Direct Testimony and Schedules
Mark P. Moeller

Before the North Dakota Public Service Commission
State of North Dakota

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

Case No. PU-20-___
Exhibit___(MPM-1)

Capital Investments, Depreciation, and Nuclear Decommissioning

November 2, 2020

Table of Contents

I.	Introduction		1
II.	Capital Additions		3
	A.	Capital Additions 2013-2019	4
	B.	Capital Additions 2020-2021	14
III.	Depreciation		20
	A.	Production Assets	24
	B.	TD&G Assets	36
IV.	Nuclear Decommissioning Trust		41
V.	Conclusion		49

Schedules

Statement of Qualifications	Schedule 1
2013-2019 Plant-in-Service Rollforward	Schedule 2a
2020-2021 Plant-in-Service Rollforward	Schedule 2b
Expenditures and Additions by Business Area Witness	Schedule 3
Production – 2020 TLG Services 5-Year Dismantling Cost Study	Schedule 4
Production – Summary of Proposed Remaining Lives	Schedule 5
Production – Comparison of Present to Proposed Net Salvage Rates	Schedule 6
TD&G – 2017 Depreciation Study by Alliance Consulting Group	Schedule 7
TD&G – Comparison of Present and Proposed Depreciation Parameters	Schedule 8
TD&G – Depreciation and Amortization Rate Calculations	Schedule 9
Nuclear Decommissioning Accrual	Schedule 10

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND TITLE.

A. My name is Mark P. Moeller. I am Director of Capital Asset Accounting 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. As a Director of Capital Asset Accounting, I am responsible for various aspects of asset accounting, primarily dealing with policy, book depreciation, tax depreciation, and deferred taxes for capital assets, as well as the related reporting and regulatory requirements for Xcel Energy and its subsidiaries. A description of my qualifications, duties, and responsibilities is included as Exhibit ___(MPM-1), Schedule 1 to my testimony.

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

A. First, I provide information regarding the Company's material capital additions since our last rate case. I then support the underlying information for the calculation of the level of depreciation expense included in the 2021 Test Year, which includes recommended changes to average service lives, remaining lives, net salvage rates, and depreciation rates, where applicable, for all Company assets used in providing electric service. I also support the Company's recommendation regarding nuclear decommissioning accruals. Unless otherwise noted, my testimony provides total Company information. Company witness Mr. Benj Halama includes the North Dakota electric jurisdictional amounts in his 2021 Test Year revenue requirement.

Q. SPECIFICALLY, WHAT DO YOU ADDRESS IN YOUR TESTIMONY?

A. My testimony addresses three topics: historical and future capital additions, depreciation expense, and nuclear decommissioning expense. In the capital additions section, I discuss material historical additions which have occurred since our last rate case as well as forecasted additions for the Test Year. In the depreciation section, I present the depreciation changes proposed for the production, transmission, distribution, electric general and intangible, and common general and intangible assets. I discuss the depreciation statistics for all assets in the electric and common utilities. In the nuclear decommissioning section, I present updates to the underlying cost estimate, the fund earnings rates, and the escalation rate.

Q. WHAT IS THE IMPACT OF THE CHANGES YOU RECOMMEND?

A. The change in lives and net salvage rates that I propose in my testimony results in an increase of $70.7 million in Electric Production depreciation expense at a total NSPM Company level – an increase of $3.7 million for the North Dakota retail jurisdiction. The primary contributing factor to this increase is the aligning of the remaining depreciable lives for Sherco Units 1 and 2 to their actual lives and updating proposed net salvage rates, which represents $3.2 million of the overall $3.7 million North Dakota jurisdictional increase. The Electric Transmission, Distribution, and General (TD&G) assets accounted for an increase of $6.1 million ($0.8 million North Dakota jurisdictional) and Common Utility assets decreased expense by $7.2 million (decrease of $0.4 million North Dakota jurisdictional).

Table 1

2021 Test Year Depreciation Expense Changes

(in millions)	Total Company	North Dakota Jurisdictionalized
Electric Production	$ 70.7	$ 3.7
Electric TD&G	6.1	0.8
Common Utility Assets	(7.2)	(0.4)
Nuclear Decommissioning*	N/A	2.0
Total	$ 69.6	$ 6.1

*Nuclear decommissioning accruals are calculated at the jurisdictional level and not at the NSPM Total Company level.

These recommended depreciation changes were then applied to the monthly plant and accumulated depreciation balance (i.e., the depreciation reserve) in the forecast period to estimate the change in depreciation expense in the 2021 Test Year.

The nuclear decommissioning accrual increased by approximately $2.0 million (North Dakota Jurisdictionalized). With respect to the Nuclear Decommissioning Trust accrual, I am recommending the accrual level to be set at $2.25 million due to the need to capture decreases in the expected long term return on trust assets and revisions to amounts to be collected in light of changes in the North Dakota jurisdictional allocation.

II. CAPITAL ADDITIONS

Q. WHAT DO YOU DISCUSS IN THIS SECTION?

A. In this section, I will discuss our historical capital additions for the period 2013 through 2019 since the Company's last rate case. I will also discuss forecasted capital additions for the 2020 current year and the 2021 Test Year.

A. Capital Additions 2013-2019

Q. WHAT WERE THE COMPANY'S CAPITAL ADDITIONS IN THE PERIOD OF 2013-2019?

A. The Company placed into service capital additions totaling $6.8 billion in the period of 2013-2019. Exhibit__(MPM-1), Schedule 2a is a Plant-in-Service Rollforward for the period 2013-2019. Unless otherwise noted, my testimony provides total Company information. Mr. Benj Halama includes the North Dakota electric jurisdictional amounts in his 2021 Test Year revenue requirement.

Q. WHAT WERE THE PRIMARY DRIVERS OF CAPITAL ADDITIONS IN THE 2013-2019 PERIOD?

A. From 2013-2019, the Company made a wide variety of investments across our system to provide reliable, safe, cost-effective service to our customers. In particular, initiatives and individual projects in the following areas were the primary drivers of our capital additions: investments in wind farms, regional expansion transmission projects, our nuclear generating fleet, a new natural gas combustion turbine, and updating our information technology and business systems. Below, I provide more information about the Company's investments in each of those areas.

Q. PLEASE DESCRIBE THE COMPANY'S INVESTMENTS IN WIND FARMS IN THE 2013-2019 PERIOD.

A. To harness the excellent wind resource of North Dakota and neighboring states and turn it into emissions-free power for our customers—at a time when market pricing of new wind generation was historically low—the Company invested $1.3 billion to build 800 megawatts (MW) of wind farms across its system between 2013 and 2019.

As detailed below, the Commission granted advanced determinations of prudence for most of these additions given the significant benefits that the projects provided to North Dakota customers, including cost savings and a hedge against the volatility of natural gas prices and potential environmental regulation.

The Company initially invested $262 million in the 150 MW Border Winds project in Rolette County, North Dakota. The Commission granted the Company an advanced determination of prudence for that project in 2014. Case No. PU-13-742, ORDER APPROVING SETTLEMENT, February 26, 2014.

The Company initially invested $274 million to acquire, develop, and own the 200 MW Courtenay Wind project in Stutsman County, North Dakota. The Commission granted the Company an advanced determination of prudence for that acquisition and development in 2015, based in large part on the substantial savings for consumers that the project provided over alternatives sources of power. Case No. PU-15-181, ORDER, August 24, 2015.

The Company initially invested $333 million in the 200 MW Pleasant Valley wind project in Minnesota. The Commission granted the Company an advanced determination of prudence in 2016. Case No. PU-13-708, ORDER APPROVING

SETTLEMENT, March 9, 2016. The location of the project—in close proximity to an existing owned facility allowed for economies of scale of operations and maintenance and in an area of historically-low curtailment of wind generation—made it a particularly compelling value for customers.

The Company also initially invested $248 million in the 150 MW Foxtail Wind project in Dickey County, North Dakota and $166 million in the 100 MW Lake Benton Wind project in Minnesota. For both projects, the Commission granted the Company an advanced determination of prudence in 2018, up to a set amount, based on the substantial savings that the wind investments provided for consumers. Case No. PU-17-120, ORDER ON SETTLEMENT, December 6, 2018.

These wind projects—and the additional projects the Company has added in subsequent years—will continue to provide substantial benefits to customers.

Q. PLEASE DISCUSS THE COMPANY'S INVESTMENTS IN REGIONAL EXPANSION TRANSMISSION PROJECTS IN THE 2013-2019 PERIOD.

A. To meet the growing need for transmission in the region, the Company made capital additions totaling $1.03 billion in regional expansion transmission projects, including projects in North Dakota, South Dakota, and Minnesota as part of the CapX2020 initiative.

These CapX2020 projects were major upgrades to the regional transmission system to support local reliability, regional reliability, and renewable generation. Prior to the CapX2020 projects, there had not been a major upgrade to the Upper Midwest's electric transmission grid in nearly 40 years. Under the

CapX2020 initiative, the eleven transmission-owning utilities in Minnesota, North Dakota, South Dakota, and Wisconsin collaborated to study and plan for the future of the regional transmission system. The result was multiple transmission planning studies that supported the development of the Regional Expansion projects.

Recognizing the benefits of the projects for customers, the Commission granted an advanced determination of prudence for those investments. Case No. PU-09-678, ORDER ADOPTING SETTLEMENT, October 6, 2010. Certain CapX2020 projects were placed into service in 2012, with the majority of them placed into service in the period of 2013-2019.

The projects for which the Commission issued an ADP included a 345 kV line from Monticello, Minnesota to Fargo, North Dakota, including the line itself and required substations. The new transmission line improved reliability in the southern Red River Valley and the Fargo area. The project also supports additional generation development in eastern North Dakota.

The Company, through its affiliate Northern States Power Company, a Wisconsin corporation (NSPW), also placed into service a 182-mile 345 kV transmission line from La Crosse, Wisconsin to Madison, Wisconsin in concert with American Transmission Company. This resulted in a total capital addition of $191 million which is recovered through the Interchange Agreement between the Company and NSPW.

Q. PLEASE DESCRIBE THE COMPANY'S NUCLEAR GENERATING FLEET.

A. Xcel Energy owns and operates three nuclear units: one unit in Monticello, Minnesota and two units at Prairie Island in Welch, Minnesota.

Monticello is a single-unit boiling water reactor rated for gross output at 671 MW and was originally licensed by the Nuclear Regulatory Commission (NRC) in 1970. The NRC approved a renewed license for the facility in 2006, allowing the plant to operate through 2030. The Company intends to seek a license extension to allow the plant to operate an additional 10 years, to 2040.

Prairie Island is a two-unit pressurized water reactor, with each unit rated at 550 MW gross output capacity. The NRC licensed Prairie Island's two units in 1973 and 1974, respectively. The initial operating licenses were set to expire in 2013 and 2014. In 2011, the NRC approved renewed licenses for Prairie Island Units 1 and 2, extending their operating lives until 2033 and 2034.

Nuclear is a critical source of power generation for the Company's customers. Monticello and Prairie Island continue to be two of Xcel Energy's most reliable system-wide baseload electric generation assets, providing almost 30 percent of the electricity to Company's system in the Upper Midwest. Monticello has operated at an average capacity factor of 95 percent over the past four years, including a record-setting 99.3 percent in 2018, a non-refueling year. Similarly, Prairie Island achieved a combined average capacity factor of more than 92 percent over the past four years, including a 100 percent capacity factor for Unit 2 in 2018 and 100 percent capacity factor for Unit 1 in 2019 (non refueling years).

These plants are part of a diverse operating portfolio that provides a hedge against changes in resource availability, fossil fuel prices and future emissions regulations. They are important sources of low-cost, base-load power that do not have carbon emissions, and their continued safe, reliable, and efficient operation are critical to the Company's commitment to provide reliable and reasonably priced electricity to North Dakota consumers.

Q. WHAT WAS THE COMPANY'S OVERALL INVESTMENT IN ITS NUCLEAR GENERATING FLEET IN THE 2013-2019 PERIOD?

A. To generate reliable, base load, carbon-free power, the Company invested $1.8 billion in our nuclear generating fleet in the period of 2013-2019.

Q. PLEASE SUMMARIZE THE COMPANY'S KEY INVESTMENTS IN ITS NUCLEAR FLEET IN THE 2013-2019 PERIOD.

A. In the 2013-2019 period, the Company invested in mandated compliance projects, such as safety measures required by federal regulators in the wake of the Fukushima nuclear incident in Japan, safety, cybersecurity, and fire-protection improvements; reliability investments including life cycle management, such as an extended power uprate at Monticello and replacement of a steam generator at Prairie Island; and dry-cask storage for spent nuclear fuel. I provide additional information about those investments below.

Q. PLEASE DISCUSS THE COMPANY'S INVESTMENTS IN NUCLEAR MANDATED COMPLIANCE IN THE 2013-2019 TIME PERIOD.

A. Mandated Compliance includes regulatory, security, and license commitment activities required by Federal or state regulators (normally the NRC), including industry commitments made to the NRC, as well as projects that require NRC

approval. The Company made capital additions across Monticello and Prairie Island to implement safety measures required by federal regulators in the wake of the Fukushima nuclear incident in Japan. Such measures included installation of enhanced spent fuel pool instrumentation and modifications to electrical and mechanical systems to augment plant cooling capability.

The Company also made capital additions for its fire-protection program at Prairie Island and at Monticello, all to reduce the likelihood of a fire incident in the first place and reduce the impacts of any fire that may occur. To ensure protection of generating assets and of the public, the Company also made capital additions for its cyber-security program across Monticello and Prairie Island and added physical security at Monticello.

Q. PLEASE DISCUSS THE COMPANY'S INVESTMENTS IN NUCLEAR RELIABILITY IN THE 2013-2019 TIME PERIOD.

A. The Company's investments in reliability projects improve equipment reliability, reduce maintenance activities, and ensure that plants run efficiently and reliably for their full planned lifecycle.

In the 2013-2019 period, the Company completed the Life Cycle Management/Extended Power Uprate work at the Monticello nuclear generating plant that was underway at the time of the company's last North Dakota rate case. The Company also invested in reliability projects at Prairie Island, such as replacement of a reactor coolant pump, process control systems, and a cooling tower. The Company also made a major investment in replacement of a steam generator.

Q. PLEASE DISCUSS THE COMPANY'S CAPITAL ADDITIONS FOR DRY-CASK STORAGE.

A. The Company made capital additions for dry cask storage, which are driven by the Federal government's delay in providing a permanent, long-term spent fuel storage facility, and the requirement that the Company store spent fuel on site in the interim. These investments included storage casks, expansion of the independent spent fuel storage installation at Prairie Island, and the loading of spent fuel into casks at Monticello.

