestern's 2024 WMP. The Direct Testimony of Gregory F. Bailly discusses NorthWestern's wildfire activities to date since the final order in the 2022 Rate Review, and the associated costs for deferred accounting treatment are discussed in the Direct Testimony of Elaine A. Rich.

Q. How does NorthWestern's WMP differ from the wildfire mitigation activities planned when the 2022 Rate Review was settled?

A. The EWMP filed with our 2022 Montana Rate Review provided the Montana Public Service Commission ("Commission") and interested parties with insight into NorthWestern's planning at the time filed. The EWMP recognized that wildfire mitigation continues to be a rapidly evolving issue that would require flexibility to ensure it reflected any changes in needs and available solutions. In addition, the EWMP was developed with NorthWestern's proposal for an Enhanced Wildfire Mitigation Plan Rider which was withdrawn from the 2022 Rate Review.

As discussed, much has occurred in the utility landscape around wildfires. Wildfire has been at the center of the discussions between utilities, and at utility association events. It has been an incredible time of cooperation, sharing, and learning amongst utilities. Certainly, NorthWestern's staff is much more informed on the matter. Although our objectives of the WMP are unchanged from the EWMP, our knowledge grows and methods mature as we constantly seek to refine approaches for more and more effective outcomes in mitigating wildfire. NorthWestern's WMP only materially differs from the EWMP with the addition of two specific items, a Public Safety Power Shutoff ("PSPS") protocol and activities with wildfire awareness and public outreach.

Q. Please describe what NorthWestern has learned and how it has shaped adjustments to the WMP.

A. Most utilities that have developed plans to mitigate against the risk of wildfire and consist of some variation of five key components. Those five components are: System Hardening, Vegetation Management, Situational Awareness, Operational Practices, and Public Outreach. NorthWestern has applied the many methods and approaches that were developed during DSIP, to our approach to wildfire mitigation. NorthWestern has led other utilities in both what to focus on and how to accomplish system hardening and vegetation management. These two components, system hardening and

vegetation management, are expected to stay on their course with optimization as technology and advances become available to assist in inspection, repair, or replacement of assets, and vegetation mitigation.

The greatest opportunity for NorthWestern to further mitigate risk is with the advancement of its situational awareness of the environment or system. Situational awareness provides necessary information for when to adjust the electric systems with how the system responds to fault situations (operational practices). Although the plan did not change, NorthWestern did choose to accelerate the timeline to develop situational awareness and operational practices. This decision initiated a change in the schedule of the existing activities in the WMP. That is, accelerating the advancement of situational awareness, which accelerated the formalization and deployment of operational practices, which allowed NorthWestern to move from “evaluating PSPS” to developing the logical application of PSPS as an operational defense strategy. Although refinement is on-going, NorthWestern is currently functional with its ability to perform situational awareness and formally developed operational practices that include PSPS as a defensive strategy. NorthWestern learned from its utility peers that successful PSPS implementation requires effective public outreach and communication. The decision to accelerate the advancement of these WMP activities was driven by witnessing the impact that wildfire events have had on our neighboring utilities and their customers, the escalation of wildfire risk for customers and

the communities of Montana, and the threat and wildfire risk for NorthWestern.

Q. How does NorthWestern's current electric tariff rules address PSPS interruptions?

A. Rule 8 in our current tariff rules provides us with latitude to interrupt service for varying events, including weather conditions, and to reestablish service with reasonable diligence. In the wildfire context, NorthWestern will implement PSPS because of weather events and Acts of God. Under the terms of the PSPS, we will reestablish service with reasonable diligence. NorthWestern does not believe changes are needed to its tariff rules to address PSPS.

Q. How do the adjustments, schedule or otherwise, improve the effectiveness of the WMP?

A. Advancing situational awareness methods provides NorthWestern the ability to adjust its operational practices appropriate to environmental conditions and risks. Adjusting operational practices results in changes in how powerline devices will perform. Wildfire operational defense strategies employ enhanced powerline safety settings (EPSS). That is, the settings of powerline devices are adjusted to accelerate de-energization of electrical facilities when a fault is detected when conditions dictate. PSPS, from an operational practice perspective, is an operational defense strategy of last resort. PSPS

is applied when environmental and system conditions and risks are so severe, and mixed with violent weather, that de-energization of power systems becomes the most reasonable alternative to mitigate wildfire risk. Choosing the defense strategy employed is the result of analyzing three factors: Situational awareness of environmental conditions (dry, low moisture, high temperatures, and potential for wind), the health of the systems, and the impact to the communities or customers served.

