Direct Testimony and Schedules
Christopher C. Cardenas

Before the Minnesota Public Utilities Commission
State of Minnesota

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

Docket No. E002/GR-20-723
Exhibit___(CCC-1)

Customer Care and Bad Debt Expense

November 2, 2020

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Schedules

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND OCCUPATION.

A. My name is Christopher C. Cardenas. I am Vice President of Customer Care for Xcel Energy Services Inc. (XES), which provides services to Northern States Power Company (NSPM or the Company).

Q. PLEASE SUMMARIZE YOUR QUALIFICATIONS AND EXPERIENCE.

A. I have more than 21 years of experience in the areas of customer service and finance for energy utilities, cable, and telecommunication companies. I joined XES in January 2019, previously serving as Vice President of Customer Services for PPL Electric Utilities in Pennsylvania. In my current position, I am responsible for the overall business performance of the Customer Care organization. Prior to this, I held various customer service and financial leadership roles with Time Warner Cable, Comcast Cable, U.S. Cellular, and Sprint Nextel. I have also held various positions in corporate strategy, customer service operations, and business development. My resume is provided as Exhibit___(CCC-1), Schedule 1.

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

A. My testimony provides an overview of the Customer Care organization and its 2020-2023 Operation and Maintenance (O&M) expense levels. I share ways we measure customer satisfaction for work Customer Care performs. I also present and discuss the Company's commodity and non-commodity bad debt expense, and the actions we have taken to minimize and manage it to the benefit of customers. Finally, I discuss impacts that Advanced Grid Infrastructure and Security (AGIS), and specifically Advanced Metering Infrastructure (AMI), will

have on Customer Care costs, functions, and processes, as well as changes that are needed to facilitate the transition to AMI for customers.

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. The Customer Care organization has achieved strong customer satisfaction results, controlled its O&M expenses, and outperformed other utilities in managing bad debt expense. The 2021 test year O&M expense I propose for the Customer Care organization is $32.2 million for the State of Minnesota Electric Jurisdiction. This level of O&M expense continues Customer Care's trend of relatively flat levels of O&M expense since 2017, while continuing to achieve strong results in the Company's service quality measures and high levels of satisfaction with the service we provide our customers.

The 2021 test year bad debt ratio we propose is 0.54 percent, which results in a 2021 test year commodity bad debt expense of $17.6 million, and approximately $80,000 for non-commodity bad debt expense for the State of Minnesota Electric Jurisdiction. While this bad debt performance compares favorably to other utilities, it is elevated when compared to 2017-2019 performance levels as a result of the ongoing COVID-19 global health crisis and associated economic impact.

Q. ARE THERE ANY CURRENT EVENTS OR ISSUES IMPACTING CUSTOMERS AND YOUR ORGANIZATION?

A. The COVID-19 pandemic has certainly impacted the communities and customers to whom we provide service, and also the Customer Care organization and employees of the Company. When the global and local reality of how this virus was changing lives became apparent in March of 2020, Xcel

Energy voluntarily suspended residential disconnections of service for nonpayment across the many states we service, including Minnesota. By the first week of April we successfully transitioned 638 Customer Care employees from the office to working from home. Throughout the pandemic we have remained committed to providing the highest levels of customer support and service while working through the challenges associated with living alongside this virus, and those presented by an increased reliance on virtual work technology. These impacts can be seen throughout the Customer Care organization and as discussed in my testimony are evident in our O&M and bad debt projections.

Q. HOW IS YOUR TESTIMONY ORGANIZED?

A. I present the remainder of my testimony in the following sections:

- *Customer Care Organization.* I discuss my organization in terms of the business functions it provides to the Company and its customers. I also discuss the improvements we have made to various aspects of our service and the research we have done to understand our customers and to measure their satisfaction with the service we provide. In addition, I summarize the Company's service quality results. In this section, I also present the overall Customer Care O&M budget and the budgets by business function.
- *Commodity Bad Debt Expense.* This is billed commodity revenue for electric and natural gas service that is considered uncollectible from customers. I discuss the test year expense and proposed bad debt ratios, as well as how we determine our bad debt ratios and manage our bad debt expense.
- *Non-Commodity Bad Debt Expense.* This is billed revenue that is considered uncollectible for everything other than electric and natural gas service. I discuss the Company's test year levels of expense, the various

components of non-commodity bad debt expense, and what the various business functions do to manage non-commodity bad debt expense.

II. CUSTOMER CARE ORGANIZATION

A. Overview

Q. PLEASE SUMMARIZE THIS SECTION OF YOUR TESTIMONY.

A. In this section, I discuss the structure of the Customer Care organization and describe the various functions involved in providing service to the Xcel Energy organization, including NSPM and the other Operating Companies and their customers. I also present the Company's test year O&M expense and discuss how we have managed to keep O&M expenses relatively flat since 2017 while introducing new customer programs and options and maintaining high levels of customer satisfaction relative to the work Customer Care performs.

Q. PLEASE DISCUSS THE FUNCTIONS OF THE CUSTOMER CARE ORGANIZATION AND HOW THEY RELATE TO THE COMPANY'S OVERALL BUSINESS GOALS.

A. The Customer Care organization performs essential functions that help the Company effectively provide its customers energy products and services and high levels of customer service. We ensure energy use is measured and billed accurately, collect and process customer payments, and assist our customers with questions, concerns or requests about their energy services. We understand customer needs and expectations are evolving in the energy marketplace. We strive to meet those changing needs through improved communication, consultation and information, and automated functionality intended to improve our customers' experience. Our organization is critical to the Company's vision of becoming more customer-focused, and we will be

instrumental as we support our customers through advanced grid modernization and help them realize the many benefits it holds for them.

Q. PLEASE PROVIDE AN OVERVIEW OF THE CUSTOMER CARE ORGANIZATION AND HOW THE ORGANIZATION SUPPORTS THESE COMPANY EFFORTS.

A. The Customer Care organization provides service to approximately 3.6 million electricity customers and 2.0 million gas customers served by Xcel Energy across its service territory in eight states. We support customers starting when they initiate their energy service, as we collect ongoing meter readings and issue bills, through posting their payments to their accounts. We are available to customers via phone, web, mobile, email, and various social media. We consider customer survey data and other feedback and use it to assess our performance and opportunities for improvement. Below is a brief description of the various business functions that comprise the Customer Care organization:

- *Billing Services.* Responsible for the production and delivery of billing statements, researching billing and payment inquiries and resolving customer billing and payment issues, billing quality assurance, and receiving and posting all customer payments.
- *Contact Center.* Responsible for interacting with our customers through our customer contact centers, mailed and electronic correspondence, social media and online inquires to answer their questions, resolve their concerns, and fulfill their requests.
- *Credit and Collections.* Responsible for accounts receivable management, minimizing customer receivable write-offs, and operation of credit contact centers.
- *Customer Operations.* Responsible for oversight and support of all Customer Care. Comprised of two core functional areas.

Measurement and Analytics: responsible for staff training, quality assurance, planning and forecasting, operational management, workforce management, performance reporting, advanced analytics, vendor management and budget oversight.

Customer Policy and Assistance: responsible for process efficiencies, resolving customer complaints, communications within the organization, customer policy, and low-income programs.

- *Meter Reading, Field Collections and Revenue Assurance.* Responsible for reading customer meters, performing field disconnection and collection activities, and investigating energy theft and revenue loss situations.

Q. DO YOU USE ONLINE OR TECHNOLOGY TOOLS TO INTERACT WITH CUSTOMERS?

A. Yes. Our Interactive Voice Response (IVR) automated phone system is an important tool customers use to conduct quick and easy transactions without the need to speak with a customer service representative. We actively manage this tool, making enhancements to ensure customers experience highly satisfying and efficient transactions. Our customers use the IVR system extensively and are very satisfied with it, as shown in Table 2. In addition, we support our customers with inquiries and requests submitted through our web site, with a notable increase in the number of customer interactions requesting moving-related changes being submitted online over the last several years. We also receive emails from customers, as well as respond to comments or requests through social media. Customers also interact with the Company through our web site, including MyAccount online account management, as well as through our mobile application.[1]

[1] Information on the mobile application can be found at: https://www.xcelenergy.com/mobile_app

Q. WHAT PAYMENT METHOD OPTIONS DO CUSTOMERS HAVE TO PAY THEIR UTILITY BILLS?

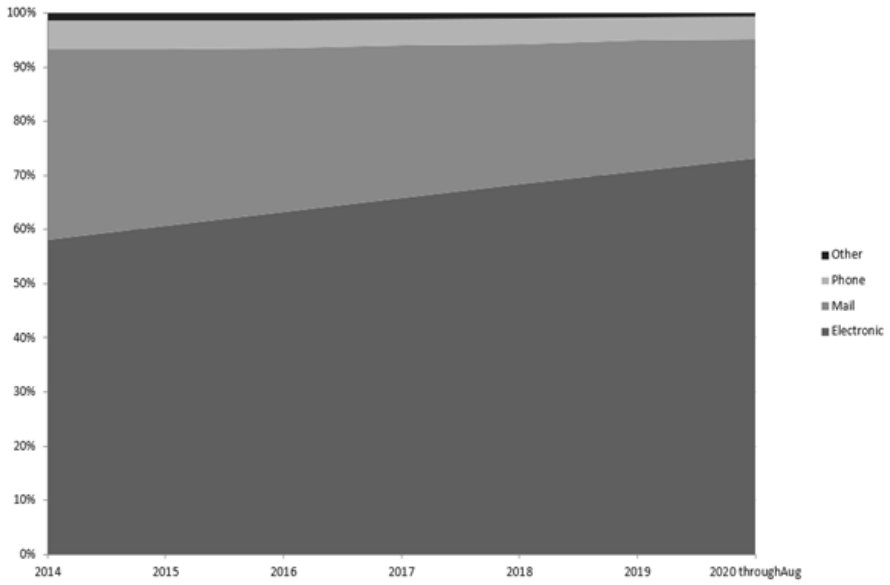
A. We currently offer several payment alternatives to our customers, which we group into four payment channels: Mail, Phone, Electronic, and Other. Customers can pay their bills by phone and either complete the payment using our IVR system, or by talking to a customer service representative. They may also use a credit or debit card to make a payment through our credit card vendor; use the Company's online MyAccount portal to pay their bill electronically; use our mobile application; or, they can pay their bill at designated pay stations.[2] Business customers have an additional option to pay their bills through Electronic Funds Transfer.