Q. WHAT HAS BEEN THE RESULT OF THE CAPITAL IMPROVEMENTS OF THE NUCLEAR FACILITIES?

A. The projects we have undertaken at Prairie Island and Monticello since 2013 have yielded significant benefits for customers and the system. In years where there is only one unit scheduled for a refueling outage, the fleet overall now operates at 95% capacity or above. In 2019, which had two units with refueling outages, the fleet performed at 92.6%. One key reason for this high capacity factor was the record run of Prairie Island Unit 2, which ran for 692 consecutive days, the longest run of any Xcel Energy nuclear units in our history. The Company's nuclear fleet is more reliable than it has ever been, and O&M costs for the two facilities are down. In addition, as a result of the improvements made in response to the Fukushima incident and the other security, fire protection, reliability and safety capital improvements made since 2013, the facilities, which have operated safely since the 1970s, are now even safer, more secure, and more resilient.

Q. PLEASE DISCUSS THE COMPANY'S INVESTMENT IN A NEW NATURAL GAS COMBUSTION TURBINE.

A. In 2018, the Company placed into service a new natural gas combustion turbine (Unit 6) at our existing Black Dog generating plant in Minnesota. The Company built the new unit to meet a need in the system, and the choice of natural gas reflects the Company's commitment to a robust mix of generation types. The Commission granted an advanced determination of prudence for this investment. Case No. PU-13-194, ORDER ADOPTING SETTLEMENT, Feb. 26, 2014.

Q. PLEASE DISCUSS THE COMPANY'S KEY INVESTMENTS IN BUSINESS SYSTEMS IN THE 2013-2019 PERIOD.

A. To streamline operations and enable employees to perform responsibilities more efficiently, the Company invested in new business systems, specifically a new SAP General Ledger (GL) system and a new Work and Asset Management (WAM) system. The Company also began implementing information technology solutions to support its AGIS initiative. The Company put the new GL in service in 2015, and the first WAM deployment went in service in 2016.

Q. PLEASE DISCUSS THE COMPANY'S GL AND ITS GL-RELATED INVESTMENTS.

A. The GL is the Company's financial record-keeping system. The Company's historical system was reaching the end of its life and its vendor was going to cease providing support. Based on its evaluation of options, the Company decided that replacement of the historical GL with a new GL offered by SAP was the best course of action. The new GL provides better analysis of how business drivers impact accounting results and a better ability to trace connections between Generally Accepted Accounting Principles (GAAP) accounting and individual Federal Energy Regulatory Commission (FERC)

accounts, among other benefits. These improvements make the Company's operations more efficient.

Q. PLEASE DISCUSS THE COMPANY'S WAM AND ITS WAM-RELATED INVESTMENTS.

A. A WAM system is the core technology for planning and scheduling utility work, managing outages, procuring materials, and managing assets and inventory. Historically, Xcel Energy had three core WAM systems, but the original software vendors were no longer providing full support or upgrades with robust protection against system failure or cyber-attacks. This situation created potential vulnerabilities and made repairs more costly to our customers with risk of delays that could jeopardize certain aspects of our day-to-day operations. Accordingly, the Company replaced these three old systems with an integrated solution that is based on current technology and works in tandem with the Company's new GL system.

Q. PLEASE DESCRIBE THE COMPANY'S AGIS INVESTMENTS.

A. The Company began capital additions for the AGIS initiative in 2019. The primary AGIS capital driver for 2019 was the purchase of servers for its Advanced Distribution Management System (ADMS). In her direct testimony, Company witness Ms. Kelly Bloch provides more detail regarding these investments and the benefits they provide customers.

B. Capital Additions 2020-2021

Q. WHAT ARE THE COMPANY'S FORECASTED CAPITAL ADDITIONS FOR THE CURRENT YEAR OF 2020?

A. The Company forecasts capital additions of $1.8 billion in the current year of 2020. Exhibit__(MPM-1), Schedule 2b is a Plant-in-Service Rollforward for the period 2020-2021. Exhibit__(MPM-1), Schedule 3 shows forecasted expenditures and additions for the period 2020-2021.

Q. WHAT ARE THE PRIMARY DRIVERS OF CAPITAL ADDITIONS IN T 2020?

A. As part of the Company's overall expenditures to provide reliable service to its customers, the following initiatives and individual projects are the key drivers of the Company's capital additions in 2020: investments in wind farms, investments at the Prairie Island nuclear facility, and investment in the AGIS initiative.

Q. PLEASE DESCRIBE THE COMPANY'S INVESTMENTS IN WIND FARMS IN 2020.

A. To increase the amount of emissions-free electricity we are providing to our customers and take advantage of historically low pricing, the Company is placing in service approximately $978 million for five wind farms in 2020.

The Company made 2020 capital additions of $332 million for the 200 MW Blazing Star I wind farm in Minnesota and forecasts additions of $342 million for the 200 MW Blazing Star II wind farm, also in Minnesota. The Commission granted an advanced determination of prudence for these projects, up to specified amounts. Case No. PU-17-120, ORDER ON SETTLEMENT, December 6, 2018.

The Company is forecasting 2020 capital additions of $328 million for the 200 MW Crowned Ridge wind farm in South Dakota. Among other components of the overall project, it will include 73 GE 2.3 MW and 15 GE 2.1 MW wind turbines. These turbines are larger than the GE turbines historically in the Company's fleet and demonstrate the Company's commitment to taking advantage of technological improvements to generate as much electricity as possible from a given project footprint. The Commission granted an advanced determination of prudence for the portion of the project for which the Company made a capital addition. Case No. PU-17-120, ORDER ON SETTLEMENT, December 6, 2018.

The Company has sought, and the Commission has granted, an advanced determination of prudence for the Company to purchase the repowered the Mower Wind project (98.9 MW when repowered). Case No. PU-19-310, ORDER ON SETTLEMENT AGREEMENT, August 26, 2020. In 2020, the Company also will be closing the purchase of the repowered Jeffers Wind (44 MW when repowered) and Community Wind North (26.4 MW when repowered) projects. Company witness Mr. Christopher Shaw discusses the prudence of these investments in his Direct Testimony.

Q. PLEASE DESCRIBE THE COMPANY'S INVESTMENTS AT PRAIRIE ISLAND NUCLEAR FACILITY IN THE 2020 CURRENT YEAR.

A. To continue providing reliable, baseload electricity to customers, the Company is making capital investments in its nuclear fleet, particularly at Prairie Island, including reloading of nuclear fuel in Prairie Island Unit 1, security enhancements, and replacement of process control equipment.

Reloading of nuclear fuel is a regular part of operating a reactor. At each refueling, the Company replaces approximately one-third of the nuclear fuel assemblies in the reactor core and performs numerous equipment inspections to ensure safety and proper functioning, including testing and maintenance tasks that the Company can perform only when the reactor is off-line. Nuclear fuel is capitalized because individual fuel assemblies are constructed by the Company and provide multiple years of benefit. Therefore, the fuel assemblies meet the definition of capital and are subsequently depreciated on a units of production or depletion method as they are depleted.

Q. PLEASE DESCRIBE THE COMPANY'S INVESTMENTS IN THE AGIS INITIATIVE IN THE 2020 CURRENT YEAR.

A. As noted above, AGIS is a transformative portfolio of grid modernization investments that will improve reliability, shorten the duration of power outages, integrate intermittent resources, and empower customers with more information to control and track their energy use.

ADMS, the foundational component of AGIS, is a collection of hardware and software applications that provides operators with enhanced visibility and situational awareness into the distribution system.

The Field Area Network (FAN) is the communications network that will enable communications between the existing communications infrastructure at the Company's substations, ADMS, and in the future, other intelligent grid devices and applications.

In the 2020 current year, the Company budgets total capital additions for the AGIS initiative of approximately $14.0 million. In her Direct Testimony, Ms. Bloch provides more detail regarding these investments.

Q. WHAT ARE THE COMPANY'S FORECASTED CAPITAL ADDITIONS FOR THE 2021 TEST YEAR?

A. The Company forecasts capital additions of $1.6 billion in the 2021 Test Year. Exhibit__(MPM-1), Schedule 2b is a Plant-in-Service Rollforward for the period 2020-2021. Exhibit__(MPM-1), Schedule 3 shows forecasted expenditures and additions for the period 2020-2021.

Q. WHAT ARE THE PRIMARY DRIVERS OF FORECASTED CAPITAL ADDITIONS FOR THE 2021 TEST YEAR?

A. For the 2021 test year, the primary drivers of the Company's forecasted capital additions will be investments in additional wind farms, regional transmission expansion, AGIS, and the nuclear generating fleet.

Q. PLEASE DISCUSS THE COMPANY'S INVESTMENTS IN ADDITIONAL WIND FARMS IN THE 2021 TEST YEAR.

A. Similarly to previous years, the Company is investing in wind generation in the 2021 test year to take advantage of federal Production Tax Credits and historically-low pricing.

The Company forecasts 2021 capital additions of $382 million in the 302 MW Dakota Range Wind project in South Dakota. The Commission granted an advanced determination of prudence for this project. Case No. PU-17-372, ORDER ON SETTLEMENt, December 6, 2018.

The Company also forecasts 2021 capital additions of $340 million for the 200 MW Freeborn Wind Farm in Minnesota and Iowa. The Commission granted an advanced determination of prudence for this project too. Case No. PU-17-120, ORDER ON SETTLEMENT, December 6, 2018.

Q. PLEASE DISCUSS THE COMPANY'S INVESTMENTS IN REGIONAL TRANSMISSION EXPANSION IN THE 2021 TEST YEAR.

A. Compared to 2020, the Company is increasing spending on regional transmission expansion in 2021. For example, the Company forecasts a capital addition of $63 million for the Huntley-Wilmarth line and related substation infrastructure. The Huntley–Wilmarth 345 kV Project is a Midcontinent Independent System Operator, Inc. designated Market Efficiency Project that is designed to provide economic benefits by providing additional transmission capacity to allow low-cost wind generation in southern Minnesota and northern Iowa to reach customers.

Q. PLEASE DISCUSS THE COMPANY'S FORECASTED INVESTMENT IN AGIS IN THE 2021 TEST YEAR.

A. As noted above, AGIS is a transformative portfolio of grid modernization investments that will improve reliability, shorten the duration of power outages, integrate intermittent resources, and empower customers with more information to control and track their energy use.

The Field Area Network (FAN) is the communications network that will enable communications between the existing communications infrastructure at the

Company's substations, ADMS, and in the future, other intelligent grid devices and applications.

Compared to 2020, the Company's investment in 2021 will increase significantly, to a total of approximately $79 million in 2021. Much of this increase results from the Company in-servicing ADMS in 2021, but the Company's investments in FAN and Advanced Metering Infrastruture (AMI) will also increase. In her direct testimony, Ms. Bloch provides more detail regarding these investments and the benefits they provide customers.

Q. PLEASE DISCUSS THE COMPANY'S INVESTMENTS IN ITS NUCLEAR GENERATING FLEET IN THE 2021 TEST YEAR.

A. The Company forecasts capital additions in the 2021 test year that will maintain the safe, reliable operation of the Company's nuclear fleet, including reloads of nuclear fuel assemblies at Monticello and Prairie Island Unit 2, expansion of the Prairie Island Independent Spent Fuel Storage Installation, and cooling tower improvements.

As noted, reloading of nuclear fuel is a regular part of operating a reactor. At each refueling, the Company replaces approximately one-third of the nuclear fuel assemblies in the reactor core and performs numerous equipment inspections to ensure safety and proper functioning, including testing and maintenance tasks that the Company can perform only when the reactor is off-line.

III. DEPRECIATION

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

A. The Company is requesting a revision to its remaining lives, net salvage rates, retirement curves, and depreciation rates for its production, transmission, distribution, general, and intangible assets. This section details the changes and includes the supporting information for the requested changes.

Q. WHAT IS DEPRECIATION?

A. The term "depreciation" is a system of accounting that distributes the cost of assets, less net salvage (if any), over the estimated useful life of the assets in a systematic and rational manner. Depreciation is a process of allocation, not valuation. However, the amount allocated to any one accounting period does not necessarily represent an actual loss or decrease in value that will occur during that particular period. The Company accrues depreciation on the basis of the original cost of all depreciable property included in each functional property group. On retirement, the full cost of depreciable property, less the net salvage value, is charged to the depreciation reserve.

Q. WHAT IS A NET SALVAGE RATE?

A. Net salvage is the difference between the gross salvage (what the asset or its remaining scrap was sold for) and the removal cost (cost to remove and dispose of the asset). If the removal cost exceeds gross salvage, net salvage is negative. Some plant assets can experience significant negative removal cost percentages due to the amount of removal cost and the timing of any capital additions versus the retirement. Salvage and removal cost percentages are calculated by dividing

the current cost of salvage or removal by the original installed cost of the associated assets.

Q. WHY IS IT IMPORTANT TO SET THE RIGHT LEVEL OF DEPRECIATION EXPENSE IN A RATE CASE?

A. The goal in setting depreciation lives and rates is to match depreciation recovery with the useful lives of assets to ensure current customers are equitably paying for the cost of the asset over the period they receive benefits from the assets, avoiding intergenerational inequity. The level of depreciation expense included in this rate case reflects the depreciation cost of service for the 2021 test year.

Q. WHAT CHANGES ARE YOU PROPOSING FOR APPROVED LIVES, NET SALVAGE RATES, RETIREMENT CURVES, OR DEPRECIATION RATES IN THIS CASE?

A. I propose several changes affecting depreciation expense for production assets due to changing the remaining life and updating the dismantling cost that is the basis of the negative net salvage rate. For transmission, distribution, general, and intangible assets, I propose changes to the average remaining life depreciation rates based on underlying changes to the average service life, retirement curves, and net salvage rates. I discuss the full scope of depreciation expense changes proposed in my testimony below; however, the major drivers to the proposed change in depreciation expense are as follows:

- *Steam Production,* shortening the remaining lives of Sherco Units 1 and 2, lengthening the remaining lives of the Red Wing and Wilmarth plants, and increasing the negative net salvage rate for all Steam Production plants;
- *Other Production*, shortening the remaining life for High Bridge; lengthening the lives for Angus Anson Units 2 through 4, Black Dog 5

(FERC Account 341 only), and Blue Lake Units 1 through 4 and Units 7&8; increasing the negative net salvage rate on most plants; and providing new remaining lives and negative net salvage rates for Black Dog Unit 6 and the Pleasant Valley, Border Winds, Courtenay, Foxtail, Lake Benton, Blazing Star I and II, Jeffers, Community Wind North, Mower, and Crowned Ridge wind facilities; and

- *Transmission, Distribution, General, and Intangible (TD&G)*, updating new average service lives, retirement curves, net salvage rates, and depreciation rates for all assets in accordance with the most recent depreciation study and requesting initial parameters for several new accounts or subaccounts of assets.