The most material adjustment to the WMP was the addition of PSPS and the necessary communication strategies for public outreach around wildfire and the purpose of PSPS. For PSPS strategies to be effective, customers and other stakeholders (community leaders, public agencies, etc.) must understand their purpose and how NorthWestern will employ such strategies. A communication strategy was developed and is being implemented to broaden the awareness of wildfire and the use of PSPS to stakeholders.

Q. Are there any proposals related to wildfire mitigation in this Rate Review?

A. Yes. Ms. Fang proposes a balancing account for the recovery of Wildfire Mitigation costs incurred on an annual basis in between rate reviews.

Q. What specific wildfire mitigation costs is NorthWestern asking for recovery of through this balancing account?

A. NorthWestern is asking for the more timely recovery of wildfire mitigation costs in between rate reviews. This is discussed further by Ms. Fang.

Q. Why is there a need for incremental recovery between rate reviews for wildfire mitigation costs?

A. As presented in the WMP and discussed further by Mr. Bailly and Ms. Hellwinkel, in response to the ever increasing threat of wildfire for customers, the communities of Montana, and for NorthWestern, wildfire mitigation activities will continue to grow year over year. Timely recovery of these expected substantial costs will be critical and is discussed further in the Direct Testimony of Crystal D. Lail.

Q. How will you update the Commission on any changes or deviations from the WMP?

A. In addition to the annual compliance filing discussed by Ms. Fang, NorthWestern plans to provide the Commission with informational updates related to our wildfire mitigation efforts twice a year – once as we head into a new wildfire season and another as we close out the year.

Q. Does NorthWestern have any other proposals related to this matter?

A. Yes, NorthWestern requests the Commission eliminate the annual Hazard Tree Status Report required by Final Order 7604u in Docket No. 2018.02.012. The separate reporting of this requirement is no longer needed given the

establishment of NorthWestern's WMP and informational updates to the Commission discussed above.

AMI – Operational Benefits

Q. Please describe your role in the management decision to implement AMI.

A. While I was not a member of the executive team at the time the decision was made to implement AMI, I can provide additional information regarding the operational benefits we have seen and expect to see resulting from AMI deployment.

Q. Please provide an update on NorthWestern's advanced meter timeline in Montana.

A. NorthWestern's AMI program in Montana began in 2021. To date, Northwestern has replaced 400,000 electric meters and gas modules in Montana. AMI deployment was completed in the Missoula Division in August 2022, Butte Division in June 2022 and Bozeman in January of 2024. Lewistown District, Billings Division, and Havre District are on schedule to be completed in 2024. Helena and Great Falls Divisions are expected to be completed mid-2025.

Q. Please describe the operational benefits that have resulted from the deployment of AMI.

A. In our last rate review,[2] NorthWestern identified three near-term benefits expected from AMI deployment: (1) timely outage information, (2) more accurate and consistent meter reads, and (3) availability of remote services. I will discuss the operational benefits associated with items 1 and 3, and the Direct Testimony of Bobbi L. Schroeppel discusses item 2, with additional detail provided by Jonathan R. Shafer.

Whatever the subject matter, specific to operating a safe energy distribution system and meeting the expectations of customers, technology for improved situational awareness is foundational. NorthWestern has advanced its ability to be effective with situational awareness by the advancement of a central function called Distribution Operation Control ("DOC"). Just as our transmission system is monitored and operated from our Grid Operations Control, the DOC has advanced for a similar purpose in monitoring and operating the distribution system. Over the last several years, new technology continues to provide the DOC the status of the distribution system. However, until the advancement of AMI our distribution controllers were blind to the most important portion of our system – the connection point to our customers. Many of the out of power notifications we receive from our customers often involve an issue with the customer's equipment and power is being delivered to the meter by the distribution system. AMI allows our distribution controllers to "ping" a meter to determine if the meter has power.

[2] Shafer Direct Testimony, pg. JRS-9, Docket No. 2022.07.078 (2022).

When the “ping” determines there is power at the meter, this is immediately communicated to the customer and without dispatching a field person. Without AMI, the customer would often have to wait for a field person to respond just to be informed the problem is their own to correct.