As shown in Figure 1 below, an increasing percentage of customers are submitting their payments through electronic payment options. In addition to being more convenient for a significant number of customers, this shift creates efficiencies for the Company as the use of any electronic channel helps reduce overall billing costs.

[2] Information on designated pay stations can be found at: https://www.xcelenergy.com/billing_and_payment

Figure 1

Customer Payments by Channel[3]



Q. ARE YOU SEEING ANY OTHER AREAS OF EVOLVING CUSTOMER EXPECTATIONS IN ADDITION TO BILLING AND PAYMENT?

A. Just as customers expect choices when it comes to billing and payment options, they also seek choices for how they interact with the Company. They appreciate receiving notifications and status updates to keep them informed of matters impacting their service, such as during outages. They increasingly interact with us using digital channels and look to their utility provider to use technology to help them improve their quality of life, save money, and maintain their safety.

[3] The Electronic payment channel includes payments through My Account, CheckFree, auto payments, and electronic funds/wire transfers. The Other payment channel includes payments through pay stations, credit/debit cards through a contracted vendor, energy assistance payments, and payments from collection activities.

B. Test Year O&M Budget – Overall Customer Care

Q. HOW DOES THE CUSTOMER CARE ORGANIZATION DEVELOP ITS PLANS AND BUDGETS?

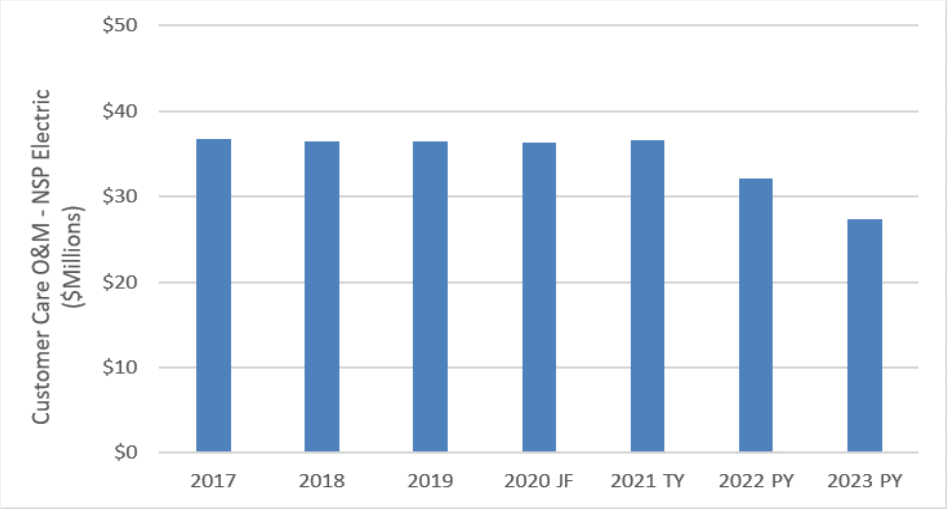
A. We assess the needs of the Customer Care organization and the various Operating Companies we support and plan and budget at the business function level. This is necessary given the variety of services provided by the different business functions that make up the Customer Care organization. Unless otherwise noted, this discussion relates to Customer Care O&M at the NSPM Electric level.[4]

Q. PLEASE PROVIDE AN OVERVIEW OF THE CUSTOMER CARE O&M BUDGET.

A. Figure 2 below summarizes overall Customer Care O&M expense since 2017. Please see Exhibit___(CCC-1), Schedule 2 for additional details regarding Customer Care O&M expense levels.

Figure 2

Customer Care O&M Trend – NSPM Electric



[4] Company witness Mr. Ross L. Baumgarten explains how the Company allocates and assigns Xcel Energy Service Company costs to NSPM. Company witness Mr. Benjamin C. Halama explains the utility and jurisdictional allocation process that assigns NSPM operating company costs to the State of Minnesota Electric Jurisdiction.

Overall, the Customer Care 2021 test year O&M budget is relatively flat compared to the O&M expense levels for the past four years. The total 2021 Customer Care test year O&M expense of $36.6 million is within 1 percent of the spending level in 2017, with slight variation in between those years.

Q. HOW HAS CUSTOMER CARE BEEN ABLE TO KEEP ITS O&M BUDGET RELATIVELY FLAT OVER SUCH A LONG PERIOD OF TIME?

A. We have largely been able to achieve favorable results by automating work processes and focusing on operational performance improvements and efficiencies. Increasing customer use of electronic billing and payment methods and digital interaction channels also play a role in managing costs. Going forward, cost renegotiations with our current meter reading vendor, as well as AMI deployment, would reduce meter reading costs substantially.

Q. HAVE YOU COMPARED THE COMPANY'S HISTORICAL O&M EXPENSE TO OTHER COMPANIES FOR CUSTOMER CARE-RELATED EXPENSES?

A. Yes. The Federal Energy Regulatory Commission (FERC) cost data from the S&P Global Intelligence Platform compares Customer Care-related expenses for more than 100 regulated energy companies representing gas and electric utilities, including combination gas and electric utilities, like NSPM. This data represents Customer Care related O&M expense for all customers regardless of utility type. The total population, on average, consisted of 102 companies annually from 2015 through 2019.

Q. HOW DOES NSPM'S HISTORICAL O&M EXPENSE COMPARE TO OTHER COMPANIES FOR CUSTOMER CARE-RELATED EXPENSES?

A. Overall, NSPM continues to compare favorably when looking at mean performance in total costs captured in FERC accounts 901 through 905, which include the majority of costs managed by Customer Care, Exhibit___(CCC-1), Schedule 7. Table 1 below shows total Customer Accounts Expense, including bad debt expense, per retail customer for FERC accounts 901 through 905. NSPM Total Company shows relatively flat, and consistently lower, cost per retail customer than the Competitor Group (mean) during the last five years of reported data.

Table 1

Customer Accounts Expense per Retail Customer

Comparison (901-905)

	2015	2016	2017	2018	2019
NSPM Total Company	$38.4	$38.5	$37.8	$37.7	$38.2
Competitor Group (mean)	$51.8	$50.6	$48.2	$49.1	$51.7

Source: S&P Global Intelligence Platform

Q. GIVEN THE RELATIVELY FLAT O&M OVER THE PAST SEVERAL YEARS, HAVE YOU SEEN A NEGATIVE IMPACT TO CUSTOMERS?

A. No. The Company's Voice of the Customer Transaction Survey (VOC) is the most direct measure of customer satisfaction with the services provided by the Customer Care organization. As seen in Table 2 below, VOC transaction results remain high.

Beginning with data reported for 2017, the Company implemented a new customer experience platform through vendor MaritzCX to assess satisfaction for various channels, including agent and IVR experiences. The Company's partnership with the new vendor eliminates a manual agent call transfer process, objectively manages the survey sampling process, and works to ensure a statistically representative sample. Results are loaded daily to interactive reporting dashboards for easier access. These enhancements facilitate more frequent results and more in-depth understanding.

The former vendor transaction study also used a different scale than the new vendor for agent results. The former vendor used a 0-10 scale for the agent survey results, while the new vendor survey uses a 1-10 scale, both with a top three box range (8-10). The IVR survey scale remains a 1-5 scale with a top two box range (4-5); however, the IVR survey method changed to an automated phone survey instead of a live phone survey, to match the method of customer interaction. The agent survey remains a live phone survey. Finally, IVR and agent survey results are now reported separately, instead of being combined into one score based on transaction channel volume. Because of these changes, data reported starting with 2017 has been, and will continue to be, somewhat different than data reported for prior years, as reflected in Table 2 below. We believe that this new survey and methodology will allow the Company to track customer satisfaction more accurately than in the past.

Table 2

Voice of the Customer Transaction Survey – Minnesota Electric

(Percentage of Customers Providing a Positive Rating)[5]

	2015	2016	2017	2018	2019	2020 Jan-Jul
Overall Satisfaction with Transaction (IVR and Agent 2015-2016; Agent Only 2017 – 2018)	86%	83%	84%	84%	85%	86%
IVR Overall Satisfaction with Transaction	88%	83%	82%	81%	81%	87%

I provide more information regarding customer satisfaction in Exhibit___(CCC-1), Schedule 3. While customer satisfaction remains high relative to the work Customer Care performs, there is room for improvement in other areas, such as the Company's digital platform for customer information, which is discussed further in the Direct Testimony of Company witness Mr. Wendell Reimer.