The depreciation expense changes are supported by several exhibits to my testimony. Exhibit__(MPM-1), Schedules 4-6 are related to the Electric Production segment. Schedule 4 is the 2020 Dismantling Study performed by TLG Services (TLG) on the Company's production assets. Schedule 5 is a summary of the proposed remaining lives and net salvage rates for each plant by FERC account. Schedule 6 is a calculation of proposed net salvage rates and a comparison of net salvage rates currently approved compared to the proposed rates.

Exhibit__(MPM-1), Schedules 7-9 support the average service lives, net salvage rates, and retirement curves for the transmission, distribution, electric general, and common general assets, using plant and depreciation reserve balances at December 31, 2019. Schedule 7 is the 2017 Depreciation Study performed by Alliance Consulting Services (Alliance) on the Company's TD&G assets. Schedule 8 is a summary of the currently approved and proposed average

service lives, net salvage rates, depreciation rates, and retirement curve for segment by FERC account. Schedule 9 shows how the proposed depreciation rates were calculated.

All of these changes are summarized in Table 2, below, which shows the overall change to depreciation expense by functional class based on plant and depreciation reserve balances requested for the 2021 test year.

Table 2

2021 Test Year

Summary of Depreciation Expense Change

Functional Class	Change in Depreciation Expense (Total Company)	Change in Depreciation Expense (ND Jurisdiction)
Electric Utility		
Steam Production	$56,415,327	$2,919,129
Hydro Production	(35,867)	(1,856)
Other Production	14,312,787	740,594
Total Electric Production	$70,692,247	$3,657,867
Transmission	$9,215,760	$476,856
Distribution (ND Located Only)	513,145	513,145
Electric General	(6,074,593)	(318,695)
Electric Intangibles	2,448,584	128,461
Total Electric Transmission, Distribution, and General	$6,102,896	$799,767
Total Electric Utility	**$76,795,143**	**$4,457,634**
Common Utility		
Common General	$(7,889,249)	$(413,898)
Common Intangibles	674,372	35,380
Total Common Utility	**$(7,214,877)**	**$(378,518)**
Total Depreciation Expense Change	**$69,580,266**	**$4,079,116**

Unless specifically stated, all depreciation numbers discussed above and later in my testimony are at total NSPM Company level. Mr. Halama provides the North Dakota jurisdictional costs for the 2021 Test Year in his testimony.

A. Production Assets

Q. DESCRIBE THE CHANGES TO PRODUCTION ASSETS AND HOW IT IMPACTS DEPRECIATION EXPENSE.

A. Production assets use a remaining life method to determine depreciation expense, which is the current net plant adjusted for expected net salvage divided by the current remaining life. The remaining lives for the production assets were evaluated based on our expectations for operating each unit at a generating station, with the common assets (those assets shared by all units) at the generating station assuming the remaining life of the longest-lived unit. We meet with the employees who are knowledgeable about the planning, construction, and operations at each facility. During these meetings, the Company reviews each facility to:

- Understand the major overhauls, rebuilds, and routine construction projects performed in the past few years;
- Consider the scope of current and upcoming projects; and,
- Forecast the likelihood of the facility achieving the currently approved remaining life in light of the past, current, and near future projects.

We consider these items along with our plans presented in our current resource planning cycle to understand the operational life of each facility and determine an appropriate remaining life that would be consistent with the likely actual life of a particular facility. Exhibit__(MPM-1), Schedules 4-6 provide detail

comparing depreciation expense using currently approved lives and net salvage rates set in 2008 versus using the lives and net salvage rates as proposed in this filing.

For the negative net salvage rates, the Company utilized a comprehensive 2020 Dismantling Study prepared by TLG for all steam, hydro, and other production electric generating plants. The Dismantling Study is included as Exhibit__(MPM-1), Schedule 4.

Q. IN GENERAL, WHAT CHANGES WERE MADE TO REMAINING LIVES?

A. To begin our analysis of remaining lives, we incorporated a seven (7) year passage of time adjustment to the last Commission-approved remaining lives of all facilities. The passage of time adjustment does not change the annual depreciation accrual, but simply reflects that our production facilities as of January 1, 2020 have aged 7 years since January 1, 2013, when the depreciation expense was last updated for the Company.

We also adjusted remaining lives to align the terminal retirement date with current expectations. Remaining lives for depreciation purposes have not been updated for North Dakota rates since 2008. Given this passage of time, it is necessary for us to update remaining lives with current reality.

The majority of the depreciation expense increase for production was due to shortening the remaining lives for Sherco Units 1 and 2, consistent with the Company's decision to retire these units in 2026 and 2023, respectively. The depreciable life for Sherco Unit 1 was shortened by 8 years from the Commission's last approved remaining life in 2008 (January 1, 2035), resulting

in a remaining life of 6 years as of January 1, 2021. Sherco Unit 2 remaining depreciable life was shortened by 11 years from the Commission's last approved remaining life in 2008 (January 1, 2035), resulting in a remaining life of 3 years. Mr. Shaw discuss the retirement of Sherco 1 and 2 further in his Direct Testimony. For the structures and improvement account, the remaining life was set to 6 years for the common assets for Sherco Units 1 and 2, which is the longest life of the two units. The change to the remaining lives and net salvage for Sherco Units 1 and 2 is 87 percent of the total $70.7 million dollar production increase. I discuss the reasons for these changes in more detail below.

In addition to the Sherco remaining life changes, the remaining lives for the Red Wing and Wilmarth refuse derived fuel (RDF) steam plants were lengthened 10 years due to extending the contracts with the RDF suppliers. The previous contracts expired in 2017. Prior to the end of the term, a new agreement was reached to provide RDF through 2027.

Changes to lives within the Other Production function include:

- Angus Anson Units 2&3 to operate through 2040 and Unit 4 to operate into 2045. Unit 3 had a major rotor out overhaul in 2018/2019 and Unit 2 will have a similar overhaul in 2021/2022. This capital expense to rebuild the combustion turbine will extend the life into 2040 per manufacturer recommendations and expectations based on the estimated number of peaking plant unit starts and hours. Unit 4 is being maintained in accordance with manufacturer recommendations. Based on the manufacturer's expectations along with revised estimations of the

number of peaking plant unit starts and hours, the Company is anticipating operating the unit until May 31, 2045;

- Black Dog Unit 5 FERC Structures and Improvements account life was extended to match that of the newly completed Unit 6. The Company plans to dismantle the structures at Unit 5 and Unit 6 simultaneously at the retirement date of the unit with the longest life in order to minimize the amount spent to decommission the facility. Therefore, Unit 5 will not be dismantled until Unit 6 is also retired. This practice can be seen in the lives of the Structures and Improvements accounts for several of our other plants including Angus Anson and Blue Lake;
- Blue Lake Units 1-4 extended through June 2023. These units were analyzed based on the number of starts and the hours run, and it was determined that with minimal operating costs, the Company would anticipate them lasting through mid-2023;
- Blue Lake Units 7&8's combustion turbines are the same model as Angus Anson Unit 4, and they were installed in the same year. Plant personnel maintain these units on a similar level and timeframe and, therefore, these units are expected to have a similar end of life date. Thus, we are requesting a retirement date of May 31, 2045;
- High Bridge was converted from Steam Production to Other Production in 2008. A 40-year life from initial in-servicing aligns this plant with the initial lives of Riverside and Black Dog Unit 6 ; and
- the Luverne Wind-to-Battery asset is to be retired as of January 1, 2021. This is a one-megawatt (MW) wind energy battery-storage system installed in December 2009 and was connected to a nearby 11 MW wind farm formerly owned by Minwind Energy, LLC. When the Minwind

facility was sold, the new owner severed the connection with the battery project. Given the battery's age and outdated technology, the Company is retiring the asset. The battery was in-serviced with an initial life of 15 years. The Company is requesting that the Commission approve a remaining life of zero years as of January 1, 2021, which would accelerate the retirement date by three years and approve a net salvage rate of negative 135.6 percent in order to fully depreciate and retire the battery and then safely remove and dispose of it.

Table 3 summarizes all the generating units with a change to remaining lives.

Table 3

Production Remaining Life Changes

Functional Class/Unit	Current depreciable end of life	Proposed Remaining Life (Years) as of January 1, 2021	Expected actual retirement date
Steam Production			
A.S. King	June 2037	16.5	June 2037
Red Wing	Dec. 2017	7	Dec. 2027
Sherco Unit 1	Dec. 2034	6	Dec. 2026
Sherco Unit 2	Dec. 2034	3	Dec. 2023
Sherco Unit 3	Dec. 2034	14	Dec. 2034
Wilmarth	Dec. 2017	7	Dec. 2027
Hydro Production			
Hennepin Island and Upper Dam	Feb. 2034	13.2	Feb. 2034
St. Croix Falls	Dec. 2027	7	Dec. 2027
Other Production			
Angus Anson Units 2 & 3 (FERC 341)	Dec. 2038	24.4	May 2045
Angus Anson Units 2 & 3 (FERC 342-346)	Dec. 2038	20	Dec. 2040
Angus Anson Unit 4	Dec. 2038	24.4	May 2045
Black Dog Unit 5 (FERC 341)	Dec. 2031	37.3	March 2058
Black Dog Unit 5 (FERC 342-346)	Dec. 2031	11	Dec. 2031
Blue Lake Units 1-4 (FERC 341)	May 2035	24.4	May 2045
Blue Lake Units 1-4 (FERC 342-346)	Dec. 2012	2.5	June 2023
Blue Lake Units 7&8	May 2035	24.4	May 2045
Grand Meadow	Nov. 2033	12.9	Nov. 2033
High Bridge	May 2053	27.4	May 2048
Inver Hills	Dec. 2026	6	Dec. 2026
Nobles	Nov. 2035	14.9	Nov. 2035
Riverside	Feb. 2049	28.2	Feb. 2049
Wind-to-Battery	Dec. 2023	0	Jan. 2021

Q. HAS THE COMPANY PREVIOUSLY REQUESTED THAT THE COMMISSION ALIGN THE REMAINING LIVES OF SHERCO UNIT 1, SHERCO UNIT 2, AND THE COMMON FACILITIES WITH THE ACTUAL LIVES OF THESE FACILITIES?

A. Yes. In our 2007 North Dakota rate case (Case No. PU-07-776), the Company sought to align the remaining lives of these facilities with the resource plan remaining lives reasonably known at that time. This proposal was contested in the case and a settlement was reached setting the remaining lives of Sherco Unit 1, Sherco Unit 2, and the common facilities according to industry averages, as recommended by North Dakota Advocacy Staff, resulting in remaining lives of these facilities set to 2034.

Q. DID THE COMPANY SEEK ANY CHANGES TO THE SHERCO UNIT 1, SHERCO UNIT 2, AND COMMON FACILITIES REMAINING LIVES IN ITS LAST NORTH DAKOTA RATE CASE (CASE NO. PU-12-813)?

A. No. The settlement agreement approved in our 2007 North Dakota rate case set forth that the Company "will use the principles adopted in Case No. PU-07-776 in establishing depreciation rates for North Dakota, including: Extend the service lives for the Sherco Generation Station, ..." To adhere to this principle, the Company did not, therefore, seek any changes to the remaining lives of these facilities in Case No. PU-12-813. However, the settlements in Case No. PU-07-776 and Case No. PU-12-813 do not bar the Company from seeking to update service lives and depreciation rates in this matter, and too much time has passed since the settlement in Case No. PU-07-776. It no longer makes sense for the Company to use service lives that were agreed-upon approximately 12 years ago.

Q. HAVE ANY OF THE COMPANY'S OTHER JURISDICTIONS DENIED THE COMPANY'S REQUESTS TO ALIGN THE REMAINING LIVES OF THESE FACILITIES WITH THE ACTUAL LIVES?

A. No. In fact, around the same time as we made our request in 2007 to the North Dakota Commission, Minnesota and South Dakota both set the remaining lives of Sherco Unit 1, Sherco Unit 2, and the common facilities to 2022. Minnesota currently recognizes 2023 for Sherco Unit 2 and 2026 for Sherco Unit 1 and the common facilities' remaining lives. South Dakota currently recognizes 2023 as the remaining lives for these facilities. The remaining lives of Sherco Unit 1, Sherco Unit 2, and the common facilities in Michigan and Wisconsin are set according to a composite calculation based on the commission approvals from Minnesota, South Dakota, and North Dakota. North Dakota, is, therefore, the only jurisdiction that has failed to allow us to align our remaining lives of Sherco 1 and 2 and the common facilities with their actual lives.

Q. ARE THERE NEW PRODUCTION ASSETS WITH NEW REMAINING LIVES?

A. Several new generation units were placed into service since the Company's last rate case. These include Black Dog Unit 6 (March 2018); Pleasant Valley Wind (November 2015); Border Winds (December 2015); Courtenay Wind (November 2016); Lake Benton Wind (November 2019); and Foxtail Wind (December 2019). Consistent with the presentation of evidence in the applicable ADP proceedings, the Company is using a 25 year life for wind production assets, and we have established a 40 year initial life for Black Dog Unit 6 consistent with the lives assumed for the High Bridge and Riverside Other Production plants. Table 4 summarizes the new generating units' remaining life.

Table 4

Remaining Lives on New Production Units

Functional Class/Unit	Remaining Life at January 1, 2021 (in years)	Proposed Retirement Date
Other Production		
Black Dog Unit 6	37.3	March 2058
Pleasant Valley Wind	20.0	December 2040
Border Winds	20.0	December 2040
Courtenay Wind	20.9	November 2041
Lake Benton Wind	24.9	November 2044
Foxtail Wind	25.0	December 2044

Q. ARE THERE ANY NEW PRODUCTION ASSETS PLANNED TO GO INTO SERVICE IN 2020 AND THE 2021 TEST YEAR?

A. Yes. There are seven new wind facilities that we plan to place into service in 2020 and 2021. They include Blazing Star I, Jeffers, Community Wind North, Mower, and Crowned Ridge in 2020, and Freeborn and Dakota Range in 2021. The Company proposes that these production assets use a 25-year life from their respective in-service dates.

Q. IN GENERAL, WHAT CHANGES WERE MADE TO THE PRODUCTION NET SALVAGE RATES?

A. Every five years, we commission a Dismantling Study to determine net salvage rates for our production assets. Our 2020 Dismantling Study is included as Exhibit__(MPM-1), Schedule 4 and it is a site-specific cost estimate for all the Electric Production assets, including Hydro Production assets. The main purpose of the 2020 Dismantling Study was to estimate the present-day costs for retiring and demolishing the facilities, also known as final removals of

existing facilities. A complete list of the assumptions used in the cost estimates is included in my Schedule 4.