We are currently in a unique position with over half of the AMI deployment completed. The benefits of AMI are emphasized with the contrast between the areas that have AMI, versus areas still without. The difference is simply glaring when it comes to outage management. NorthWestern’s service territory contains six divisions, or operating areas. Three of the six divisions have functioning AMI. In the divisions with AMI, notifications of power outages occur without the need for customers to call and alert us. Power outage notifications from the meter are delivered to the DOC alerting the distribution controllers in the early moments when an outage begins. With this functionality, we have numerous examples where we have dispatched resources to the area of an outage before we have heard from a customer associated with the outage. Additionally, the controller has an awareness of all meters that are associated with the outage and is able to provide sound predictive information to field resources regarding the location of the specific protective line device (fuse, reclosure, breaker, etc.) involved in the outage. This reduces the time required for the field resource to respond to the outage. Also, AMI provides visibility to the distribution system and allows the DOC to

aid the field resource to identify the proximity of the problem and guide partial restoration efforts when repairs are required.

This operational functionality is incredibly beneficial when managing major storm outages. During major storms, when significant damages occurs or are expected to occur, our strategy for restoration generally follows this logical and prioritized order to assess and restore: 1) transmission lines, 2) substations, 3) critical customers, 4) high density residential, 5) low density residential, and finally 6) individual services. Historically, when it was necessary to create a storm recovery plan that followed this strategy, field assessments would first have to be performed to provide the needed field intelligence to develop a recovery plan. Field assessments determined both damaged facilities and which customers had power versus those that did not. The process often had field employees trudging through the same conditions (deep snow, mud, downed trees, and bad roads) that created the outage event to capture the system status, post event. With AMI, customer information is known almost immediately, and allows damage assessments to be deliberate and dispatch of resources to be more effective for storm recovery. In summary, AMI has greatly improved outage management. Customers expect NorthWestern to know if their power is on or off, and AMI provides us with the ability to meet that expectation and provides operational awareness resulting in improved reliability through more effective restoration and decreased outage times.

AMI also provides many other operational benefits to efficiently and effectively meet the expectations of customers. Reduced meter reading hours is one obvious benefit. Operational resource hours have also been reduced for other activities, such as the time operations staff need to obtain meter reads for the "move in/move out" of customers and investigations of power problems. With the high frequency of meter data captured daily (versus a single monthly read), usage can be correlated with customer's habits, activities, and household appliances. This creates confidence in NorthWestern from customers who ask for help in determining the source of abnormally high power consumption. AMI technology provides operation technicians more effective tools to investigate power quality issues for customers, specifically problems that are intermittent and seemingly hide when our technicians show up to find and solve the issue. Stored data allows employees to investigate the problem and deliver solutions. The Direct Testimony of Jonathan R. Shafer discusses the specifics of the operational benefits.

Q. Are there other operational benefits you would like to discuss?

A. Yes. Another significant benefit is with customer safety alerts, and the early detection of power quality problems that could lead to damage of customer equipment (property). Loose or damaged electrical connections and customer overloading of equipment can cause electrical components to

overheat. This ultimately can lead to structure fires, putting lives and property in harm's way. AMI has the ability to detect excessive heat at the meter and notify NorthWestern of such problems. Since the deployment of AMI, we have responded to a number of high temperature alerts. Most often, NorthWestern identifies the problem at the meter socket and collaborates with the customer to resolve the issue effectively.

NorthWestern is also deploying a voltage monitoring tool that allows our operations to verify voltages before dispatching a resource -- again, meeting the needs for immediate situational awareness. NorthWestern is further exploring how to leverage voltage data for the early detection of power quality problems, such as flicker lights, momentary outages, and equipment issues. AMI, with its real-time alarms and detailed voltage information, has provided NorthWestern and its customers with safety alerts and improved power quality -- again, meeting the needs of customers through real time situational awareness.

Q. Are there any operational benefits that NorthWestern hoped would show up but have not? If so, please describe.

A. Yes. Currently, NorthWestern is still required to leave pre-termination and post-termination in-person door tag notices for customers whose electric or and/or natural gas service is about to be shut off for non-payment.

As AMI deployment continues throughout NorthWestern's service territory, the need for NorthWestern personnel to be on our customers' premises in order to ensure the continuation of safe and reliable service to our customers has been reduced significantly with this door tag service requirement being an exception.

There has been some history of Northwestern requesting to modify this practice. Ms. Fang provides testimony regarding those details.