Q. ARE THERE OTHER INDICATORS THAT SHOW YOU ARE MEETING CUSTOMER EXPECTATIONS?

A. Yes. In addition to achieving high customer satisfaction levels over this period, the Company has consistently met the service quality performance measures contained in its Minnesota Service Quality Plan tariff related to the time to answer customer calls and billing and meter reading performance metrics. The company is on track to meet service quality performance measures related to customer complaints for the year of 2020.

[5] Positive rating equates to a score of 8, 9, or 10 on a 0-10 scale (2014 – 2016) or 8, 9, or 10 on a 1-10 scale (2017 – 2020) for Agent/IVR or Agent Only satisfaction; or a score of 4 or 5 on a 1-5 scale for IVR satisfaction. 2020 data represents January-July.

Q. WHAT ARE CUSTOMER CARE'S O&M 2021 EXPENSE LEVELS FOR THE 2022 AND 2023 PLAN YEARS?

A. The Company requests a NSPM Electric O&M expense level for Customer Care of $36.6 million for the 2021 test year, $32.1 million for 2022 and $27.3 million for 2023. I note that these amounts incorporate anticipated O&M reductions associated with the proposed AMI deployment plan. Deployment delays or disapproval of AMI deployment may impact these Customer Care O&M expense levels. I discuss the key drivers of Customer Care's O&M expenses from 2020 through 2023 below.

Q. PLEASE SUMMARIZE KEY FACTORS IMPACTING CUSTOMER CARE EXPENSE LEVELS FROM 2020 THROUGH 2023.

A. Customer Care expects an overall O&M reduction from 2020 through 2023 primarily associated with anticipated reductions in meter reading expenses. Part of this reduction results from successful contract negotiations with the Company's meter reading services vendor, Landis+Gyr (Cellnet). The negotiations eliminated a contract cost escalation factor associated with economic indicators starting in January 2019. It also enables reductions in meter reading services costs as AMI deployment occurs starting in 2022, partially offset by the elimination of credits for meters Cellnet cannot read according to its contractual schedule. These negotiated contract changes extend for the life of the remaining contract. Additional O&M reductions are associated with the anticipated AMI deployment timeline. In addition, COVID-19 related impacts and reallocations impacted 2020 O&M. As an example, reduced work hours due to suspended field collections and residential manual meter reading activities were charged to Pandemic Non-Productive (enterprise)

accounts resulting in lower Customer Care labor costs in 2020. I discuss the year-to-year O&M impacts and expense drivers in more detail below.

Q. PLEASE EXPLAIN THE PURPOSE AND IMPACT OF THE KEY COST DRIVERS OF CUSTOMER CARE'S 2020 O&M EXPENSES FROM 2019 LEVELS.

A. From 2019 to 2020, we anticipate a decrease of approximately $243,000. Labor costs decrease by approximately $508,000 with a three-percent annual performance-based wage increase in most business areas being offset by pandemic related reductions in hiring, overtime spend, and labor associated with field collections and manual meter reading activities in 2020. In addition, Employee Expenses are reduced by approximately $83,000 as a result of pandemic-related travel and spending reductions. In Outside Services, we anticipate an increase of approximately $445,000 associated with meter growth additions, increased automated customer notification, and bill image and processing costs, partially offset by approximately $95,000 in AMI-related savings.

Q. PLEASE EXPLAIN THE PURPOSE AND IMPACT OF THE KEY COST DRIVERS ON CUSTOMER CARE'S 2021 O&M EXPENSES FROM 2020 LEVELS.

A. From 2020 to 2021, we anticipate an increase of approximately $300,000 in Customer Care O&M expenses. This includes AMI deployment savings of about $691,000, offset by a labor increase of approximately $762,000 due to annual wage increases and labor reductions associated with field collections and manual meter reading activities in 2020. We anticipate an increase for postage costs of $214,000 associated with an anticipated percent increase in postage rates partially offset by customer adoption of electronic billing and payment methods.

Q. PLEASE EXPLAIN THE PURPOSE AND IMPACT OF THE KEY COST DRIVERS OF CUSTOMER CARE'S 2022 O&M EXPENSES FROM 2021 LEVELS.

A. From 2021 to 2022, we anticipate the Customer Care O&M budget will decrease by about $4.4 million. This is primarily driven by anticipated cost reductions in Meter Reading; including a $2.3 million reduction based on the deployment of AMI meters, and a $3.4 million reduction expected due to Cellnet contract renegotiation and lower anticipated bill processing fees contributed to increasing customer use of electronic billing and payment channels. These reductions are partially offset by elimination of Cellnet credits totaling $1.1 million in 2022. Reductions also are expected in postage of approximately $151,000, offset by labor increases of $312,000.

C. O&M Budgets by Business Function

Q. PLEASE SUMMARIZE CUSTOMER CARE O&M EXPENSE BY BUSINESS FUNCTION.

A. Table 3 below provides an overall view of Customer Care O&M expense levels since 2017. Please see Exhibit___(CCC-1), Schedule 2 for additional details regarding Customer Care O&M expense. As I discussed above, overall Customer Care O&M levels have remained relatively flat over a significant period of time. I discuss below some of the variations that have occurred in the various functional areas of Customer Care for the 2017 to 2023 period. I discuss the drivers of Customer Care's 2022 through 2023 plan year expense levels in Section II.B above.

Table 3

Customer Care O&M by Business Area –

NSPM Electric ($ millions)

	Historic Actuals			July 2020 Forecast	2021 Test Year	Plan Years		Percent Change 2017 - 2023
	2017	**2018**	**2019**			**2022**	**2023**	
Billing Services	$7.7	$7.4	$7.1	$7.5	$7.9	$7.7	$7.7	0.0%
Contact Center	$4.3	$4.0	$4.1	$3.9	$3.9	$4.1	$4.1	-5.7%
Credit and Collections	$2.4	$2.3	$2.1	$2.0	$2.2	$2.2	$2.2	-5.3%
Customer Operations	$1.7	$1.6	$1.7	$1.8	$1.7	$1.8	$1.8	7.6%
Meter Reading and Field Collections	$20.7	$21.2	$21.5	$21.0	$20.8	$16.4	$11.4	-44.6%
Total Customer Care O&M	*$36.8*	*$36.4*	*$36.5*	*$36.3*	*$36.6*	*$32.1*	*$27.3*	*-25.7%*

Due to rounding, there may be differences between the sum of the individual category amounts and total amounts.

1. Billing Services

Q. PLEASE DESCRIBE THE CHANGE IN BILLING SERVICES O&M.

A. From 2017 through 2023, the Billing Services O&M budget remains flat. We are able to achieve this reduction through increased customer adoption of electronic billing and payment channels helping to offset postal rate increases; billing work automation; and other process improvements and efficiencies.

2. Customer Contact Center

Q. PLEASE DESCRIBE THE CHANGE IN CUSTOMER CONTACT CENTER O&M.

A. The Customer Contact Center O&M budget decreases by 5.7 percent from 2017 to 2023. This is primarily due to increased customer use of automated interaction channels, including the IVR system, which has helped to lower labor costs through reduced staffing needs. While Contact Center entry-level wage rates have increased, given more competitive labor markets, we have seen agent-handled call volume decline over time. We are focusing on resolving customers' needs efficiently on the first call. We recognize that calls coming into our contact centers are more complex, as simpler transactions are increasingly completed through automated means.

Tables 4 and 5 below illustrate Minnesota customers' increased use of the IVR system, as well as total Minnesota call volume trends. Call volume has generally been declining over time, as customers continue to increase their use of digital interaction channels, including the IVR. There is always some variability from year to year, with weather primarily influencing the volume of both power outage and billing-related calls.

Table 4

Minnesota Customer IVR Utilization Rate – State of Minnesota

	2015	**2016**	**2017**	**2018**	**2019**	**2020 (Jan-Jul)**
Percent of Calls Handled in the IVR	58%	58%	58%	61%	60%	64%

Table 5

Customer Call Volume – State of Minnesota

	2015	2016	2017	2018	2019	2020 Jan-Jul
Total Offered Calls (Agent and IVR)	3,940,849	3,970,416	3,439,419	3,372,034	3,262,732	1,655,057
Average Monthly Call Volume	328,404	330,868	286,618	281,003	271,894	236,437

3. Credit and Collections

Q. PLEASE DISCUSS CREDIT AND COLLECTIONS O&M.

A. The Credit and Collections O&M budget decreases by 5.3 percent from 2017 to 2023. This decline is primarily due to increased use of more cost-effective and efficient customer outreach methods, such as email and calls, for proactive outbound credit campaigns to the Company's past-due customers. These campaigns integrate with our IVR system to facilitate more automated customer payments. IVR functionality has also been expanded to enable disconnected customers to set up reconnection of their service through the IVR and to establish payment arrangements. Analytics have also helped to further target cost-effective customer outreach efforts.

4. Customer Operations

Q. PLEASE DISCUSS THE CUSTOMER OPERATIONS O&M.

A. The Customer Operations O&M budget is projected to increase by 7.6 percent from 2017 to 2023, which is a $128,000 increase over five years. The main cost drivers are performance-based wage increases ($98,000) and increased automated customer notifications ($25,000), which are used to keep customers informed of outage status and provide billing and payment reminders.

5. Meter Reading and Field Collections

Q. WHAT IS THE COMPANY'S CURRENT METER READING PROCESS?

A. The Company currently uses Automated Meter Reading (AMR) technology, which it implemented beginning in the mid-1990s. Meter readings are collected and provided to the Company via a proprietary network by Cellnet, our current meter reading services vendor. Informational meter readings are generally provided daily and billing quality readings are provided once per billing cycle, with the billing quality readings used to generate the monthly customer bill. In addition to providing the meter readings, Cellnet owns and maintains the communication network and software used to transmit the readings. Cellnet also owns and maintains electric meter communication modules, which refers to the radio interface that is installed as part of the electric meter. The Company's payments to Cellnet for these services are reflected as O&M expense in our budgets.