Q. WHAT CHANGES TO THE PRODUCTION NET SALVAGE RATES ARE BEING PROPOSED?

A. Except for a few units, the general trend is toward a more negative net salvage rate due to the increasing costs of removal. The Hydro Production Hennepin Island and Upper Dam units show a slight decrease in cost of removal as well as Nobles Wind. Exhibit__(MPM-1), Schedule 6, is the comparison of present and proposed net salvage rates. To calculate the proposed negative net salvage rates, we took the dismantling cost estimate for the entire facility and allocated it to each unit. Once allocated to each unit, the unit dismantling cost is divided by the unit's plant balance at January 1, 2020 to get the negative net salvage rate for each unit. The proposed percent changes to the net salvage rates for production assets are summarized in Table 5.

Table 5

Production Net Salvage Rate Changes

Functional Class/Unit	Change in Net Salvage Rate (%)	Change in removal reserve by end of life (in millions)
Steam Production		
Allen S. King	-3.7%	$26.5
Red Wing	-0.2%	$0.1
Sherco Unit 1	-10.0%	$72.2 (combined U1 & U2)
Sherco Unit 2	-10.0%	
Sherco Unit 3	-3.6%	$26.9
Wilmarth	-2.8%	$1.7
Hydro Production		
Hennepin Island	+3.3%	($0.6)
St. Croix Falls	-7.5%	$0.2
Upper Dam	+3.3%	($0.1)
Other Production		
Angus Anson Units 2 & 3	-6.8%	$5.9
Angus Anson Unit 4	-2.0%	$1.0
Black Dog Unit 5	-4.7%	$9.2
Blue Lake Units 1-4	-18.7%	$4.6
Blue Lake Units 7 & 8	-7.5%	$5.4
Grand Meadow Wind	-3.8%	$7.6
High Bridge	-1.2%	$4.7
Inver Hills	-8.4%	$5.1
Nobles Wind	+0.2%	($1.2)
Riverside	-8.2%	$25.3
Wind-to-Battery	-135.6%	$5.6

Q. FOR THE WIND PRODUCTION ASSETS GOING INTO SERVICE IN 2020 AND THE 2021 TEST YEAR, WHAT IS THE RECOMMENDED NET SALVAGE RATE?

A. There are seven new wind facilities that plan to place into service in 2020 and 2021. They include Blazing Star I, Jeffers, Community Wind North, Mower, and

Crowned Ridge in 2020, and Freeborn and Dakota Range in 2021. The Company proposes these production assets use a negative 10.5 percent for the net salvage rate.

Q. WHAT IS THE CHANGE IN NET SALVAGE FOR PRODUCTION ASSETS THAT WERE PLACED IN SERVICE SINCE THE LAST NORTH DAKOTA RATE CASE BUT PRIOR TO THE CURRENT YEAR?

A. There were six facilities placed in service prior to 2020 but after the last North Dakota rate case in 2013. These are the Pleasant Valley, Border Wind, Courtenay, Lake Benton, and Foxtail wind farms as well as Black Dog Unit 6. Table 6 below shows the current net salvage rate used to calculate North Dakota jurisdictional depreciation expense and the proposed rate based on the 2020 Dismantling Study.

Table 6

Net Salvage Rates for New Plants

Unit	Current Net Salvage %	Proposed Net Salvage %
Black Dog Unit 6	-5.0%	-10.3%
Blazing Star 1	-8.5%	-11.6%
Border Winds	-6.6%	-9.5%
Courtenay	-6.9%	-10.4%
Foxtail	-6.4%	-9.1%
Lake Benton	-8.5%	-10.8%
Pleasant Valley	-8.5%	-11.7%

Q. PLEASE SUMMARIZE THE PROPOSED CHANGES TO DEPRECIATION EXPENSE FOR PRODUCTION ASSETS INCLUDED IN THE TEST YEAR.

A. All of these changes are summarized in Table 2, above, which shows the overall $70.7 million NSPM total Company increase to depreciation expense by

functional class based on plant and depreciation reserve balances requested for the 2021 Test Year. Mr. Halama provides the revenue requirement impact of these changes for the 2021 Test Year.

B. TD&G Assets

Q. WHAT ARE TD&G ASSETS?

A. TD&G assets refer to all assets in the Transmission, Distribution, and General functional classes of assets. General assets can be either Electric Utility only (e.g. communication equipment which specifically supports only the Electric segment) or Common Utility (e.g. a service truck which can be deployed to support either Gas or Electric repairs). Common Utility assets are allocated out to the Electric and Gas segments based on various allocation methods.

Q. WHAT IS THE PURPOSE OF A TD&G DEPRECIATION STUDY?

A. A depreciation study is a comprehensive analysis of all TD&G assets in order to determine the statistical parameters for each account or group of assets to set depreciation rates and lives. The depreciation study encompasses four distinct phases. The first phase involves data collection and field interviews. The second phase is an initial data analysis. The third phase evaluates the information and analysis. Finally, the fourth phase involves the calculation of depreciation rates and documents the corresponding recommendations.

Q. WHEN WAS A TD&G DEPRECIATION STUDY LAST PERFORMED?

A. The Company directed Alliance Consulting Group to perform a comprehensive depreciation study (2017 Alliance Study) for the TD&G assets for the electric, gas, and common utilities. This study is performed every 5 years so the next study will be performed in 2022. Although gas assets were included in the 2017

Alliance Study, they are not part of this proceeding. All Company assets were included in the 2017 Alliance Study regardless of where they were located. The 2017 Alliance Study is included as Exhibit__(MPM-1), Schedule 7.

In the 2017 Alliance Study, the depreciable lives and net salvage rates for TD&G assets were reviewed. Their analysis included interviews with operating personnel responsible for purchase, maintenance, and utilization of the equipment. For the 2017 Alliance Study, the lives were adjusted if factors such as market forces, manufacturer expected life, technological obsolescence, business planning, known causes of retirement, and changes in expected future utilization affected the useful life of the asset.

Q. PLEASE PROVIDE AN OVERVIEW OF THE ANALYSIS THAT WAS DONE TO DETERMINE DEPRECIATION RATES FOR TD&G ASSETS.

A. The 2017 Alliance Study was only used for the resulting statistics (average service life, net salvage rate, and retirement curve) and not for the determination of the depreciation rate. The calculation of the average remaining life depreciation rate was done by Company personnel using the North Dakota depreciation reserve in conjunction with the depreciation statistics from the 2017 Alliance Study. The 2017 Alliance Study is included as Exhibit__(MPM-1), Schedule 7. Exhibit__(MPM-1), Schedule 8 compares the presently approved depreciation rates and parameters to the proposed values. The depreciation rate calculation is shown in Exhibit__(MPM-1), Schedule 9.

As a result of the comprehensive 2017 Alliance Study, we propose new depreciation lives, net salvage rates, retirement curves, and depreciation rates for TD&G assets in this filing to better reflect the expected useful lives of our

assets as well as removal costs and expected salvage. In general, depreciation lives are lengthening slightly and net salvage rates are becoming more negative due to increasing removal costs and decreasing gross salvage values. We also continue the use of an Average Remaining Life (ARL) method. This method allows an automatic true-up of differences created between the theoretical and actual reserves over the remaining lives of the assets.

Q. AS A RESULT OF THE 2017 ALLIANCE STUDY, WHAT CHANGES TO ELECTRIC TRANSMISSION AVERAGE SERVICE LIVES AND NET SALVAGE RATES ARE BEING PROPOSED?

A. For electric transmission accounts, the lives for half of the accounts increased. There are seven accounts, three that have increasing lives, one that had a decreasing life, and the lives of the other three accounts were unchanged. The account with the greatest change in life is FERC Account 354, Transmission Towers and Fixtures, which increased by five years. There is also a trend toward higher negative net salvage, with five accounts increasing (i.e. more negative), their negative net salvage and the remaining two accounts remaining unchanged. The account with the largest increase in negative net salvage is FERC Account 355, Poles and Fixtures, where the net salvage moved from negative 35 percent to negative 50 percent. There is a new account included for the first time, FERC Account 359, Roads and Trails. There are currently no assets in this account; it was added in anticipation of future additions. The average service life was set at 60 years with a zero net salvage rate.

Q. WHAT CHANGES TO ELECTRIC DISTRIBUTION AVERAGE SERVICE LIVES AND NET SALVAGE RATES ARE BEING PROPOSED?

A. There are 12 electric distribution accounts, of which six have increasing lives, one has a decreasing life, and the lives of the other five accounts are unchanged. The accounts with the greatest change in life are FERC Account 366, Underground Conduit, and FERC Account 367, Underground Conductor and Devices, both of which moved four years longer in life. There is also a trend toward higher negative net salvage with eight accounts increasing (i.e. more negative) their negative net salvage, one account decreased its negative net salvage, and the remaining three accounts remaining unchanged. The account with the largest increase in negative net salvage is FERC Account 364 Distribution Poles, Towers, and Fixtures where the net salvage moved from negative 100 percent to a negative 120 percent. The analysis of distribution assets used only North Dakota located assets.

Q. WHAT CHANGES TO ELECTRIC GENERAL AVERAGE SERVICE LIVES AND NET SALVAGE RATES ARE BEING PROPOSED?

A. For electric general accounts, the lives for most of the accounts remained the same. There are 17 accounts, three that have increasing lives, four that have decreasing lives, and the lives of the other 10 accounts were unchanged. The account with the greatest change in life is FERC Account 392.3, Trailers, which moved three years shorter in life. There is also a slight trend toward higher positive net salvage with five accounts increasing their positive net salvage and the remaining 12 accounts remaining unchanged. The account with the largest increase in positive net salvage is FERC Account 392.3, Trailers, where the net salvage moved from zero percent to a positive 20 percent, which equates to a change of 20 percent.

Q. WHAT CHANGES TO COMMON GENERAL AVERAGE SERVICE LIVES AND NET SALVAGE RATES ARE BEING PROPOSED?

A. For common general accounts, the lives for most of the accounts remained the same. There are 15 accounts, four that have increasing lives, four that have decreasing lives, and the lives of the other seven accounts were unchanged. The account with the greatest decrease in life is FERC Account 390, Structures and Improvements, which moved five years shorter in life. There is also a slight trend toward higher positive net salvage with five accounts increasing their positive net salvage, one account increasing their negative net salvage, and the remaining nine accounts remaining unchanged. The account with the largest increase in positive net salvage is FERC Account 392.3, Trailers, where the net salvage moved from zero percent to a positive 20 percent. The account with the largest increase in negative net salvage is FERC Account 390, Structures and Improvements, where the net salvage moved from negative 20 percent to a negative 25 percent.

Additionally, the Company is proposing a new subaccount under FERC Account 397 Communication Equipment for Smart Grid assets, specifically, the Advanced Grid Intelligence and Security (AGIS) Field Area Network (FAN) equipment. This equipment is discussed in more detail in the direct Testimony of Ms. Bloch. The Company is proposing a 10-year Average Service Life with a zero net salvage percent, which means that the expected salvage will equal the cost to remove the equipment. This is consistent with the current parameters of other similar communication assets. These assumptions result in a 10.00 percent initial depreciation rate.

Q. WHAT CHANGES TO ELECTRIC AND COMMON INTANGIBLE AVERAGE SERVICE LIVES AND NET SALVAGE RATES ARE BEING PROPOSED?

A. For both electric and common intangible accounts, no life or net salvage changes are recommended to existing accounts. FERC Account 302, Franchises and Consents, has been added to the schedules, and these assets are amortized over the term of the individual franchise agreements. Also, a new sub account for FERC Account 303, Software, was added for the new large base computer systems for the General Ledger and Work and Asset Management. This group has a proposed average life of 15 years. Common intangible had previously approved categories of three, five, seven, and ten year lives. Electric intangible only had a five-year life category. Therefore, we are adding new sub accounts to the electric utility so each utility has the categories of three, five, seven, ten, and fifteen year lives in anticipation of future additions.

Q. IS THE COMPANY PROPOSING TO CONTINUE THE USE OF AVERAGE REMAINING LIFE DEPRECIATION RATES FOR TD&G?

A. Yes.

IV. NUCLEAR DECOMMISSIONING TRUST

Q. WHAT DO YOU DISCUSS IN THIS SECTION?

A. This section addresses the changes to the calculation of the nuclear decommissioning accrual that have occurred since the last case. There is a new engineering cost estimate, updated escalation and earnings rates, current bank balances, and elimination of the Escrow Fund that must now be reflected in current rates.

Q. WHAT IS THE NUCLEAR DECOMMISSIONING ACCRUAL?

A. Nuclear decommissioning accrual is the method used to accumulate the final removal costs for the Company's three nuclear units. The amounts collected through general rates are deposited externally in a trust fund per Nuclear Regulatory Commission (NRC) rules. The annual accruals are calculated from a detailed engineering cost estimate for removal of the plant and of storage of the fuel until the federal government takes possession of all the fuel assemblies. These accruals are then invested by professional asset managers in a risk-mitigating strategy to grow the accrued amount while hedging losses.

This is in contrast to how the Company addresses dismantling costs for its other production assets, where the dismantling costs are not segregated into a trust account nor invested.

Q. WHAT CHANGES ARE YOU RECOMMENDING?

A. The Company is proposing to increase the annual nuclear decommissioning accrual from $276,513 set in Case No. PU-12-813 to $2,250,002. This increases the annual cost by $1,973,489 for the North Dakota jurisdiction. Nuclear decommissioning accruals are calculated at the jurisdictional level and not at the total NSPM Company level.

Q. WHAT IS CAUSING THE NUCLEAR DECOMMISSIONING ACCRUAL TO INCREASE?

A. The increase is driven primarily by a decrease in the earnings assumption of the trust. This change in earnings assumption accounts for approximately $1.6 million of the impact to the North Dakota jurisdiction. Additionally, the increase in the accrual calculation is driven by the increase in the escalation rate

and an increase in the jurisdictional allocation offset by a decrease in other factors.

Q. PLEASE DESCRIBE THE DRIVERS OF THESE CHANGES.

A. The decrease in earnings assumptions is the result of lower long-term expected returns for the trust portfolio. A key factor impacting this lower long-term return is lower long-term interest rates. In light of a low-interest-rate environment and the need to safely invest trust assets, we are forecasting lower earnings from the trust portfolio and must, therefore, accrue more funds now. If we wait to recover decommissioning costs later, we run the risk of having customers who did not benefit from the nuclear fleet while it was in service having to pay for its decommissioning. Further, we are forecasting increased costs of decommissioning our nuclear fleet. This increases the amount of funding required to decommission the plants in future dollars.

Jurisdictional allocations are the second biggest driver of the changes in the accrual amount. Because our nuclear fleet serves all of our customers in the five state NSP System, we must allocate the responsibility for nuclear decommissioning costs to all of our customers. We use the same allocation methodology for nuclear decommissioning costs as we do for other generation costs. Between 2012 and 2020 the jurisdictional allocator increased from 4.8195 percent to 5.1744 percent and was the second largest driver of change. The jurisdictional allocator for the nuclear decommissioning accrual is derived from the Company's North Dakota 12 CP demand allocator for NSPM of 6.1731 percent (presented in the Direct Testimony of Ms. Jannell Marks) multiplied by the 36-month (18 month leading/18 month lagging) FERC approved Interchange Demand Allocator for the NSPM to Northern States Power –

Wisconsin (NSPW) Interchange Agreement. Consistent with past practice, this allocation methodology is used to determine the portion of the cost estimate that is assigned to North Dakota and we are only updating the allocation amounts, but not changing our methodology.