Q. Why is NorthWestern concerned with this requirement?

A. As noted above, as NorthWestern's AMI deployment continues throughout the service territory, the need for NorthWestern personnel to be on our customers' property has been reduced significantly including the need to be on the customer premises to terminate service. While that need has been reduced, we nevertheless continue to need to be on the customers' premises to place door tags both pre- and post-termination. This requirement in the Commission's rule has reduced the benefits we expected to receive from AMI deployment.

However, the most compelling concern in performing this requirement is primarily employee safety. The requirement that NorthWestern personnel be on a customer's property to deliver pre- and post-termination notices continues to be a tense and potentially confrontational interaction, different

than other interactions when NorthWestern is there at the customer's request. When performing the tag requirements, NorthWestern employees are too often subjected to very unsafe situations that are not common in today's workplace. Interactions can involve verbal abuse, physical threats, navigating vicious dogs, and more. Employees have been injured in performing these activities. The necessity to endure such unsafe and abusive conditions to perform the tagging task must change, specifically when so many other effective communication channels are available in today's world.

Ms. Fang will provide testimony for the former dockets and the specific request of the Commission on this matter.

Role of Distribution Operations – Natural Gas

Q. Please provide a general description of NorthWestern's natural gas distribution system in Montana.

A. NorthWestern operates a natural gas distribution system that includes 5,155 miles of main pipeline with 195,204 services at the end of 2023. This system serves approximately 212,100 customers in 118 communities. Our total distribution system breakdown with main and service pipeline material, sizes, and vintage is shown in our Pipeline and Hazardous Materials Safety Administration ("PHMSA") Annual Report Form 7100 for Calendar Year 2021 Gas Distribution System.[3]

[3] *See* Exhibit CTP-1, Pohl, C. (2022) in Docket No. 2022.07.078 before the Montana Public Service Commission.

This system connects to NorthWestern's natural gas intrastate transmission system described by Mr. Cashell at city gate stations where the natural gas is measured and the transmission gas pressure is reduced to distribution pressures. The distribution system operates through various networked systems where maximum allowable operating pressures range from 15 pounds per square inch gauge ("psig") to 150 psig. Major equipment that is maintained includes the pipeline main and services, pressure regulating stations, sectionalizing valves, cathodic systems, and customer meters and associated equipment.

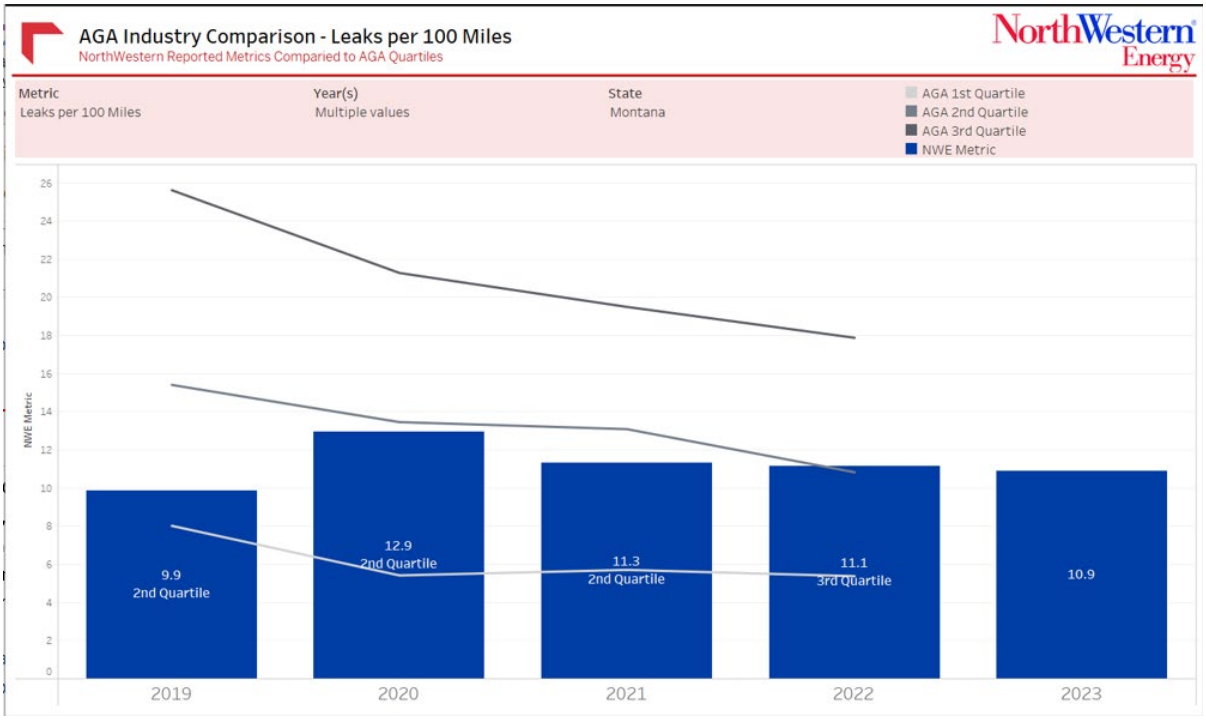
Q. Please describe NorthWestern's Natural Gas Distribution Operations' approach to the provision of safe and reliable natural gas service.