Q. PLEASE DISCUSS THE METER READING AND FIELD COLLECTIONS O&M.

A. The Meter Reading and Field Collections O&M budget is projected to decline by 44 percent from 2017 to 2023. Through recent negotiations with Cellnet, the Company successfully removed an annual cost escalation factor tied to economic indicators. This is reflected in relatively flat O&M budgets starting in 2019 and 2020. The elimination of this cost escalation factor will continue through the remaining life of the contract. This will be a significant benefit in managing meter reading O&M cost during the next several years. Contract negotiations also resulted in lower meter reading services fees starting in 2022 that continue for the life of the remaining contract. Additional budget reductions in this business area in 2022 are dependent upon deployment of AMI meters.

III. COMMODITY BAD DEBT EXPENSE

A. Introduction

Q. WHAT IS COMMODITY BAD DEBT EXPENSE?

A. Commodity bad debt expense is billed commodity revenue for electric and natural gas service that is considered uncollectible from customers. Commodity revenue refers to the revenue billed to the Company's customers for the cost of utility service, including fuel charges and all regulated charges to customers, such as riders. This definition represents virtually all of the Company's billed retail customer revenue. It does not include comparatively minor ancillary charges such as damage claims, which are considered "non-commodity" revenue, discussed in Section IV of my testimony.

Q. PLEASE SUMMARIZE THE COMPANY'S PROPOSED TEST YEAR COMMODITY BAD DEBT EXPENSE.

A. For the 2021 test year, we propose a 0.54 percent of revenue ratio. On a State of Minnesota Electric Jurisdiction level, this represents commodity bad debt expense of $17.6 million. I discuss the bad debt expense budget and forecast process in Part B; the methodology we use to determine our bad debt ratios and proposed bad debt expense levels and trending in Part C; and the allocation methodology for commodity bad debt expense between electric and gas operations in Part D.

Q. HOW DO THE 2021-2023 PROPOSED BAD DEBT EXPENSE LEVELS COMPARE TO PREVIOUS LEVELS?

A. The 2021 through 2023 bad debt expense levels are forecast to be elevated over past performance. These increases can be attributed to the COVID-19

pandemic and associated economic impacts, including record unemployment levels. The company has recent experience in managing through such difficulties and did achieve significant and steady declines from the Great Recession of 2008, when the Company's bad debt expense ratio was at 0.65 percent. We expect to perform similarly in recovery from the current situation.

B. Bad Debt Expense Budget and Forecast Process

Q. HOW DOES THE COMPANY BUDGET AND FORECAST COMMODITY BAD DEBT EXPENSE?

A. In general, we recognize commodity bad debt expense through a combination of: (1) estimating an amount of accounts receivable reserve (or provision) associated with outstanding receivables that will be unrecoverable; and, (2) writing-off uncollectible accounts not previously reflected in this reserve. From the combination of these amounts, we derive a weighted average ratio of bad debt to overall billed commodity revenue. To determine forecasted bad debt expense, as is necessary for budgeting purposes and for a rate case, the Company applies this bad debt ratio to forecasted commodity revenues and allocates it between its electric and natural gas operations.

Q. WHY IS IT REASONABLE TO ESTIMATE BAD DEBT EXPENSE BASED UPON A RATIO OF BAD DEBT EXPENSE TO COMMODITY REVENUE?

A. Using a ratio of billed commodity revenue is reasonable because there is a direct relationship between billed commodity revenue and bad debt expense. In particular, as billed commodity revenue increases and decreases, bad debt proportionately increases and decreases. This practice is commonly used by industry groups, as verified by the Edison Electric Institute (EEI), and this trend is also supported by historical data.

Q. WHAT FACTORS IMPACT COMMODITY BAD DEBT EXPENSE?

A. All else being equal, commodity bad debt expense varies directly with billed commodity revenues. Other factors affecting bad debt expense include changes in credit policy, external considerations such as the economy, low income energy assistance programs, levels of business bankruptcies, as well as the efficiency of the Company's supporting processes and operations.

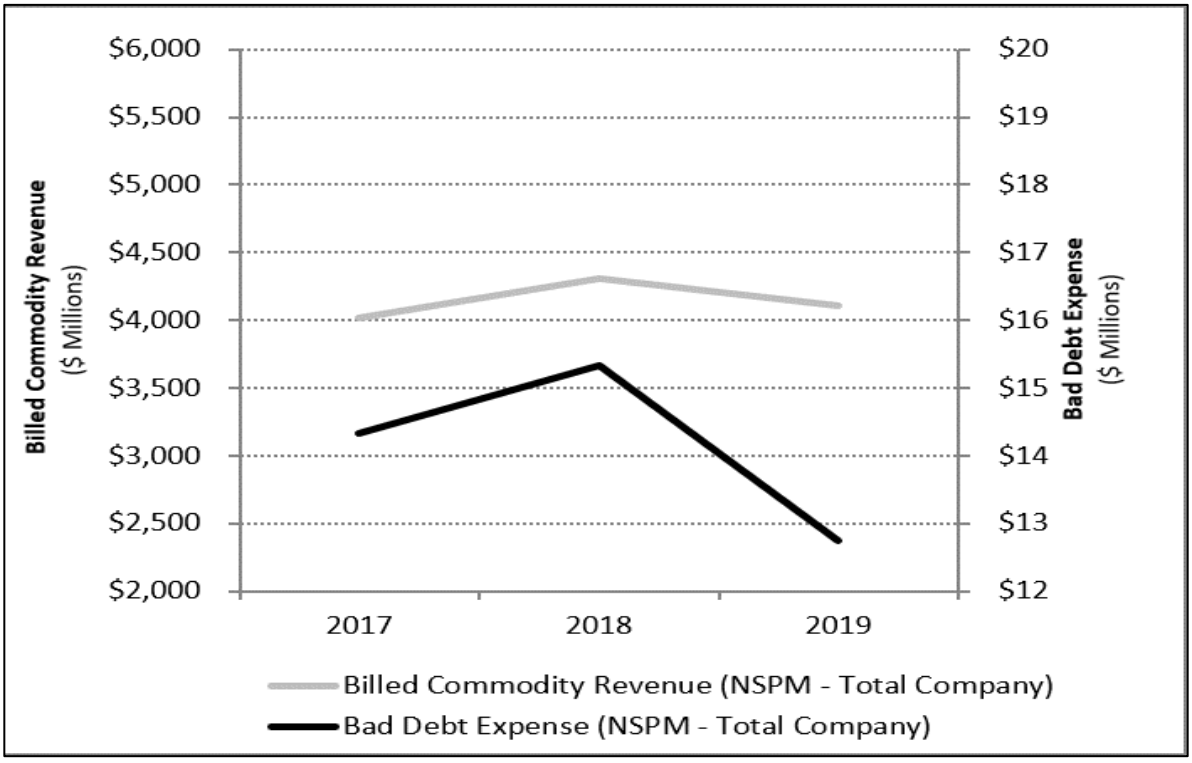
Q. CAN YOU ILLUSTRATE THE CORRELATION BETWEEN BILLED COMMODITY REVENUES AND THE RESERVE FOR BAD DEBT?

A. Yes. Figure 3 below illustrates the historical correlation between billed commodity revenues and the change in bad debt reserve. It is notable that while the correlation is evident within the 2019 data, the result for this year is skewed due to one-time refunds posted to customer accounts in 2019 associated with the Tax Cut and Jobs Act (TCJA).

Figure 3

Billed Commodity Revenues and

Bad Debt Expense NSPM Total Company



Q. DOES THE FUEL FORECAST IMPACT COMMODITY BAD DEBT EXPENSE?

A. Yes. The revenue forecast is a primary input to the bad debt expense forecast, and the fuel cost forecast is used in developing the revenue forecast. Therefore, the relationship of fuel cost increases and decreases are directly correlated to changes in revenues, and ultimately bad debt expense budgets and forecasts. Once the revenue forecast is complete, the bad debt expense model uses that forecast as an input so that the bad debt expense forecast directly reflects forecasted changes in revenue.

Q. HOW DO YOU CALCULATE THE ACCOUNTS RECEIVABLE RESERVE PORTION OF BAD DEBT EXPENSE?

A. We calculate the reserve by applying provisioning factors to various aging categories of outstanding arrears for both active and inactive customers. A provisioning factor is the percentage of the accounts receivable estimated to eventually prove uncollectible. In general, as arrears age, and as they move with our customers from active to inactive status, we apply a higher provisioning factor to reflect the declining likelihood that we will collect the full outstanding balance. These reserve amounts are updated monthly and are combined with net write-offs to become the total bad debt expense for the period.

Q. HOW DOES THE COMPANY KNOW THAT ITS PROVISIONING FACTORS ARE REASONABLE?

A. The provisioning factors we apply to outstanding arrears are developed from annual reserve studies in which we analyze historical customer payment behavior data and consider contributing factors such as the sales forecast and underlying fuel forecast, any changes in credit policy, and external considerations such as the economy. Our most recent reserve study was completed in June 2020.