Q. WHICH NUCLEAR DECOMMISSIONING COST ESTIMATE STUDY HAS BEEN USED FOR THIS PROCEEDING?

A. This proceeding uses the 2017 cost estimate prepared by TLG Services, the engineering consultant the Company has historically used to prepare these estimates. TLG Services has extensive industry experience and currently provides estimates for the majority of nuclear production plants in the country. The study was performed in 2017 and provided costs in 2017 dollars.

Q. WHAT EARNINGS AND ESCALATION RATES ARE BEING USED TO CALCULATE THE NUCLEAR DECOMMISSIONING ACCRUAL?

A. The accrual calculation is run on each unit using two single effective earnings rates, one rate for the operating period (radiological) and one for the post-shutdown period (spent fuel/site restoration). These rates which reflect the anticipated amount of investment proceeds we expect to earn on the funds in trust are calculated and provided by Goldman Sachs Asset Management (GSAM), our professional asset manager, based on asset allocation recommendations made at the same time as the development of the 2017 cost estimate. The operating period rates are 5.00 percent for Monticello, down from 5.35 percent in 2011; 4.99 percent for Prairie Island Unit 1, down from 5.50 percent in 2011; and 5.04 percent for Prairie Island Unit 2, down from 5.53 percent in 2011. The post shutdown period rates are 4.43 percent for Monticello, down from 4.82 percent in 2011;4.15 percent for Prairie Island

Unit 1, down from 4.66 percent in 2011; and 4.09 percent for Prairie Island Unit 2, down from 4.57 percent in 2011. Cost escalation rates were also provided by GSAM. The cost escalation rates in the 2017 study are 4.05 percent for labor costs and 2.85 percent for non-labor costs. This is not directly comparable to the Operations rate of 3.63 percent and the post decommissioning rate of 2.63 percent that was used in the 2011 study but uses the same base assumptions around inflation and wage increase rates.

Table 7

Earnings Rates Changes

Nuclear Unit	Period	2011 Return	2017 Return	Change
Monticello	Pre-decommission start	5.35%	5.00%	(0.35%)
Monticello	Post-decommission start	4.82%	4.43%	(0.39%)
PI Unit 1	Pre-decommission start	5.50%	4.99%	(0.51%)
PI Unit 1	Post-decommission start	4.66%	4.15%	(0.51%)
PI Unit 2	Pre-decommission start	5.53%	5.04%	(0.49%)
PI Unit 2	Post-decommission start	4.57%	4.09%	(0.48%)

Table 8

Qualified Trust Fund Balance by Unit (June 30, 2020)

Monticello	$1,076,666,911
Prairie Island 1	622,498,987
Prairie Island 2	695,439,515
Total	$2,394,605,413

Q. WHAT IS THE BALANCE FOR NORTH DAKOTA IN THE QUALIFIED TRUST?

A. The accrual calculation uses qualified trust balances as of June 30, 2020. The market value of the fund, net of expected taxes on unrealized gains, for each

unit for the North Dakota jurisdiction issued as a starting point for each unit's accrual calculation. Table 7 shows the balances of the funds as of June 30, 2020 used to calculate the accrual.

Consistent with our 2015 Filing in Case No. PU-07-776 regarding the then-existing nuclear decommissioning escrow account, the beginning balance of the trust also includes the pour-over of the then-existing escrow funds. In addition to the North Dakota jurisdictional fund balances, past wholesale balances are expected to be reallocated across all jurisdictions. When this reallocation occurs, North Dakota will realize a benefit for these dollars as they impact the beginning balance of future decommissioning accruals.

Q. DOES THE COMPANY'S TREATMENT OF THE NUCLEAR DECOMMISSIONING ACCRUAL REQUESTED IN THIS PROCEEDING ALIGN IT WITH ITS OTHER JURISDICTIONS?

A. Yes. The company is currently using the 2017 Triennial Nuclear Decommissioning proceeding in Minnesota (Docket No. E002/M-17-828, submitted December 1, 2018) as the basis for the nuclear decommissioning accrual in Minnesota. This study was adjusted in the 2019 Integrated Resource Plan to integrate the effects of the DOE refunds. We believe the same outcome should be used in North Dakota as well.

Q. WHAT IS THE DEPARTMENT OF ENERGY (DOE) REFUND?

A. These are payments related to the DOE's partial breach of its contract to begin accepting spent nuclear fuel beginning on or before January 31, 1998. Under settlement, the DOE has agreed to pay for costs associated with their failure to begin taking spent fuel in 1998 including: a) any additional pool storage costs

and other plant modifications; b) dry casks storage and costs directly related to such storage (e.g. internal labor, overhead, operation and maintenance, training and security); and c) additional property taxes resulting from the on-site dry cask storage or other plant modifications. The Company has historically refunded the amount paid by the DOE under this settlement to customers in the year received.

Q. PLEASE SUMMARIZE THE INTERACTION OF THE ACCRUAL AND THE DOE SETTLEMENT PAYMENTS FOR THE NORTH DAKOTA JURISDICTION.

A. Currently, the DOE settlement payments allocated to North Dakota are being refunded to customers as received. In other jurisdictions these amounts have been used to offset accrual increases and avoid rate increases. The Company is proposing in this case to utilize projected future DOE reimbursements after shutdown to offset the expected costs associated with spent fuel disposal within the NDT accrual. The company has developed two scenarios for calculating the amount of the DOE offset. There are currently both a 75 percent and a 90 percent scenario. The percentages designate how much of the future expected spent fuel costs will be offset by DOE reimbursements. In the amounts calculated for this case, we are assuming an average of the 75 percent and 90 percent scenarios as a conservative approach. The company used a third-party consultant[1] in the 2017 Triennial Nuclear Decommissioning to validate that the company's inclusion of these funds is reasonable.

[1] Adam Levin is a sole proprietor doing business as AHL Consulting, delivering consulting services to the commercial nuclear power industry and the U.S. Department of Energy, providing expertise in all areas of decommissioning and spent nuclear fuel (SNF) management strategy, operations and finances.

Q. WHAT IS THE IMPACT TO ACCRUAL EXPENSE OF ADOPTING THE COMPANY'S RECOMMENDATION WITH RESPECT TO THE DOE REFUND?

A. The accrual scenario we are recommending with the average of the 75 percent and 90 percent of the DOE reimbursements is $2,250,002. If North Dakota were to adopt the same 75 percent offset assumption as Minnesota, the accrual would increase to $2,613,726, or an increase of $363,724 per year.

Q. WHAT IS THE END-OF-LIFE (EOL) NUCLEAR FUEL ACCRUAL?

A. The EOL Accrual is a cost recovery mechanism that reserves for the unspent and unamortized nuclear fuel that is in the reactors at the time the nuclear reactors are shut down. These reserves accrete over the life of the plant through a periodic expense, similar to other end of life and removal reserves.

Q. HOW DOES THE END-OF-LIFE (EOL) NUCLEAR FUEL ACCRUAL WORK?

A. The EOL Accrual and Decommissioning Accrual both function by setting funds aside for known future obligations. However, the EOL Accrual is different in that its funds are held within the Company as opposed to a separate trust. Because of this, there is an offset to rate base for the cumulative EOL funding. Customers receive offsetting benefit from this funding through a reduction in rate base and in the resulting reduction in general rates.

The intent of EOL recovery is that the cumulative effect of the accrual and corresponding rate base reduction will maintain a constant annual net cost to customers over time. The EOL rate base reduction and accruals collected are put into rates in the Company's general rate case filings. At that point both are in parity – meaning that for the first year the customer pays the full accrual amount and receives the full benefit of the rate base impact through rates. However, in future years the customer needs to be compensated for the

additional offset to rate base that it should receive for the contributions it has made since the general rate was approved. To compensate for this, the assumed accrual increases to an amount that includes the rate base impact the customer should receive. In this way, the customer is credited for the benefit they should receive by essentially investing the assumed return into the EOL fund balance. As such, every year that passes, the assumed accrual will increase without an increase to rates, to compensate for the assumed interest until another general rate case is filed and ordered on. At this point, the higher accrual is put into rates, offset by a larger rate base offset.

In summary, the EOL Accrual increases annually without an increase in rates as a result of the compensating effect of the assumed interest on the rate base reduction. This process resets or rebalances every time a new general rate case is filed where the rate base benefit is adjusted to reflect the past amount contributed.

Q. IS THERE A REVISION TO THE EOL NUCLEAR FUEL ACCRUAL?

A. Yes. Based on updated assumptions around the cost of fuel and the how the fuel will be used in the reactors, the amount the Company needs to recover has increased from the last approved filing. In the 2017 Triennial Filing, this accrual was approved for $2,856,756 effective in 2021.

V. CONCLUSION

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. The Company has made considerable investments in the NSP System since 2013 to help ensure safe, reliable, and affordable electric service to our

customers. Many of these investments have been granted advanced determinations of prudence by the Commission and those that have not are prudent.

The Company must update its depreciation expense given the passage of time since our last rate case. The changes in our depreciation expense are consistent with current known and assumed remaining lives of our production plant, currently known net salvage rates, and other considerations. Additionally, the Company's proposed TD&G depreciation rates are consistent with appropriate studies and conform to past practice. Overall, the Company's proposed depreciation rates are reasonable and should be approved by the Commission.

Also given the passage of time since our last rate case, the Company must increase amounts accrued to fund the Nuclear Decommissioning Trust. The costs to fund the trust are a necessary component of providing the benefits of a strong nuclear fleet to our customers, are reasonable, and should be approved by the Commission.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

STATE OF NORTH DAKOTA
BEFORE THE
PUBLIC SERVICE COMMISSION

In the Matter of the Application of Northern States Power Company, a Minnesota Corporation For Authority to Increase Rates for Electric Service in North Dakota	))))	Case No. PU-20-___

AFFIDAVIT OF
Mark P. Moeller

I, the undersigned, being duly sworn, depose and say that the foregoing is the Direct Testimony of the undersigned, and that such Direct Testimony and the exhibits or schedules sponsored by me to the best of my knowledge, information and belief, are true, correct, accurate and complete, and I hereby adopt said testimony as if given by me in formal hearing, under oath.

Mark P. Moeller

Subscribed and sworn to before me, this 20 day of October, 2020.

Notary Public
My Commission Expires: January 31, 2025

STEVEN DELMONT SPIESS
NOTARY PUBLIC
MINNESOTA
My Commission Expires Jan. 31, 2025

Statement of Qualifications

Mark P. Moeller
Director, Capital Asset Accounting
401 Nicollet Mall, Minneapolis, Minnesota

Current Responsibilities:

My current position with Xcel Energy Services (XES) is Director, Capital Asset Accounting. I am responsible for:

- Capital investment cost recovery process, which includes the development of detailed actuarial analysis, regulatory filings with the various state and federal rate regulatory commissions, and expert testimony to support recovery levels in rate proceedings;
- Accounting for and reporting on the nuclear plant decommissioning funding process, which includes the development of detailed engineering cost studies combined with a complete financial and economic analysis to develop detailed regulatory filings to establish the ratepayer funding levels necessary to accumulate the total future decommissioning cost requirement;
- Plant asset-related ratemaking process, which supports the rate filings for all of the Xcel Energy Operating Companies' retail and wholesale jurisdictions; and
- Overseeing capital asset reporting including internal reporting as well as external report to meet SEC, FERC, IRS and state specific filing requirements
- Capitalization policy, including policy development, interpretation and alignment with GAAP and FERC principles and requirements.

Previous Experience:

I have worked for Xcel Energy since 2003 and held various financial management roles in financial controls, corporate accounting, internal reporting and process improvement.

Education:

I received a Bachelor of Science degree with a major accounting, from Saint John's University in 1989. I received an Masters of Business Administration degree from the University of Minnesota Carlson School of Management in 1996.

Account Description	Beginning Balance 1/1/2013	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2019
ELECTRIC INTANGIBLE						
302 Franchise and Consents	$ 95,945	$ 167,361	$ -	$ -	$ -	$ 263,307
303 Computer Software 3 Year	-	-	-	201,839	-	201,839
303 Computer Software 5 Year	64,370,730	108,104,864	(27,828,370)	(793,698)	-	143,853,526
303 Computer Software 7 Year	-	-	(621,977)	621,977	-	-
Electric Intangible Plant Total	**$ 64,466,676**	**$ 108,272,225**	**$ (28,450,347)**	**$ 30,118**	**$ -**	**$ 144,318,672**
ELECTRIC TRANSMISSION						
350 Land - Fee	$ 16,683,316	$ 20,530,583	$ (12,578,003)	$ (556,683)	$ -	$ 24,079,212
350 Land - Other	62,841,275	77,997,686	-	495,238	-	141,334,199
352 Structures and Improvements	53,469,433	69,526,271	(804,800)	3,675,716	-	125,866,620
353 Station Equipment	889,409,394	403,234,485	(35,001,603)	24,906,329	-	1,282,548,604
354 Towers and Fixtures	113,929,817	5,383,059	(502,165)	(788,431)	-	118,022,279
355 Poles and Fixtures	621,903,675	840,912,429	(22,011,505)	219,714	-	1,441,024,312
356 Overhead Conductors and Devices	327,296,834	286,470,023	(18,911,163)	745,247	-	595,600,941
357 Underground Conduit	12,606,675	17,331,818	(55,087)	-	-	29,883,406
358 Underground Conductor and Devices	21,431,822	15,502,164	(12,824)	64,808	-	36,985,970
Electric Transmission Plant Total	**$ 2,119,572,240**	**$ 1,736,888,517**	**$ (89,877,149)**	**$ 28,761,937**	**$ -**	**$ 3,795,345,544**
ELECTRIC DISTRIBUTION (ND ONLY)						
360 Land - Fee	$ 614,755	$ -	$ -	$ (45,179)	$ -	$ 569,576
361 Structures and Improvements	821,584	817,671	(3,554)	(546,301)	-	1,089,400
362 Station Equipment	16,816,017	21,653,872	(2,860,592)	(1,146,274)	-	34,463,023
364 Poles, Towers, and Fixtures	12,228,441	5,381,120	(367,492)	-	-	17,242,070
365 Overhead Conductors and Devices	17,608,241	7,497,952	(2,532,596)	-	-	22,573,598
366 Underground Conduit	5,676,750	1,673,183	(30,883)	-	-	7,319,050
367 Underground Conductor and Devices	46,748,364	21,131,257	(1,423,755)	-	-	66,455,866
368 Line Transformers	11,563,082	7,204,922	(4,627,274)	12,331,960	-	26,472,691
368 Line Capacitors	552,642	255,697	(41,253)	-	-	767,086
369 Overhead Services	5,159,565	583,178	(97,732)	-	-	5,645,012
369 Underground Services	7,657,126	1,756,231	(28,362)	-	-	9,384,994
370 Meters	5,326,177	1,253,842	(2,012,963)	2,679,189	-	7,246,245
370 Meters - Old	177,749	-	(177,749)	-	-	-
373 Street Lighting and Signal Systems	1,925,552	2,301,081	(1,020,586)	-	-	3,206,047
Electric Distribution Plant Total (ND Only)	**$ 132,876,047**	**$ 71,510,006**	**$ (15,224,790)**	**$ 13,273,394**	**$ -**	**$ 202,434,657**