A. As with electric service, our number one goal for natural gas service is the safety of our workforce and the public. We attain this goal by maintaining our system to minimize gas leaks while providing quality and timely customer service. We pride ourselves on a highly qualified workforce and undertake continual planning to maintain this workforce into the future. We have developed a culture that embraces continual work process improvement. We perform the appropriate work in accordance with all pipeline safety requirements to maintain a safe and reliable system, but also focus on efficiency, resulting in high-quality service at reasonable rates. Our overall asset management approach is fundamental, but very effective. By utilizing

this approach, we are able to analyze the data that is produced through inspections and system performance monitoring to plan and prioritize investments and implement maintenance plans that maximize the safety and overall performance of our system.

The figure below shows distribution natural gas system leak performance over the past five years benchmarked against peer company members of the American Gas Association. Our distribution natural gas system performs at a high level in leaks per 100 miles of pipe. We have made great progress over the past five years in addressing third-party damage, but this is an area we need to continue to focus on through our damage prevention program.

Figure 2: Leaks Per 100 Miles



Sleepy Hollow

Q. Please provide an overview of NorthWestern's acquisition and operation of Sleepy Hollow.

A. NorthWestern's acquisition of Sleepy Hollow represents NorthWestern's concern for public safety, the commitment to not only its customers, but also to Montana's rural communities.

Sleepy Hollow was a natural gas utility that served the community of Winifred, Montana that became defunct and needed a qualified operator immediately or would face decommissioning leaving the community of Winifred without critical natural gas service. After consultation with the Commission's

Pipeline Safety and Regulatory staff, NorthWestern agreed to acquire and operate the Sleepy Hollow system to ensure that the community maintained continued natural gas service. In Final Order No. 7833d in Docket No. 2022.04.051, the Commission approved NorthWestern's application to acquire the natural gas assets of the Sleepy Hollow system. In that docket, cost recovery issues were deferred to a future date in order to expedite Commission approval and ensure that community continued un-interrupted natural gas service.

Q. Please describe your activities associated with the acquisition and operation to date.

A. Generally, the activities performed were with three key objectives. The first objective was to perform the necessary activities to assure a safe operating system by meeting all regulations for a distribution gas system. This required NorthWestern to validate those components met specifications and perform all required inspections (corrosion inspections, leak survey, cathodic protection, etc.). The second objective was to validate all customers were accounted for and being billed appropriately and to replace the meter infrastructure to optimize meter reading. The last objective was to perform the activities to convert the system from a gas gathering system, which it was originally constructed as, to a gas distribution system and to remove all gas line segments and components that were unnecessary to serve the customers. This effort greatly improved the safety of the system and

optimized future operating costs by removing gathering system components that served no function in a distribution system and if left in place were prone to leak. Components such as first cut regulators, liquid capture devices, compressor stations, dehydrators, pipe segments connecting to gas wells, etc. were removed. The detail of all activities performed since assets were acquired by NorthWestern are included in Exhibit JCM-1.

Conclusion

Q. Please summarize your testimony.

A. The consistent themes, regardless of the subject matter discussed, are NorthWestern's objective for employee and public safety and meeting the expectations of customers. Investment in the distribution systems (gas and electric) for maintenance, system upgrades, expansion, and technology is imperative to meet these objectives.

Q. Does this conclude your direct testimony?

A. Yes.

Verification

This Direct Testimony of Jason C. Merkel is true and accurate to the best of my knowledge, information, and belief.

/s/ Jason C. Merkel
Jason C. Merkel