Q. IS THE IMPACT OF LOW-INCOME PROGRAMS REFLECTED IN THE COMPANY'S 2021 THROUGH 2022 PLAN YEAR BAD DEBT EXPENSE?

A. Generally, yes. Low-income programs (*i.e.* Low-Income Home Energy Assistance Program (LIHEAP), our Electric Low-Income Discount Rider, and/or our Gas Affordability Program) help low-income customers pay amounts due for energy services, thereby reducing outstanding receivables. To the extent the remaining balance of these customer accounts are later written

off per current Company policy (Exhibit___(CCC-1), Schedule 4, Northern States Power Write-Off Policy, low-income payment programs help reduce the amount of the write-off, and thus bad debt expense. We work closely with our customers and agencies to try to maximize customers' participation in energy assistance funding and programs. While we believe state funding appears relatively consistent for the plan years, federal funding is reviewed annually and subject to change. Table 6 below, shows historical customer participation in LIHEAP and other energy assistance programs from 2017 through 2019.

Table 6
LIHEAP and Energy Assistance Program
Historical Participation
($ millions)

Year	NSPM LIHEAP House-holds	NSPM Program Participants	NSPM Discount and PowerON Disbursements	NSPM Medical Program Disbursements	Total Energy Assistance (LIHEAP, County Assistance, Fuel Funds, other)	Total*
2017	55,377	52,834	$11.50	N/A	$25.30	$36.90
2018	55,223	53,843	$10.30	$1.30	$30.10	$40.50
2019	50,255	46,839	$14.50	$3.09	$25.20	$42.80

Note: The LIHEAP households, Company program participation and Total Energy Assistance columns are following the program year of October 1 to September 30. Discount and PowerON Disbursements are January to December. The first year of disbursements for the MN Xcel Energy Medical Program was 2018.
** Totals may not match sum of components due to rounding.*

Q. WHAT DOES THE COMPANY DO TO MANAGE BAD DEBT EXPENSE, PARTICULARLY WHEN REVENUES ARE INCREASING?

A. We continue to use a combination of approaches to manage bad debt expense, including:

- Proactively contacting delinquent residential customers through targeted contacts, including emails and outbound calls;
- Close monitoring of commercial accounts and industry trends, and work to keep these customers as current as possible to minimize potential bankruptcy impacts;
- Focused management of collection agency practices to help improve collections from customers whose debt had previously been written off;
- Developing advanced analytical methods to ensure the most efficient and effective credit activities are utilized; and
- Strong support of energy assistance programs that help the Company's most at-risk customers.

We continually monitor our level of bad debt expense and the factors that influence it and take action to respond through process or other changes. I discuss specific activities that Customer Care has implemented in an effort to manage bad debt expense in conjunction with my discussion of our bad debt expense trend in Part C below.

C. Test Year Bad Debt Calculation

1. Bad Debt Ratios and Trend

Q. HOW WAS THE 2021 BAD DEBT RATIO CALCULATED?

A. As I have discussed, the ongoing COVID-19 pandemic has disrupted the economy in 2020, impacting our customers and, for some, creating challenges

in paying their bills. While there are certainly unprecedented aspects of current events in relation to the pandemic, the Company does have a relevant benchmark on which to forecast recovery from global economic disruption in the Great Recession of 2008. As a result of that economic downturn, the Company saw a significant rise in bad debt expense in 2009, even as the economy began to recover. The Company anticipates a similar pattern due to the current economic disruption. Thus, the 2021 bad debt ratio was calculated by utilizing the same bad debt percentage of revenue as experienced in 2009.

Q. HOW DID YOU DERIVE THE 2022 THROUGH 2023 BAD DEBT RATIOS?

A. Continuing the methodology of using the Company's experience recovering from the Great Recession, the bad debt ratio for 2022 was calculated by utilizing the same bad debt as percentage of revenue as 2011 which is 0.41 percent. The bad debt ratio for 2023 was calculated based on an average of 24 months actual bad debt expense as a percentage of revenue from July 2017 to June 2019 which is 0.35 percent. Recovery from the current economic recession is expected to occur at a faster pace than experienced after the 2008 Great Recession. Significant portions of the current situation can be attributed to government-imposed business restrictions and closures related to health safety protocols. These are expected to be reduced or removed entirely as the impacts of the virus are mitigated through use of an anticipated vaccine.

Q. IS THE COMMODITY BAD DEBT RATIOS THE COMPANY PROPOSES FOR THE 2021 TEST YEAR AND 2021 THROUGH 2023 REASONABLE?

A. Yes. As shown in Table 7 below, our bad debt ratio remained relatively stable 2017-2019. Also, the ratios we propose for 2021 - 2023 closely align with our actual bad debt expense ratios experienced in the recovery after the 2008 Great

Recession. Our commodity bad debt ratio for 2019 was lower due to one-time refunds posted to customer accounts in 2019 associated with the Tax Cut and Jobs Act (TCJA). Minnesota electric customers received TCJA refunds totaling $198 million in 2019. These one-time refunds will not occur in future years. Commodity bad debt ratios for NSPM are forecasted based on the total company, including electric and natural gas commodities.

Table 7

Commodity Bad Debt Ratio – NSPM Total Company

Actuals			July Forecast	Test Year	Plan Years	
2017	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
0.36%	0.36%	0.31%	0.64%	0.54%	0.41%	0.35%

Note: The 2019 forecast is lower because it includes the impact of one-time TCJA customer refunds.

2. Bad Debt Expense and Trend

Q. WHAT IS THE PROPOSED 2021 COMMODITY BAD DEBT EXPENSE?

A. We propose a commodity bad debt expense of $22.9 million for NSPM Total Company, which translates to a 2021 test year commodity bad debt expense of $17.6 million for the State of Minnesota Electric Jurisdiction. We provide detailed calculations supporting the 2021 test year commodity bad debt expense as Exhibit___(CCC-1), Schedule 5.

Q. WHAT IS THE PROPOSED 2022 THROUGH 2023 COMMODITY BAD DEBT EXPENSE?

A. We propose a 2022 commodity bad debt expense of $18.3 million for NSPM Total Company, which translates to a 2022 plan year commodity bad debt expense of $14.1 million for the State of Minnesota Electric Jurisdiction. For 2023, we propose NSPM Total Company commodity bad debt expense of $15.7 million, which translates to a 2023 plan year commodity bad debt expense of $12.1 million for the State of Minnesota Electric Jurisdiction. We provide detailed calculations supporting the 2022 through 2023 plan years commodity bad debt expense as Schedule 5.

Q. HOW WAS THE PER-YEAR BAD DEBT EXPENSE CALCULATED?

A. We calculate the commodity bad debt expense level by applying the bad debt ratio for each year to each year's total Company forecasted commodity revenues. We then allocate the proposed bad debt expense to the State of Minnesota Electric Jurisdiction through an allocation process that I discuss in Section III.D of my testimony.

Q. HOW DO 2021 THROUGH 2023 BAD DEBT EXPENSE LEVELS COMPARE TO HISTORICAL BAD DEBT EXPENSE LEVELS?

A. Table 8 below presents the trend of the Company's commodity bad debt expense since 2017. Commodity bad debt expense is expected to be elevated in 2021 through 2023 due to increasing revenue and expected economic impacts of the global COVID-19 pandemic. Bad debt as a percent of revenue is expected to peak at 0.64 percent in 2020 then reduce to 2017-2019 levels in 2023. This is consistent with performance experienced in 2017 through 2019 and the company's recovery following the 2008 Great Recession. As stated

earlier in my testimony, bad debt as a percent of revenue came in at 0.31 percent for 2019, which is lower than historical trending and future forecasts due to the one-time impact of TCJA customer refunds applied within the year.

Table 8
Commodity Bad Debt Expense Trend –
State of Minnesota Electric
($ millions)

Actuals			July Forecast	Test Year	Plan Years	
2017	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
$10.69	$11.50	$9.79	$19.28	$17.64	$14.08	$12.07

Q. PLEASE DISCUSS THE TREND IN THE COMPANY'S COMMODITY BAD DEBT EXPENSE.

A. Table 8 above shows the Company's bad debt expense has generally increased since 2017. The primary reason is the increase of approximately $487 million in NSPM Total Company billed commodity revenue from 2017 (approximately $4.0 billion) to 2023 (approximately $4.5 billion) as reflected in Exhibit___(CCC-1), Schedule 6. This increase in revenue has been compounded by the increase in bad debt as a percent of revenue attributed to the economic impacts of the ongoing global pandemic as discussed throughout my testimony.

Q. HOW DOES THE COMPANY'S TOTAL BAD DEBT EXPENSE COMPARE TO OTHER UTILITIES?

A. The Company's bad debt expense compares favorably to other utilities as reflected in FERC account 904 expenses.[6] For the 2015-2019 period, which is the most current information available, the combination of the Company's total commodity and non-commodity bad debt expense has consistently been below the mean expense level of other utilities. We provide a summary of this expense level comparison in Table 9 below.

Table 9
Customer Records and Uncollectible Expense per Retail Customer Comparison

	2015	2016	2017	2018	2019
NSPM Total Company	$8.33	$8.61	$8.87	$9.28	$7.83
Competitor Group (mean)	$12.90	$12.70	$10.11	$11.74	$11.14

Source: S&P Global Intelligence Platform

D. Allocation Methodology

Q. HOW DOES THE COMPANY ALLOCATE COMMODITY BAD DEBT EXPENSE BETWEEN ELECTRIC AND NATURAL GAS OPERATIONS?

A. We allocate bad debt expense to our natural gas and electric operations consistent with the process by which debt is written off. Total bad debt expense is assigned at a total Operating Company level, because customer payments and write-offs are recorded to the customer's overall account – not separately for electric and gas service. Therefore, because we have combined electric and gas

[6] FERC account 904 is "charged with amounts sufficient to provide for losses from uncollectible utility revenues."

customers who pay for utility service on an integrated basis, the bad debt expense is also integrated at a customer account level.