Account	Description	Beginning Balance 1/1/2013	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2019
ELECTRIC GENERAL							
389	Land - Fee	$ 4,438,256	$ 45,181	$ -	$ -	$ -	$ 4,483,437
389	Land - Other	665	-	-	-	-	665
390	Structures and Improvements	61,149,065	21,378,962	(8,504,122)	(1,053,394)	-	72,970,511
390	Structures and Improvements - Leasehold Improvements	-	1,039,781	-	35,652	-	1,075,433
391	Office Furniture and Equipment	24,221,227	8,666,371	(775,303)	-	-	32,112,296
391	Network Equipment	6,919,037	55,237,610	(13,569,389)	-	-	48,587,258
392	Automobiles	416,526	6,250,682	(283,699)	-	-	6,383,510
392	Light Trucks	23,049,501	17,122,104	(5,108,754)	-	-	35,062,851
392	Trailers	9,113,657	13,205,904	(220,951)	0	-	22,098,610
392	Heavy Trucks	50,035,830	68,758,603	(2,154,591)	(0)	-	116,639,842
393	Stores Equipment	1,781,049	338,884	(488,196)	0	-	1,631,738
394	Tools, Shop, and Garage Equipment	57,234,442	57,277,756	(11,373,024)	8,920	-	103,148,094
395	Laboratory Equipment	3,850,584	1,712,703	(2,578,386)	-	-	2,984,900
396	Power Operated Equipment	27,557,332	26,490,573	(2,061,848)	-	-	51,986,057
397	General Communication Equipment	14,651,825	4,672,811	(1,684,502)	(194,423)	-	17,445,712
397	Communication Equipment - Two Way	252,239	57,882,744	(167,589)	441,995	-	58,409,389
397	Comm. & Telecomm. Equipment - AES	6,102,771	968,955	-	-	-	7,071,726
397	Comm. & Telecomm. Equipment - EMS	10,261,010	32,303,558	(1,186,930)	297,055	-	41,674,693
398	Miscellaneous Equipment	2,794,004	1,112,115	(256,388)	(30,118)	-	3,619,613
	Electric General Plant Total	**$ 303,829,019**	**$ 374,465,299**	**$ (50,413,671)**	**$ (494,313)**	**$ -**	**$ 627,386,334**
ELECTRIC STEAM PRODUCTION							
310	Land & Land Rights - Fee	$ 9,446,779	$ 64,855	$ (41,579)	$ (950,861)	$ -	$ 8,519,194
310	Land & Land Rights - Other	(10,137)	19,993	-	(1,831)	-	8,024
311	Structures & Improvements	312,827,110	25,157,348	(13,955,250)	(32,216,098)	96,034	291,909,144
312	Boiler Plant Equipment	1,342,597,221	266,668,512	(130,098,285)	(14,257,290)	-	1,464,910,157
314	Turbogenerator Units	290,614,318	81,707,867	(39,086,429)	(14,266,338)	-	318,969,418
314	Turbogenerator Units - Sherco 3 HFU	16,700,339	17,158	-	(16,717,497)	-	-
315	Accessory Electric Equipment	167,176,816	35,423,940	(9,380,823)	(5,479,143)	-	187,740,791
315	Accessory Electric Equipment - Sherco 3 HFU	7,656,037	15,561	-	(7,671,598)	-	-
316	Miscellaneous Power Plant Equipment	53,846,319	5,294,098	(1,557,973)	(3,516,681)	-	54,065,763
	Electric Steam Production Plant Total	**$ 2,200,854,803**	**$ 414,369,332**	**$ (194,120,339)**	**$ (95,077,338)**	**$ 96,034**	**$ 2,326,122,491**

Account Description	Beginning Balance 1/1/2013	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2019
ELECTRIC NUCLEAR PRODUCTION						
302 Franchises & Consents	$ 121,634,121	$ 129,598,698	$ -	$ -	$ -	$ 251,232,819
320 Land & Land Rights - Fee	1,153,084	607,549	-	-	-	1,760,634
320 Land and Land Rights - Other	1,729	-	-	-	-	1,729
321 Structures & Improvements	432,300,869	174,352,924	(25,746,132)	(848,812)	-	580,058,850
322 Reactor Plant Equipment	1,004,535,965	828,538,822	(65,471,121)	141,051,839	-	1,908,655,504
323 Turbogenerator Units	444,629,223	336,934,988	(13,384,258)	(134,364,462)	-	633,815,490
324 Accessory Electric Equipment	284,871,603	281,196,774	(12,138,704)	-	-	553,929,673
325 Miscellaneous Power Plant Equipment	142,877,762	71,067,298	(6,373,269)	62,090	-	207,633,882
Electric Nuclear Production Plant Total	**$ 2,432,004,356**	**$ 1,822,297,053**	**$ (123,113,484)**	**$ 5,900,655**	**$ -**	**$ 4,137,088,581**
ELECTRIC HYDRO PRODUCTION						
302 Franchises & Consents	$ 2,857,039	$ -	$ -	$ -	$ -	$ 2,857,039
330 Land & Land Rights - Fee	298,638	-	(5,775)	-	-	292,863
330 Land & Land Rights - Other	1,400,213	-	-	-	-	1,400,213
331 Structures & Improvements	542,363	979,938	(133,821)	57,124	-	1,445,604
332 Reservoirs, Dams & Waterways	6,335,245	5,104,921	(373,593)	-	-	11,066,573
333 Water Wheels, Turbines & Generators	7,844,873	2,616,866	(284,672)	-	-	10,177,067
334 Accessory Electric Equipment	2,716,375	575,961	(35,364)	-	-	3,256,972
335 Miscellaneous Power Plant Equipment	60,824	-	-	-	-	60,824
Electric Hydro Production Plant Total	**$ 22,055,570**	**$ 9,277,686**	**$ (833,224)**	**$ 57,124**	**$ -**	**$ 30,557,156**
ELECTRIC OTHER PRODUCTION						
340 Land & Land Rights - Fee	$ 4,958,572	$ 1,105,332	$ (96,560)	$ (1,330,779)	$ -	$ 4,636,565
340 Land & Land Rights - Other	10,368,887	-	(1,236)	-	-	10,367,652
340 Wind Rights	3,884,834	2,232,514	-	10,672,452	-	16,789,800
341 Structures & Improvements	167,003,738	136,044,302	(1,602,435)	32,885,943	-	334,331,548
342 Fuel Holders, Producers & Accessories	78,725,816	12,981,018	(3,425,324)	(61,172,438)	-	27,109,072
343 Prime Movers	-	652,252	-	139,802,454	-	140,454,706
344 Generators	1,404,024,150	1,217,119,568	(50,809,594)	(50,893,823)	-	2,519,440,301
345 Accessory Electric Equipment	165,644,290	123,260,685	(4,928,829)	11,639,994	-	295,616,140
346 Miscellaneous Power Plant Equipment	21,267,808	2,797,215	(242,974)	9,081,430	-	32,903,480
348 Energy Storage Equipment	-	-	-	4,128,902	-	4,128,902
Electric Other Production Plant Total	**$ 1,855,878,097**	**$ 1,496,192,887**	**$ (61,106,952)**	**$ 94,814,135**	**$ -**	**$ 3,385,778,166**
TOTAL ELECTRIC UTILITY	**$ 9,131,536,807**	**$ 6,033,273,004**	**$ (563,139,957)**	**$ 47,265,712**	**$ 96,034**	**$ 14,649,031,600**

Account	Account Description	Beginning Balance 1/1/2013	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2019
COMMON INTANGIBLE							
301	Intangible Organization Costs	$ 100,608	$ -	$ -	$ -	$ -	$ 100,608
302	Franchise and Consents	-	-	-	-	-	-
303	Computer Software 3 Year	-	9,602,650	-	7,611,149	-	17,213,800
303	Computer Software 5 Year	-	104,012,470	(72,968,024)	197,603,730	-	228,648,176
303	Computer Software 7 Year	-	-	(41,284,956)	44,140,612	-	2,855,656
303	Computer Software 10 Year	-	1,110,368	(14,716,203)	68,449,240	-	54,843,405
303	Computer Software 15 year	-	104,814,510	-	61,015,418	-	165,829,929
303	Computer Software - All	242,565,884	170,393,967	(34,139,702)	(378,820,150)	-	-
	Common Intangible Plant Total	**$ 242,666,492**	**$ 389,933,966**	**$ (163,108,884)**	**$ -**	**$ -**	**$ 469,491,574**
COMMON GENERAL							
389	Land - Fee	$ 4,939,939	$ 1,251,397	$ -	$ -	$ -	$ 6,191,336
389	Land - Other	5,572	-	-	-	-	5,572
390	Structures and Improvements	129,498,058	77,985,752	(17,065,551)	(2,518,050)	-	187,900,208
390	Structures and Improvements - Leasehold Improvements	1,163,412	16,895,528	(1,833,753)	1,869,142	-	18,094,329
391	Office Furniture and Equipment	30,825,969	14,596,528	(15,744,870)	(1,525,701)	-	28,151,926
391	Network Equipment	56,638,244	176,540,281	(87,490,060)	-	-	145,688,465
392	Automobiles	408,597	1,239,502	(165,915)	-	-	1,482,184
392	Light Trucks	4,610,345	2,143,853	(2,756,525)	-	-	3,997,674
392	Trailers	1,172,999	196,533	(256,671)	-	-	1,112,860
392	Heavy Trucks	4,576,760	2,600,926	(1,252,353)	-	-	5,925,333
393	Stores Equipment	152,859	114,654	(21,350)	-	-	246,162
394	Tools, Shop, and Garage Equipment	2,662,096	2,782,725	(565,053)	38,530	-	4,918,298
395	Laboratory Equipment	36,686	-	(36,686)	-	-	-
396	Power Operated Equipment	836,688	491,275	(300,841)	-	-	1,027,122
397	Comm. & Telecomm. Equipment	1,685,395	19,488	(1,556,033)	-	-	148,850
397	Communication Equipment - Two Way	3,738,356	76,870	(3,738,356)	-	-	76,870
397	Communication Equipment - Smart Grid	-	529,266	-	-	-	529,266
398	Miscellaneous Equipment	917,274	7,245	(688,911)	-	-	235,608
	Common General Plant Total	**$ 243,869,248**	**$ 297,471,824**	**$ (133,472,927)**	**$ (2,136,080)**	**$ -**	**$ 405,732,065**
	TOTAL COMMON UTILITY	**$ 486,535,740**	**$ 687,405,790**	**$ (296,581,812)**	**$ (2,136,080)**	**$ -**	**$ 875,223,638**
	TOTAL - ALL UTILITIES	**$ 9,618,072,547**	**$ 6,720,678,794**	**$ (859,721,769)**	**$ 45,129,632**	**$ 96,034**	**$ 15,524,255,238**

Account Description	Beginning Balance 1/1/2013	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2013
ELECTRIC INTANGIBLE						
302 Franchise and Consents	$ 95,945	$ 132,639	$ -	$ -	$ -	$ 228,585
303 Computer Software 3 Year	-	-	-	-	-	-
303 Computer Software 5 Year	64,370,730	8,333,040	(855,828)	30,118	-	71,878,061
303 Computer Software 7 Year	-	-	-	-	-	-
Electric Intangible Plant Total	**$ 64,466,676**	**$ 8,465,679**	**$ (855,828)**	**$ 30,118**	**$ -**	**$ 72,106,645**
ELECTRIC TRANSMISSION						
350 Land - Fee	$ 16,683,316	$ 3,968,369	$ (658,109)	$ 8,838	$ -	$ 20,002,414
350 Land - Other	62,841,275	33,992,314	-	(425)	-	96,833,165
352 Structures and Improvements	53,469,433	2,267,147	(70,691)	156,692	-	55,822,581
353 Station Equipment	889,409,394	58,786,737	(12,886,849)	(109,608)	-	935,199,674
354 Towers and Fixtures	113,929,817	4,851,346	(90,901)	-	-	118,690,261
355 Poles and Fixtures	621,903,675	43,111,337	(1,943,392)	(119,425)	-	662,952,195
356 Overhead Conductors and Devices	327,296,834	12,456,962	(4,679,708)	801,200	-	335,875,287
357 Underground Conduit	12,606,675	95,169	-	-	-	12,701,844
358 Underground Conductor and Devices	21,431,822	498,657	-	64,808	-	21,995,288
Electric Transmission Plant Total	**$ 2,119,572,240**	**$ 160,028,038**	**$ (20,329,649)**	**$ 802,079**	**$ -**	**$ 2,260,072,708**
ELECTRIC DISTRIBUTION (ND ONLY)						
360 Land - Fee	$ 614,755	$ -	$ -	$ -	$ -	$ 614,755
361 Structures and Improvements	821,584	96,089	(3,147)	-	-	914,526
362 Station Equipment	16,816,017	5,540,532	(136,711)	8,980	-	22,228,818
364 Poles, Towers, and Fixtures	12,228,441	469,085	(67,490)	-	-	12,630,036
365 Overhead Conductors and Devices	17,608,241	974,345	(709,101)	-	-	17,873,485
366 Underground Conduit	5,676,750	125,940	(5,268)	-	-	5,797,422
367 Underground Conductor and Devices	46,748,364	3,802,532	(255,414)	-	-	50,295,482
368 Line Transformers	11,563,082	-	(874,109)	-	-	10,688,973
368 Line Capacitors	552,642	-	(1,140)	-	-	551,503
369 Overhead Services	5,159,565	94,813	(16,034)	-	-	5,238,345
369 Underground Services	7,657,126	179,823	(2,819)	-	-	7,834,129
370 Meters	5,326,177	-	-	-	-	5,326,177
370 Meters - Old	177,749	-	(177,749)	-	-	-
373 Street Lighting and Signal Systems	1,925,552	126,924	(73,464)	-	-	1,979,012
Electric Distribution Plant Total (ND Only)	**$ 132,876,047**	**$ 11,410,082**	**$ (2,322,446)**	**$ 8,980**	**$ -**	**$ 141,972,663**