To differentiate bad debt expense between gas and electric service, we use an allocation to reasonably approximate the proportions of electric and gas utilities' bad debt expense. After applying the bad debt ratio to total NSPM commodity revenue, the resulting amount is allocated to the Minnesota jurisdiction and between the electric and gas utilities by using a rolling four-year total of revenues to utility and jurisdiction. The allocator in the 2021 test year is developed based on the four previous calendar years' actual operating revenues from the corporate income statement, which we update every April.

Using this methodology, the amount of bad debt expense allocated to the State of Minnesota Electric Jurisdiction utility operations for 2021 in this case is 76.9 percent of the total bad debt expense for the Company. Essentially, this reflects the fact that Minnesota electric commodity revenues equaled 76.9 percent of NSPM commodity revenues during the January 2016 through December 2019 period.

Q. DID YOU USE THE SAME ALLOCATION PERCENTAGE FOR THE 2022 THROUGH 2023 PLAN YEARS?

A. Yes. The 2022 through 2023 plan years use the same allocation percentage as the 2021 test year.

Q. HAS THE COMPANY USED THIS ALLOCATION METHODOLOGY IN ITS PREVIOUS RATE CASES?

A. Yes. This is the same methodology used in all recent rate cases, including the 2019 rate case (Docket No. E002/GR-19-564), and the Company's most recent natural gas rate case (Docket No. G002/GR-09-1153).

IV. NON-COMMODITY BAD DEBT EXPENSE

Q. WHAT IS NON-COMMODITY BAD DEBT EXPENSE?

A. Non-commodity bad debt expense is billed revenue that is considered uncollectible for everything other than electric and natural gas service. The non-commodity bad debt budget categories align with functional business areas and include the following:

- *Customer Care*: Miscellaneous charges such as returned check and connection-related fees;
- *Distribution Operations*: Contributions In Aid Of Construction; charges for requests made by customers for non-standard equipment or set-up; claims against third parties that damage the Company's electric and gas facilities.

Q. WHAT IS THE 2021 TEST YEAR AMOUNT FOR NON-COMMODITY BAD DEBT?

A. The 2021 test year non-commodity bad debt expense for the State of Minnesota Electric Jurisdiction is $80,000. Detailed calculations supporting the test year non-commodity bad debt expense are provided in Schedule 6.

Q. WHAT ARE THE 2022 THROUGH 2023 PLAN YEAR AMOUNTS FOR NON-COMMODITY BAD DEBT EXPENSE?

A. The 2022 through 2023 plan year non-commodity bad debt for the State of Minnesota Electric Jurisdiction is $60,000 and 80,000 each year, respectively. I provide the details as Schedule 6 to my testimony.

Q. HOW DO THESE AMOUNTS COMPARE TO PAST YEARS?

A. Table 10 below provides actual non-commodity bad debt expense amounts for the 2017-2019 period, the 2020 forecast, the 2021 test year, and the 2022 through 2023 plan year amounts.

Table 10
Non-Commodity Bad Debt Expense Trend
State of Minnesota Electric Jurisdiction
($ millions)

Actuals			July Forecast	Test Year Proposed	Plan Years Proposed	
2017	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
$0.76	$0.51	$0.60	$0.35	$0.08	$0.06	$0.08

Q. WHAT ARE THE AMOUNTS FOR THE INDIVIDUAL BUSINESS AREAS?

A. I provide the details as Schedule 6 to my testimony and summarize the amounts in Table 11 below.

Table 11

Non-Commodity Bad Debt Expense by Business Area

State of Minnesota Electric Jurisdiction

($ millions)

	Actual Expense			July Forecast	Test Year	Plan Years	
	2017	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
Customer Care	$0.08	$0.08	$0.07	$0.08	$0.08	$0.06	$0.08
Distribution Operations	$0.68	$0.44	$0.21	$0.27	$0.00	$0.00	$0.00
Corporate Other	*$0.00*	*$0.00*	*$0.32*	*$0.00*	*$0.00*	*$0.00*	*$0.00*
Total	*$0.76*	*$0.51*	*$0.60*	*$0.35*	*$0.08*	*$0.06*	*$0.08*

Q. HOW DID THE COMPANY DEVELOP THE 2021 THROUGH 2023 NON-COMMODITY BAD DEBT EXPENSE LEVELS?

A. Each of the functions identified above assesses its current reserve in light of expected test year activities, such as expected billing amounts and Company credit policies, and then budgets accordingly.

V. CONCLUSION

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. The Customer Care organization continues to achieve strong customer satisfaction results and effectively manage its O&M expense levels. It continues to perform favorably to other electric utilities in managing bad debt expense and the cost to perform overall Customer Care functions. Therefore, the Customer Care organization's overall O&M expenses, including commodity and non-commodity bad debt expense, are reasonable and should be approved.

Finally, Customer Care has continued to perform essential business functions and support customers while managing through the unique and unprecedented impacts of a global pandemic.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

Résumé

Christopher C. Cardenas
Vice President, Customer Care
Xcel Energy
1800 Larimer Street, Suite 1500, Denver, Colorado

Current Responsibilities (2019 - Present)

Provides leadership and direction for the Company's customer care functions, including meter reading, field collection, billing, credit and collection, customer contact centers, and related business support functions.

Previous Positions

PPL Electric Utilities
2014 - 2018 Vice President, Customer Services

Time Warner Cable
2012 – 2014 Vice President, Customer Service Operations

Comcast Cable
2011 – 2012 Director, Customer Service

U.S. Cellular
2007 – 2010 Director, Customer Service Operations

Sprint
2001 – 2007 Senior Manager, Business Customer Support

Education

Bachelor's Degree, Business Administration in Finance, Texas Lutheran University; Master's Degree, Business Administration (Finance emphasis), Webster University

Business / Industry Activities

Chair, Customer Service Committee for Association of Edison Illuminating Companies (AEIC); Advisory Board, J.D. Power (Electric Utility Industry); Advisory Board, CS Week; Advisory Board, Utility Analytics Institute

Customer Care O&M Expense Levels
($s)

Total NSP Electric	Historic Actuals				
Cost Element	2017 Actuals	2018 Actual	2019 Actual	2020 July Forecast	2021 Test Year
Labor	11,826,822	11,215,202	11,326,632	10,818,984	11,580,911
AMI Saving				(94,650)	(785,622)
Contract Labor	65,191	39,784	92,926	54,390	53,590
Outside Services	20,884,143	21,298,276	21,307,997	21,753,484	21,899,719
Employee Expenses	367,719	331,113	346,784	264,140	386,287
O&M Credits	(1,058,737)	(978,953)	(962,198)	(1,130,134)	(1,131,846)
Postage	4,072,063	3,872,032	3,723,036	4,000,524	4,214,482
Net Other*	603,899	627,601	674,044	599,680	348,882
Grand Total	36,761,100	36,405,055	36,509,220	36,266,418	36,566,403

* All other accounts with less than $250,000 annually average for the years listed above

Total MN Electric Jurisdiction	Historic Actuals				
Cost Element	2017 Actuals	2018 Actual	2019 Actual	2020 July Forecast	2021 Test Year
Labor	10,144,577	9,587,334	9,678,577	9,303,253	9,919,795
AMI Saving				(94,650)	(785,622)
Contract Labor	27,705	7,230	32,037	13,136	12,499
Outside Services	19,120,689	19,353,926	19,366,871	19,747,871	19,900,535
Employee Expenses	318,345	282,714	295,977	226,599	330,609
O&M Credits	(1,058,737)	(978,953)	(962,198)	(1,130,134)	(1,131,846)
Postage	3,551,779	3,377,470	3,249,597	3,491,709	3,677,760
Net Other*	519,783	528,286	595,449	521,652	292,520
Grand Total	32,624,141	32,158,008	32,256,309	32,079,437	32,216,250

Customer Care O&M Expense Levels
($s)

		Total NSP Electric							Total MN Electric Jurisdiction						
Sum of YE Amt		Historic Actuals							Historic Actuals						
Director	Cost Element	2017 Actuals	2018 Actual	2019 Actual	2020 July Forecast	2021 Test Year	2022 Plan Year	2023 Plan Year	2017 Actuals	2018 Actual	2019 Actual	2020 July Forecast	2021 Test Year	2022 Plan Year	2023 Plan Year
Billing Services	Labor	2,049,009	1,999,450	1,892,165	1,921,052	2,019,992	2,026,099	1,985,882	1,787,377	1,744,146	1,651,582	1,676,796	1,763,156	1,768,487	1,733,383
	Contract Labor	7,697	8,288	35,838	12,897	12,096	12,096	12,096	6,714	7,230	31,282	11,257	10,558	10,558	10,558
	Outside Services	1,520,703	1,427,939	1,414,866	1,555,813	1,589,190	1,501,859	1,595,597	1,326,529	1,245,610	1,234,970	1,357,996	1,387,130	1,310,902	1,392,722
	Employee Expenses	25,909	21,479	25,895	16,187	19,082	19,082	19,082	22,601	18,736	22,603	14,129	16,656	16,656	16,656
	Postage	4,061,999	3,863,721	3,716,571	3,994,535	4,207,259	4,056,372	4,056,366	3,543,334	3,370,374	3,244,021	3,486,642	3,672,318	3,540,617	3,540,611
	Net Other*	62,313	34,846	56,273	46,814	70,087	65,005	54,840	54,357	30,397	49,118	40,861	61,176	56,740	47,867
Billing Services Total		7,727,630	7,355,724	7,141,609	7,547,298	7,917,706	7,680,513	7,723,862	6,740,912	6,416,493	6,233,575	6,587,682	6,910,993	6,703,959	6,741,796
Contact Center	Labor	4,187,099	3,868,993	4,031,697	3,765,651	3,765,743	3,929,159	3,939,815	3,652,461	3,374,973	3,519,078	3,286,859	3,286,940	3,429,578	3,438,880
	Outside Services	27,761	32,885	25,848	81,440	27,730	27,730	27,730	24,216	28,686	22,562	71,085	24,204	24,204	24,204
	Employee Expenses	55,220	55,698	75,241	35,875	49,900	49,900	49,900	48,169	48,586	65,675	31,314	43,555	43,555	43,555
	Postage	3,216	3,654	3,249	3,377	3,831	3,831	3,831	2,806	3,187	2,836	2,948	3,344	3,344	3,344
	Net Other*	42,003	16,914	(8,062)	28,228	46,314	40,314	46,473	36,640	14,754	(7,037)	24,639	40,426	35,188	40,564
Contact Center Total		4,315,300	3,978,144	4,127,974	3,914,571	3,893,518	4,050,934	4,067,748	3,764,292	3,470,186	3,603,114	3,416,845	3,398,469	3,535,870	3,550,546
Credit & Collections	Labor	1,606,373	1,518,807	1,515,612	1,519,028	1,559,473	1,584,018	1,607,936	1,401,260	1,324,875	1,322,907	1,325,888	1,361,191	1,382,615	1,403,491
	Contract Labor			866	975						755	851			
	Outside Services	655,494	664,291	469,333	431,093	565,347	565,347	565,347	571,796	579,470	409,659	376,281	493,465	493,465	493,465
	Employee Expenses	43,930	47,678	52,079	32,801	42,730	42,730	42,730	38,320	41,590	45,457	28,630	37,297	37,297	37,297
	Postage	4,866	2,504	1,392	1,421	1,333	1,332	1,332	4,244	2,185	1,215	1,240	1,163	1,163	1,163
	Net Other*	62,569	38,738	44,869	34,378	29,692	28,367	29,692	54,580	33,791	39,164	30,007	25,917	24,760	25,917
Credit & Collections Total		2,373,232	2,272,018	2,084,151	2,019,696	2,198,575	2,221,794	2,247,037	2,070,201	1,981,911	1,819,157	1,762,897	1,919,033	1,939,300	1,961,333
Meter Reading	Labor	2,532,964	2,443,654	2,519,819	2,204,449	2,775,177	2,848,769	2,934,226	2,037,424	1,935,799	1,991,524	1,784,030	2,233,683	2,293,063	2,361,921
	AMI Saving				(94,650)	(785,622)	(3,096,719)	(8,230,719)				(94,650)	(785,622)	(3,096,719)	(8,230,719)
	Contract Labor	57,396	31,495	56,222	40,253	41,096	41,096	41,096	20,906	-	-	797	1,593	1,593	1,593
	Outside Services	18,567,081	19,035,730	19,249,723	19,422,172	19,580,830	16,228,157	16,383,236	17,099,485	17,380,278	17,570,300	17,712,978	17,876,485	13,789,709	13,921,486
	Employee Expenses	207,700	171,328	147,570	145,212	224,160	196,497	168,427	178,759	143,331	122,093	122,793	189,096	164,950	140,449
	O&M Credits	(1,058,737)	(978,953)	(962,198)	(1,130,134)	(1,131,846)			(1,058,737)	(978,953)	(962,198)	(1,130,134)	(1,131,846)		
	Postage	1,827	2,081	1,391	964	1,705	1,705	1,705	1,259	1,662	1,148	680	625	625	625
	Net Other*	342,907	467,245	478,440	417,092	119,833	144,409	144,409	292,116	388,405	424,715	362,280	92,594	115,187	115,187
Meter Reading Total		20,651,138	21,172,580	21,490,966	21,005,356	20,825,332	16,363,915	11,442,380	18,571,212	18,870,522	19,147,581	18,758,773	18,476,608	13,268,410	8,310,543
VP & Customer Care Operations	Labor	1,451,376	1,384,298	1,367,339	1,408,805	1,460,525	1,505,120	1,549,776	1,266,055	1,207,541	1,193,486	1,229,679	1,274,824	1,313,748	1,352,727
	Contract Labor	98	-		265	398	398	398	85	-		231	348	348	348
	Outside Services	113,105	137,431	148,226	262,967	136,623	137,454	138,299	98,663	119,883	129,380	229,532	119,251	119,977	120,714
	Employee Expenses	34,959	34,930	45,999	34,066	50,416	50,416	50,416	30,495	30,470	40,150	29,734	44,006	44,006	44,006
	Postage	156	72	432	227	355	355	355	136	63	377	198	309	309	309
	Net Other*	94,106	69,859	102,524	73,168	82,956	82,956	82,956	82,090	60,939	89,489	63,865	72,408	72,408	72,408
VP & Customer Care Operations Total		1,693,800	1,626,590	1,664,520	1,779,497	1,731,273	1,776,699	1,822,200	1,477,524	1,418,896	1,452,881	1,553,240	1,511,147	1,550,797	1,590,512
Grand Total		36,761,100	36,405,055	36,509,220	36,266,418	36,566,403	32,093,855	27,303,227	32,624,141	32,158,008	32,256,309	32,079,437	32,216,250	26,998,335	22,154,731

* All accounts included in the "Net Other" category from Page 1

Measuring the Voice of our Customers with J.D. Power Satisfaction

Xcel Energy participates in the J.D. Power residential study to capture the voice of our customers across a broad spectrum of satisfaction categories.

J.D. Power is an independent global research firm that provides services to several industries, including the energy industry. As it pertains to the energy industry, J.D. Power performs ongoing benchmarking studies that assess how utilities have performed compared to one another in several customer service-related categories.

The Company does not retain J.D. Power to perform its surveys; rather, J.D. Power performs the surveys and makes the results available annually via subscription. The Company subscribes to the J.D. Power survey because the Company finds value in understanding the issues that are important to customers nationally and regionally, as well as how its customers rate its service performance compared to other utilities.

The J.D. Power study uses a ratings scale of 1 to 10, where 10 represents very satisfied and 1 represents very dissatisfied. J.D. Power uses an index to combine customer scores to create a single overall satisfaction score, which is on a 1,000 point scale.

J.D. Power has identified through ongoing analysis the top drivers of customer satisfaction. Utilities use this information to understand and prioritize activities to improve satisfaction. J.D. Power results are shared with business areas so they have timely information from which to make any necessary changes to better serve customers.

The table below summarizes our performance over the past six and a half years in these areas. It also includes some examples of what J.D. Power collects regarding each of these categories.

J.D. Power Utility Residential Study Results: Xcel Energy Midwest Index score on 1,000 point scale as calculated by J.D. Power

Factor	2014	2015	2016	2017	2018	2019	2020 Q2 YTD
Price (i.e., total monthly cost, fairness, options, easy to understand, help in managing usage)	574	596	625	663	664	691	715
Power Quality & Reliability (i.e., quality power, avoiding outages, reliable during extreme weather, prompt restoration, outage communications)	717	718	743	781	780	802	814
Billing & Payment (i.e., reasonableness of billing cycle, clarity of bill, ease, variety of methods to pay)	726	728	749	781	779	798	813
Corporate Citizenship (i.e., community involvement, environmental stewardship, energy efficiency focused, develops future energy plans)	604	622	636	653	674	697	731
Communications (i.e., variety of communications used, safety, communicating changes, messages that get attention)	605	629	647	668	681	709	735
Customer Care (i.e., phone ease of use, rep clarity, promptness, courteousness, knowledge, concern, clarity, timeliness, online appearance, clarity, ease, timeliness, helpfulness, in-person promptness, courtesy, knowledge, concern, clarity, timeliness)	728	737	762	788	792	827	830

JD Power reports satisfaction performance based on region by utility. Therefore, NSP-Minnesota and NSP-Wisconsin are combined into "Xcel Energy Midwest" by JD Power. To be consistent with all data in this section, we are reporting Xcel Energy Midwest performance.

As mentioned, the J.D. Power study measures customer satisfaction with utilities nationally, which includes over 143 utilities as of 2020. The table below provides a six and a half year history over our overall satisfaction index score and how that compares to the average score in our region as well as our quartile performance in the Midwest.

J.D. Power Utility Residential Customer Satisfaction Study
Regional Benchmarks

J.D. Power Study	Indicators	2014	2015	2016	2017	2018	2019	2020 YTD
Residential Electricity Customers	Xcel Energy Midwest Large Segment Quartile Achievement	2	2	1	1	2	1	1
	Xcel Energy Midwest Customer Satisfaction Index Score	658	670	692	723	727	751	770
	Midwest Large Segment - Average Index Score	644	661	678	717	726	732	756

Northern States Power Write-Off Policy

Once an account is finaled and has aged **139** working days past the final bill due date, the following events take place:

- Debtors with a balance of $1,000 or less go directly to write-off in Daily Processing in the Customer Resource System (CRS).