Account	Account Description	Beginning Balance 1/1/2013	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2013
ELECTRIC GENERAL							
389	Land - Fee	$ 4,438,256	$ -	$ -	$ -	$ -	$ 4,438,256
389	Land - Other	665	-	-	-	-	665
390	Structures and Improvements	61,149,065	(1,392,235)	(3,173,978)	(35,652)	-	56,547,200
390	Structures and Improvements - Leasehold Improvements	-	-	-	35,652	-	35,652
391	Office Furniture and Equipment	24,221,227	400,766	(69,718)	-	-	24,552,275
391	Network Equipment	6,919,037	6,115,959	(1,096,352)	-	-	11,938,644
392	Automobiles	416,526	23,206	-	-	-	439,733
392	Light Trucks	23,049,501	2,606,035	-	-	-	25,655,537
392	Trailers	9,113,657	1,257,908	-	-	-	10,371,565
392	Heavy Trucks	50,035,830	9,446,716	-	-	-	59,482,545
393	Stores Equipment	1,781,049	329,269	(261,474)	-	-	1,848,844
394	Tools, Shop, and Garage Equipment	57,234,442	10,657,162	(1,884,820)	-	-	66,006,784
395	Laboratory Equipment	3,850,584	59,124	(308,567)	-	-	3,601,141
396	Power Operated Equipment	27,557,332	2,417,797	-	-	-	29,975,129
397	General Communication Equipment	14,651,825	1,567,872	(119,530)	(195,704)	-	15,904,463
397	Communication Equipment - Two Way	252,239	184,073	(19,682)	-	-	416,630
397	Comm. & Telecomm. Equipment - AES	6,102,771	953,331	-	-	-	7,056,102
397	Comm. & Telecomm. Equipment - EMS	10,261,010	6,913,933	(834,712)	195,704	-	16,535,935
398	Miscellaneous Equipment	2,794,004	106,682	(13,712)	(30,118)	-	2,856,855
	Electric General Plant Total	**$ 303,829,019**	**$ 41,647,598**	**$ (7,782,545)**	**$ (30,118)**	**$ -**	**$ 337,663,954**
ELECTRIC STEAM PRODUCTION							
310	Land & Land Rights - Fee	$ 9,446,779	$ -	$ -	$ -	$ -	$ 9,446,779
310	Land & Land Rights - Other	(10,137)	19,993	-	-	-	9,856
311	Structures & Improvements	312,827,110	3,928,133	(1,377,198)	(493,593)	-	314,884,452
312	Boiler Plant Equipment	1,342,597,221	59,914,868	(16,138,106)	-	-	1,386,373,983
314	Turbogenerator Units	290,614,318	29,810,658	(451,791)	16,717,497	-	336,690,683
314	Turbogenerator Units - Sherco 3 HFU	16,700,339	17,158	-	(16,717,497)	-	-
315	Accessory Electric Equipment	167,176,816	13,433,328	(605,482)	7,671,598	-	187,676,261
315	Accessory Electric Equipment - Sherco 3 HFU	7,656,037	15,561	-	(7,671,598)	-	-
316	Miscellaneous Power Plant Equipment	53,846,319	1,362,933	(763,227)	(708,194)	-	53,737,832
	Electric Steam Production Plant Total	**$ 2,200,854,803**	**$ 108,502,633**	**$ (19,335,804)**	**$ (1,201,787)**	**$ -**	**$ 2,288,819,845**

Account Description	Beginning Balance 1/1/2013	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2013
ELECTRIC NUCLEAR PRODUCTION						
302 Franchises & Consents	$ 121,634,121	$ 59,650,544	$ -	$ -	$ -	$ 181,284,664
320 Land & Land Rights - Fee	1,153,084	-	-	-	-	1,153,084
320 Land and Land Rights - Other	1,729	-	-	-	-	1,729
321 Structures & Improvements	432,300,869	15,027,121	(2,744,986)	-	-	444,583,005
322 Reactor Plant Equipment	1,004,535,965	463,989,589	(13,864,756)	-	-	1,454,660,797
323 Turbogenerator Units	444,629,223	126,462,103	(1,147,710)	-	-	569,943,615
324 Accessory Electric Equipment	284,871,603	145,226,747	(1,514,845)	-	-	428,583,505
325 Miscellaneous Power Plant Equipment	142,877,762	1,049,669	(71,365)	-	-	143,856,066
Electric Nuclear Production Plant Total	**$ 2,432,004,356**	**$ 811,405,772**	**$ (19,343,662)**	**$ -**	**$ -**	**$ 3,224,066,467**
ELECTRIC HYDRO PRODUCTION						
302 Franchises & Consents	$ 2,857,039	$ -	$ -	$ -	$ -	$ 2,857,039
330 Land & Land Rights - Fee	298,638	-	(5,775)	-	-	292,863
330 Land & Land Rights - Other	1,400,213	-	-	-	-	1,400,213
331 Structures & Improvements	542,363	797,468	(40,158)	-	-	1,299,673
332 Reservoirs, Dams & Waterways	6,335,245	2,619,511	(149,587)	-	-	8,805,169
333 Water Wheels, Turbines & Generators	7,844,873	2,256,832	-	-	-	10,101,704
334 Accessory Electric Equipment	2,716,375	675,946	-	-	-	3,392,321
335 Miscellaneous Power Plant Equipment	60,824	-	-	-	-	60,824
Electric Hydro Production Plant Total	**$ 22,055,570**	**$ 6,349,756**	**$ (195,520)**	**$ -**	**$ -**	**$ 28,209,806**
ELECTRIC OTHER PRODUCTION						
340 Land & Land Rights - Fee	$ 4,958,572	$ -	$ -	$ -	$ -	$ 4,958,572
340 Land & Land Rights - Other	10,368,887	-	-	-	-	10,368,887
340 Wind Rights	3,884,834	-	-	-	-	3,884,834
341 Structures & Improvements	167,003,738	932,164	(122,197)	493,593	-	168,307,298
342 Fuel Holders, Producers & Accessories	78,725,816	141,141	-	-	-	78,866,957
343 Prime Movers	-	-	-	-	-	-
344 Generators	1,404,024,150	7,552,327	(12,931,245)	-	-	1,398,645,232
345 Accessory Electric Equipment	165,644,290	226,268	(166,983)	-	-	165,703,575
346 Miscellaneous Power Plant Equipment	21,267,808	366,535	(7,711)	708,194	-	22,334,826
348 Energy Storage Equipment	-	-	-	-	-	-
Electric Other Production Plant Total	**$ 1,855,878,097**	**$ 9,218,435**	**$ (13,228,136)**	**$ 1,201,787**	**$ -**	**$ 1,853,070,182**
TOTAL ELECTRIC UTILITY	**$ 9,131,536,807**	**$ 1,157,027,994**	**$ (83,393,591)**	**$ 811,060**	**$ -**	**$ 10,205,982,270**

Account Description	Beginning Balance 1/1/2013	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2013
COMMON INTANGIBLE						
301 Intangible Organization Costs	$ 100,608	$ -	$ -	$ -	$ -	$ 100,608
302 Franchise and Consents	-	-	-	-	-	-
303 Computer Software 3 Year	-	-	-	-	-	-
303 Computer Software 5 Year	-	-	-	-	-	-
303 Computer Software 7 Year	-	-	-	-	-	-
303 Computer Software 10 Year	-	-	-	-	-	-
303 Computer Software 15 year	-	-	-	-	-	-
303 Computer Software - All	242,565,884	18,095,016	(21,484,729)	-	-	239,176,171
Common Intangible Plant Total	**$ 242,666,492**	**$ 18,095,016**	**$ (21,484,729)**	**$ -**	**$ -**	**$ 239,276,779**
COMMON GENERAL						
389 Land - Fee	$ 4,939,939	$ 1,231,718	$ -	$ -	$ -	$ 6,171,657
389 Land - Other	5,572	-	-	-	-	5,572
390 Structures and Improvements	129,498,058	21,934,559	(10,192,810)	(979,066)	-	140,260,741
390 Structures and Improvements - Leasehold Improvements	1,163,412	(489,533)	(450,706)	979,066	-	1,202,240
391 Office Furniture and Equipment	30,825,969	1,104,686	(4,781,782)	-	-	27,148,873
391 Network Equipment	56,638,244	24,642,219	(21,150,757)	-	-	60,129,706
392 Automobiles	408,597	248,605	-	-	-	657,202
392 Light Trucks	4,610,345	440,355	-	-	-	5,050,699
392 Trailers	1,172,999	-	-	-	-	1,172,999
392 Heavy Trucks	4,576,760	426,960	-	-	-	5,003,721
393 Stores Equipment	152,859	32,654	(9,329)	-	-	176,183
394 Tools, Shop, and Garage Equipment	2,662,096	351,086	(334,636)	-	-	2,678,546
395 Laboratory Equipment	36,686	-	-	-	-	36,686
396 Power Operated Equipment	836,688	63,866	-	-	-	900,554
397 Comm. & Telecomm. Equipment	1,685,395	-	(44,115)	-	-	1,641,280
397 Communication Equipment - Two Way	3,738,356	-	(42,946)	-	-	3,695,410
397 Communication Equipment - Smart Grid	-	-	-	-	-	-
398 Miscellaneous Equipment	917,274	-	(237,763)	-	-	679,511
Common General Plant Total	**$ 243,869,248**	**$ 49,987,176**	**$ (37,244,844)**	**$ -**	**$ -**	**$ 256,611,579**
TOTAL COMMON UTILITY	**$ 486,535,740**	**$ 68,082,192**	**$ (58,729,573)**	**$ -**	**$ -**	**$ 495,888,358**
TOTAL - ALL UTILITIES	**$ 9,618,072,547**	**$ 1,225,110,186**	**$ (142,123,164)**	**$ 811,060**	**$ -**	**$ 10,701,870,628**

Account Description	Beginning Balance 1/1/2014	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2014
ELECTRIC INTANGIBLE						
302 Franchise and Consents	$ 228,585	$ 1,450	$ -	$ -	$ -	$ 230,035
303 Computer Software 3 Year	-	-	-	-	-	-
303 Computer Software 5 Year	71,878,061	14,563,579	-	-	-	86,441,640
303 Computer Software 7 Year	-	-	-	-	-	-
Electric Intangible Plant Total	**$ 72,106,645**	**$ 14,565,029**	**$ -**	**$ -**	**$ -**	**$ 86,671,675**
ELECTRIC TRANSMISSION						
350 Land - Fee	$ 20,002,414	$ 5,677,646	$ (639,286)	$ -	$ -	$ 25,040,774
350 Land - Other	96,833,165	15,947,715	-	(1)	-	112,780,878
352 Structures and Improvements	55,822,581	14,107,028	(5,105)	(74,900)	-	69,849,603
353 Station Equipment	935,199,674	114,444,965	(611,451)	74,901	-	1,049,108,089
354 Towers and Fixtures	118,690,261	-	(40,284)	-	-	118,649,978
355 Poles and Fixtures	662,952,195	288,913,240	(181,568)	(431,683)	-	951,252,184
356 Overhead Conductors and Devices	335,875,287	95,447,122	(599,036)	(65,235)	-	430,658,139
357 Underground Conduit	12,701,844	13,041,630	-	-	-	25,743,474
358 Underground Conductor and Devices	21,995,288	8,654,342	-	-	-	30,649,630
Electric Transmission Plant Total	**$ 2,260,072,708**	**$ 556,233,688**	**$ (2,076,729)**	**$ (496,918)**	**$ -**	**$ 2,813,732,749**
ELECTRIC DISTRIBUTION (ND ONLY)						
360 Land - Fee	$ 614,755	$ -	$ -	$ -	$ -	$ 614,755
361 Structures and Improvements	914,526	2,271	-	-	-	916,797
362 Station Equipment	22,228,818	4,558,394	-	-	-	26,787,212
364 Poles, Towers, and Fixtures	12,630,036	598,190	(41,020)	-	-	13,187,206
365 Overhead Conductors and Devices	17,873,485	1,260,383	(349,823)	-	-	18,784,045
366 Underground Conduit	5,797,422	350,369	(4,425)	-	-	6,143,366
367 Underground Conductor and Devices	50,295,482	4,708,577	(288,832)	-	-	54,715,227
368 Line Transformers	10,688,973	13,389	(526,138)	12,331,960	-	22,508,184
368 Line Capacitors	551,503	(72,137)	(16,886)	-	-	462,480
369 Overhead Services	5,238,345	84,296	(13,140)	-	-	5,309,501
369 Underground Services	7,834,129	181,108	(2,532)	-	-	8,012,706
370 Meters	5,326,177	5,480	(354,282)	2,679,189	-	7,656,563
370 Meters - Old	-	-	-	-	-	-
373 Street Lighting and Signal Systems	1,979,012	77,117	(36,694)	-	-	2,019,435
Electric Distribution Plant Total (ND Only)	**$ 141,972,663**	**$ 11,767,437**	**$ (1,633,772)**	**$ 15,011,149**	**$ -**	**$ 167,117,476**

Account	Account Description	Beginning Balance 1/1/2014	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2014
ELECTRIC GENERAL							
389	Land - Fee	$ 4,438,256	$ -	$ -	$ -	$ -	$ 4,438,256
389	Land - Other	665	-	-	-	-	665
390	Structures and Improvements	56,547,200	3,160,092	(649,654)	-	-	59,057,637
390	Structures and Improvements - Leasehold Improvements	35,652	-	-	-	-	35,652
391	Office Furniture and Equipment	24,552,275	264,149	-	-	-	24,816,424
391	Network Equipment	11,938,644	11,320,554	(2,792,103)	-	-	20,467,094
392	Automobiles	439,733	79,300	-	-	-	519,032
392	Light Trucks	25,655,537	1,600,563	-	-	-	27,256,100
392	Trailers	10,371,565	1,135,526	-	-	-	11,507,091
392	Heavy Trucks	59,482,545	7,757,990	-	-	-	67,240,536
393	Stores Equipment	1,848,844	-	(66,914)	-	-	1,781,931
394	Tools, Shop, and Garage Equipment	66,006,784	6,084,032	(919,705)	-	-	71,171,111
395	Laboratory Equipment	3,601,141	525,938	(892,983)	-	-	3,234,096
396	Power Operated Equipment	29,975,129	3,040,646	-	-	-	33,015,775
397	General Communication Equipment	15,904,463	1,211,104	(512,066)	-	-	16,603,500
397	Communication Equipment - Two Way	416,630	(4,096)	-	-	-	412,534
397	Comm. & Telecomm. Equipment - AES	7,056,102	15,624	-	-	-	7,071,726
397	Comm. & Telecomm. Equipment - EMS	16,535,935	2,564,087	-	-	-	19,100,022
398	Miscellaneous Equipment	2,856,855	15,284	-	-	-	2,872,139
	Electric General Plant Total	**$ 337,663,954**	**$ 38,770,791**	**$ (5,833,425)**	**$ -**	**$ -**	**$ 370,601,319**
ELECTRIC STEAM PRODUCTION							
310	Land & Land Rights - Fee	$ 9,446,779	$ -	$ (6,313)	$ -	$ -	$ 9,440,466
310	Land & Land Rights - Other	9,856	-	-	-	-	9,856
311	Structures & Improvements	314,884,452	5,978,658	(1,082,116)	-	-	319,780,995
312	Boiler Plant Equipment	1,386,373,983	64,177,593	(15,200,755)	-	-	1,435,350,821
314	Turbogenerator Units	336,690,683	318,713	(8,300,655)	-	-	328,708,741
314	Turbogenerator Units - Sherco 3 HFU	-	-	-	-	-	-
315	Accessory Electric Equipment	187,676,261	10,385,229	(3,713,273)	-	-	194,348,217
315	Accessory Electric Equipment - Sherco 3 HFU	-	-	-	-	-	-
316	Miscellaneous Power Plant Equipment	53,737,832	2,891,356	(58,456)	-	-	56,570,732
	Electric Steam Production Plant Total	**$ 2,288,819,845**	**$ 83,751,550**	**$ (28,361,568)**	**$ -**	**$ -**	**$ 2,344,209,827**