- Accounts with a balance of over $1,000 need to be worked manually.
  - A '*Pending Write-offs'* report is created for all debtors that are ready to be written off but have not been written off by CRS. This report is reviewed by Revenue Assurance to search for an active account for the same debtor to transfer the past due amount to, and/or to collect money if possible. If they are unable to find a current account for the same debtor, the past due amount is manually written-off. (Refer to *Write-off Requests, Manual Approval Procedures* for process steps.)

- For debt meeting the criteria above for manual processing (**139** working days past the final bill due date over $1,000) items will be processed for up to 30 days from the Pending Write-Off report with one of the following actions taking place by day 30 of the item being in the queue:

  1) Transfer balance to new using account
  2) Collection of debt
  3) Write off

- Enforcement of the 30-day processing will be managed with a report to identify and track all accounts aged later than the **139** date and ensure any uncollectible account is written off by the cutoff date, unless there is evidence of collectibility to the contrary (collections incoming or a legitimate promise to pay in place). Changes will be minimized as much as possible, and any changes will require the approval of the Vice President of Customer Care.

Northern States Power Company
Schedule 05_ Bad Debt Expense

Commodity Bad Debt Expense

Actual Bad Debt Gross Write-offs	2017 Actual	2018 Actual	2019 Actual	2020 YE July Forecast	2021 Test Year	2022 Plan Year	2023 Plan Year
Total Company NSP MN (MN, ND & SD)	$ 16,744,412	$ 17,040,397	$ 18,394,133				
Total Company NSP MN Electric (MN, ND & SD)	$ 14,310,607	$ 14,651,519	$ 15,979,790				
MN Jurisdiction Electric (MN only)	$ 12,501,377	$ 12,780,038	$ 14,139,739				

Gross Recoveries of Bad Debt & Other	2017 Actual	2018 Actual	2019 Actual	2020 YE July Forecast	2021 Test Year	2022 Plan Year	2023 Plan Year
Total Company NSP MN (MN, ND & SD)	$ (3,753,537)	$ (3,811,319)	$ (4,986,303)				
Total Company NSP MN Electric (MN, ND & SD)	$ (3,207,960)	$ (3,277,013)	$ (4,331,820)				
MN Jurisdiction Electric (MN only)	$ (2,802,391)	$ (2,858,431)	$ (3,833,017)				

Reserve for Bad Debt	2017 Actual	2018 Actual	2019 Actual	2020 YE July Forecast	2021 Test Year	2022 Plan Year	2023 Plan Year
Total Company NSP MN (MN, ND & SD)	$ 1,332,518	$ 2,110,341	$ (671,385)				
Total Company NSP MN Electric (MN, ND & SD)	$ 1,138,836	$ 1,814,494	$ (583,261)				
MN Jurisdiction Electric (MN only)	**$ 994,858**	**$ 1,582,723**	**$ (516,100)**				

Total Bad Debt Expense	2017 Actual	2018 Actual	2019 Actual	2020 YE July Forecast	2021 Test Year	2022 Plan Year	2023 Plan Year
Total Company NSP MN (MN, ND & SD)	$ 14,323,393	$ 15,339,419	$ 12,736,445	$ 25,077,570	$ 22,943,997	$ 18,319,593	$ 15,708,018
Total Company NSP MN Electric (MN, ND & SD)	$ 12,241,484	$ 13,188,999	$ 11,064,709	$ 21,890,805	$ 20,027,035	$ 15,990,549	$ 13,710,995
MN Jurisdiction Electric (MN only)	$ 10,693,844	$ 11,504,330	$ 9,790,622	$ 19,277,358	$ 17,637,261	$ 14,082,439	$ 12,074,897

Billed Commodity Revenue	2017 Actual	2018 Actual	2019 Actual	2020 YE July Forecast	2021 Test Year	2022 Plan Year	2023 Plan Year
Total Company NSP MN (MN, ND & SD)	$ 4,018,233,653	$ 4,309,029,202	$ 4,101,533,243	**$ 3,902,704,290**	**$ 4,272,072,565**	**$ 4,417,048,036**	**$ 4,504,865,090**

Bad Debt Expense / Commodity Revenue	2017 Actual	2018 Actual	2019 Actual	2020 YE July Forecast	2021 Test Year	2022 Plan Year	2023 Plan Year
Total Company NSP MN (MN, ND & SD)	0.36%	0.36%	0.31%	**0.64%**	**0.54%**	**0.41%**	**0.35%**

NSP MN Commodity Bad Debt Jurisdictional Allocators	2017 Actual	2018 Actual	2019 Actual	2020 YE July Forecast	2021 Test Year	2022 Plan Year	2023 Plan Year
North Dakota Electric	**5.5%**	**5.5%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**
North Dakota Gas	**1.6%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**
Minnesota Electric	**74.7%**	**75.0%**	**76.9%**	**76.9%**	**76.9%**	**76.9%**	**76.9%**
Minnesota Gas	**12.9%**	**12.5%**	**11.4%**	**11.4%**	**11.4%**	**11.4%**	**11.4%**
South Dakota Electric	**5.4%**	**5.5%**	**5.2%**	**5.2%**	**5.2%**	**5.2%**	**5.2%**
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Non-Commodity Non-Energy Bad Debt Information
(Amounts in $'s)

	2017 Actual		2018 Actual		2019 Actual		2020 July Forecast		2021 Test Year		2022 Plan Year		2023 Plan Year	
	Total Electric	Mn Jurisdiction	Total Electric	Mn Jurisdiction	Total Electric	Mn Jurisdiction	Total Electric	Mn Jurisdiction	Total Electric	Mn Jurisdiction	Total Electric	Mn Jurisdiction	Total Electric	Mn Jurisdiction
Customer Care Non-Commodity (1)	94,378	82,350	88,628	77,326	74,710	65,183	95,104	82,977	89,911	78,446	66,282	57,830	89,911	78,446
Distribution Operations (2)	676,078	676,078	440,831	435,710	223,106	214,613	297,968	271,439	-	-	-	-	-	-
Corporate Other (3)	-	-	-	-	316,252	316,252	-	-	-	-	-	-	-	-
Corporate Giving (4)	6	6	-	-	-	-	-	-	-	-	-	-	-	-
	770,463	758,435	529,458	513,036	614,068	596,048	393,072	354,415	89,911	78,446	66,282	57,830	89,911	78,446

(1) Miscellaneous charges such as returned check and connection-related fees

(2) Distribution Contributions In Aid Of Construction, and charges for requests made by customers for non-standard equipment or set-up; claims against third parties that damage the Company's electric and gas facilities

(3) Puerto Rico mutual aid reserve

(4) Minnesota city requested facilities surcharge

(904) Uncollectible Accounts per Retail Customer			(901-905 less 904) Customer Care Accts Exp per Retail Customer			(902) Meter Reading Exp per Retail Customer			(903) Customer Records & Collection Exp per Retail Customer			(901 - 905) Total Customer Accounts Expense per Retail Customer		
	Mean	NSPM		Mean	NSPM		Mean	NSPM		Mean	NSPM		Mean	NSPM
2008	$ 14.50	$ 13.95	2008	$ 38.33	$ 34.11	2008	$ 8.16	$ 15.15	2008	$ 26.98	$ 18.68	2008	$ 52.82	$ 48.06
2009	$ 13.66	$ 10.52	2009	$ 38.62	$ 34.09	2009	$ 8.36	$ 14.90	2009	$ 27.05	$ 18.94	2009	$ 52.39	$ 44.61
2010	$ 12.98	$ 8.49	2010	$ 39.08	$ 34.58	2010	$ 8.14	$ 15.41	2010	$ 28.12	$ 19.00	2010	$ 52.22	$ 43.07
2011	$ 12.24	$ 9.04	2011	$ 39.34	$ 33.29	2011	$ 7.93	$ 14.18	2011	$ 28.26	$ 18.97	2011	$ 51.57	$ 42.33
2012	$ 11.44	$ 6.33	2012	$ 38.26	$ 31.82	2012	$ 7.37	$ 12.95	2012	$ 27.80	$ 18.73	2012	$ 49.70	$ 38.15
2013	$ 12.36	$ 7.96	2013	$ 37.75	$ 31.02	2013	$ 6.83	$ 12.96	2013	$ 27.68	$ 17.93	2013	$ 50.11	$ 38.98
2014	$ 13.35	$ 9.97	2014	$ 38.06	$ 30.64	2014	$ 6.51	$ 13.00	2014	$ 28.31	$ 17.54	2014	$ 51.41	$ 40.61
2015	$ 12.90	$ 8.33	2015	$ 38.86	$ 30.06	2015	$ 6.66	$ 13.23	2015	$ 28.95	$ 16.75	2015	$ 51.76	$ 38.39
2016	$ 12.70	$ 8.61	2016	$ 37.92	$ 29.90	2016	$ 6.35	$ 13.42	2016	$ 28.57	$ 16.39	2016	$ 50.62	$ 38.50
2017	$ 10.11	$ 8.87	2017	$ 38.07	$ 28.91	2017	$ 6.11	$ 13.48	2017	$ 28.74	$ 15.35	2017	$ 48.18	$ 37.78
2018	$ 11.74	$ 9.28	2018	$ 37.35	$ 28.45	2018	$ 5.84	$ 14.36	2018	$ 28.69	$ 14.04	2018	$ 49.08	$ 37.73
2019	$ 11.14	$ 7.83	2019	$ 37.35	$ 30.36	2019	$ 5.64	$ 14.64	2019	$ 28.82	$ 15.64	2019	$ 51.68	$ 38.20

* 2019 data was not impacted by the pandemic