Account Description	Beginning Balance 1/1/2014	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2014
ELECTRIC NUCLEAR PRODUCTION						
302 Franchises & Consents	$ 181,284,664	$ 47,180,246	$ -	$ -	$ -	$ 228,464,910
320 Land & Land Rights - Fee	1,153,084	-	-	-	-	1,153,084
320 Land and Land Rights - Other	1,729	-	-	-	-	1,729
321 Structures & Improvements	444,583,005	37,330,151	(1,035,936)	-	-	480,877,219
322 Reactor Plant Equipment	1,454,660,797	37,111,024	(9,869,450)	28,092,238	-	1,509,994,609
323 Turbogenerator Units	569,943,615	1,107,676	(1,001,785)	(28,092,238)	-	541,957,269
324 Accessory Electric Equipment	428,583,505	18,753,347	(4,841,752)	-	-	442,495,101
325 Miscellaneous Power Plant Equipment	143,856,066	17,970,866	(44,508)	-	-	161,782,425
Electric Nuclear Production Plant Total	**$ 3,224,066,467**	**$ 159,453,310**	**$ (16,793,430)**	**$ -**	**$ -**	**$ 3,366,726,347**
ELECTRIC HYDRO PRODUCTION						
302 Franchises & Consents	$ 2,857,039	$ -	$ -	$ -	$ -	$ 2,857,039
330 Land & Land Rights - Fee	292,863	-	-	-	-	292,863
330 Land & Land Rights - Other	1,400,213	-	-	-	-	1,400,213
331 Structures & Improvements	1,299,673	181,638	(93,663)	-	-	1,387,647
332 Reservoirs, Dams & Waterways	8,805,169	6,775	(29,380)	-	-	8,782,564
333 Water Wheels, Turbines & Generators	10,101,704	148,333	(211,041)	-	-	10,038,996
334 Accessory Electric Equipment	3,392,321	(99,985)	(35,364)	-	-	3,256,972
335 Miscellaneous Power Plant Equipment	60,824	-	-	-	-	60,824
Electric Hydro Production Plant Total	**$ 28,209,806**	**$ 236,760**	**$ (369,447)**	**$ -**	**$ -**	**$ 28,077,119**
ELECTRIC OTHER PRODUCTION						
340 Land & Land Rights - Fee	$ 4,958,572	$ -	$ -	$ (297,837)	$ -	$ 4,660,735
340 Land & Land Rights - Other	10,368,887	-	-	-	-	10,368,887
340 Wind Rights	3,884,834	-	-	-	-	3,884,834
341 Structures & Improvements	168,307,298	1,692,733	(255,760)	-	-	169,744,272
342 Fuel Holders, Producers & Accessories	78,866,957	913,637	(36,402)	(4,128,902)	-	75,615,290
343 Prime Movers	-	-	-	-	-	-
344 Generators	1,398,645,232	5,919,199	(3,026,054)	-	-	1,401,538,377
345 Accessory Electric Equipment	165,703,575	2,212,146	(941,408)	-	-	166,974,313
346 Miscellaneous Power Plant Equipment	22,334,826	225,845	(49,902)	-	-	22,510,768
348 Energy Storage Equipment	-	-	-	4,128,902	-	4,128,902
Electric Other Production Plant Total	**$ 1,853,070,182**	**$ 10,963,560**	**$ (4,309,526)**	**$ (297,837)**	**$ -**	**$ 1,859,426,379**
TOTAL ELECTRIC UTILITY	**$ 10,205,982,270**	**$ 875,742,124**	**$ (59,377,898)**	**$ 14,216,394**	**$ -**	**$ 11,036,562,890**

Account Description	Beginning Balance 1/1/2014	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2014
COMMON INTANGIBLE						
301 Intangible Organization Costs	$ 100,608	$ -	$ -	$ -	$ -	$ 100,608
302 Franchise and Consents	-	-	-	-	-	-
303 Computer Software 3 Year	-	-	-	-	-	-
303 Computer Software 5 Year	-	-	-	-	-	-
303 Computer Software 7 Year	-	-	-	-	-	-
303 Computer Software 10 Year	-	-	-	-	-	-
303 Computer Software 15 year	-	-	-	-	-	-
303 Computer Software - All	239,176,171	54,708,510	(867,148)	-	-	293,017,533
Common Intangible Plant Total	**$ 239,276,779**	**$ 54,708,510**	**$ (867,148)**	**$ -**	**$ -**	**$ 293,118,141**
COMMON GENERAL						
389 Land - Fee	$ 6,171,657	$ -	$ -	$ -	$ -	$ 6,171,657
389 Land - Other	5,572	-	-	-	-	5,572
390 Structures and Improvements	140,260,741	5,118,152	(2,569,934)	-	-	142,808,958
390 Structures and Improvements - Leasehold Improvements	1,202,240	-	-	-	-	1,202,240
391 Office Furniture and Equipment	27,148,873	1,506,453	(5,902,551)	-	-	22,752,776
391 Network Equipment	60,129,706	22,256,336	(10,839,036)	-	-	71,547,007
392 Automobiles	657,202	98,491	-	-	-	755,694
392 Light Trucks	5,050,699	156,446	-	-	-	5,207,145
392 Trailers	1,172,999	-	-	-	-	1,172,999
392 Heavy Trucks	5,003,721	61,678	-	-	-	5,065,398
393 Stores Equipment	176,183	-	-	-	-	176,183
394 Tools, Shop, and Garage Equipment	2,678,546	469,888	-	-	-	3,148,434
395 Laboratory Equipment	36,686	-	-	-	-	36,686
396 Power Operated Equipment	900,554	48,148	-	-	-	948,702
397 Comm. & Telecomm. Equipment	1,641,280	-	(545,824)	-	-	1,095,456
397 Communication Equipment - Two Way	3,695,410	-	(3,253)	-	-	3,692,157
397 Communication Equipment - Smart Grid	-	-	-	-	-	-
398 Miscellaneous Equipment	679,511	(1,002)	-	-	-	678,509
Common General Plant Total	**$ 256,611,579**	**$ 29,714,591**	**$ (19,860,597)**	**$ -**	**$ -**	**$ 266,465,573**
TOTAL COMMON UTILITY	**$ 495,888,358**	**$ 84,423,101**	**$ (20,727,745)**	**$ -**	**$ -**	**$ 559,583,714**
TOTAL - ALL UTILITIES	**$ 10,701,870,628**	**$ 960,165,225**	**$ (80,105,643)**	**$ 14,216,394**	**$ -**	**$ 11,596,146,604**

Note: 322 Reactor Plant Equipment excludes amounts in FERC 105 - Plant Held for Future Use

Account Description	Beginning Balance 1/1/2015	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2015
ELECTRIC INTANGIBLE						
302 Franchise and Consents	$ 230,035	$ 33,272	$ -	$ -	$ -	$ 263,307
303 Computer Software 3 Year	-	-	-	-	-	-
303 Computer Software 5 Year	86,441,640	32,984,416	(6,155,198)	-	-	113,270,858
303 Computer Software 7 Year	-	-	-	-	-	-
Electric Intangible Plant Total	**$ 86,671,675**	**$ 33,017,688**	**$ (6,155,198)**	**$ -**	**$ -**	**$ 113,534,164**
ELECTRIC TRANSMISSION						
350 Land - Fee	$ 25,040,774	$ 5,804,399	$ (1,148,545)	$ 295	$ -	$ 29,696,924
350 Land - Other	112,780,878	5,765,556	-	-	-	118,546,434
352 Structures and Improvements	69,849,603	7,521,898	(70,653)	1,683,373	-	78,984,222
353 Station Equipment	1,049,108,089	77,907,715	(3,507,159)	20,624,754	-	1,144,133,399
354 Towers and Fixtures	118,649,978	556,200	(10,264)	(689,542)	-	118,506,371
355 Poles and Fixtures	951,252,184	288,595,548	(4,946,544)	689,542	-	1,235,590,730
356 Overhead Conductors and Devices	430,658,139	79,675,942	(2,860,800)	-	-	507,473,281
357 Underground Conduit	25,743,474	(95,755)	-	-	-	25,647,719
358 Underground Conductor and Devices	30,649,630	314,271	(12,708)	-	-	30,951,193
Electric Transmission Plant Total	**$ 2,813,732,749**	**$ 466,045,774**	**$ (12,556,673)**	**$ 22,308,422**	**$ -**	**$ 3,289,530,273**
ELECTRIC DISTRIBUTION (ND ONLY)						
360 Land - Fee	$ 614,755	$ -	$ -	$ -	$ -	$ 614,755
361 Structures and Improvements	916,797	284,382	-	-	-	1,201,179
362 Station Equipment	26,787,212	566,828	(195,952)	(305,089)	-	26,852,999
364 Poles, Towers, and Fixtures	13,187,206	705,864	(68,740)	-	-	13,824,330
365 Overhead Conductors and Devices	18,784,045	1,051,787	(406,775)	-	-	19,429,057
366 Underground Conduit	6,143,366	219,863	(7,176)	-	-	6,356,053
367 Underground Conductor and Devices	54,715,227	4,159,831	(332,488)	-	-	58,542,570
368 Line Transformers	22,508,184	1,391,296	-	-	-	23,899,480
368 Line Capacitors	462,480	30,547	(4,962)	-	-	488,064
369 Overhead Services	5,309,501	66,335	(7,091)	-	-	5,368,745
369 Underground Services	8,012,706	238,327	(1,188)	-	-	8,249,845
370 Meters	7,656,563	365,810	(298,805)	-	-	7,723,568
370 Meters - Old	-	-	-	-	-	-
373 Street Lighting and Signal Systems	2,019,435	176,314	(96,303)	-	-	2,099,445
Electric Distribution Plant Total (ND Only)	**$ 167,117,476**	**$ 9,257,184**	**$ (1,419,481)**	**$ (305,089)**	**$ -**	**$ 174,650,090**

Account	Account Description	Beginning Balance 1/1/2015	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2015
ELECTRIC GENERAL							
389	Land - Fee	$ 4,438,256	$ -	$ -	$ -	$ -	$ 4,438,256
389	Land - Other	665	-	-	-	-	665
390	Structures and Improvements	59,057,637	5,736,559	(1,474,613)	-	-	63,319,583
390	Structures and Improvements - Leasehold Improvements	35,652	-	-	-	-	35,652
391	Office Furniture and Equipment	24,816,424	1,095,240	(527,953)	-	-	25,383,711
391	Network Equipment	20,467,094	3,774,049	(174,104)	-	-	24,067,038
392	Automobiles	519,032	74,919	(8,718)	-	-	585,233
392	Light Trucks	27,256,100	4,646,219	(57,114)	-	-	31,845,205
392	Trailers	11,507,091	5,874,936	(38,497)	-	-	17,343,530
392	Heavy Trucks	67,240,536	28,074,750	-	-	-	95,315,285
393	Stores Equipment	1,781,931	-	(57,769)	-	-	1,724,162
394	Tools, Shop, and Garage Equipment	71,171,111	9,237,315	(3,325,572)	-	-	77,082,854
395	Laboratory Equipment	3,234,096	588,119	(283,177)	-	-	3,539,038
396	Power Operated Equipment	33,015,775	9,128,824	(52,719)	-	-	42,091,879
397	General Communication Equipment	16,603,500	55,970	(128,665)	-	-	16,530,804
397	Communication Equipment - Two Way	412,534	1,558,550	-	-	-	1,971,084
397	Comm. & Telecomm. Equipment - AES	7,071,726	-	-	-	-	7,071,726
397	Comm. & Telecomm. Equipment - EMS	19,100,022	4,501,417	(241,981)	30,017	-	23,389,475
398	Miscellaneous Equipment	2,872,139	6,565	(11,893)	-	-	2,866,811
	Electric General Plant Total	**$ 370,601,319**	**$ 74,353,431**	**$ (6,382,776)**	**$ 30,017**	**$ -**	**$ 438,601,991**
ELECTRIC STEAM PRODUCTION							
310	Land & Land Rights - Fee	$ 9,440,466	$ -	$ -	$ (950,861)	$ -	$ 8,489,605
310	Land & Land Rights - Other	9,856	-	-	(1,831)	-	8,024
311	Structures & Improvements	319,780,995	5,727,348	(6,184,640)	(30,915,209)	-	288,408,494
312	Boiler Plant Equipment	1,435,350,821	49,944,530	(62,426,930)	(13,667,016)	-	1,409,201,404
314	Turbogenerator Units	328,708,741	9,584,188	(21,554,918)	(21,434,627)	-	295,303,384
314	Turbogenerator Units - Sherco 3 HFU	-	-	-	-	-	-
315	Accessory Electric Equipment	194,348,217	4,729,898	(2,819,856)	(12,998,356)	-	183,259,903
315	Accessory Electric Equipment - Sherco 3 HFU	-	-	-	-	-	-
316	Miscellaneous Power Plant Equipment	56,570,732	603,678	(348,017)	(2,893,342)	-	53,933,051
	Electric Steam Production Plant Total	**$ 2,344,209,827**	**$ 70,589,641**	**$ (93,334,361)**	**$ (82,861,241)**	**$ -**	**$ 2,238,603,866**

Account Description	Beginning Balance 1/1/2015	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2015
ELECTRIC NUCLEAR PRODUCTION						
302 Franchises & Consents	$ 228,464,910	$ 16,176,249	$ -	$ -	$ -	$ 244,641,160
320 Land & Land Rights - Fee	1,153,084	-	-	-	-	1,153,084
320 Land and Land Rights - Other	1,729	-	-	-	-	1,729
321 Structures & Improvements	480,877,219	35,210,149	(529,159)	-	-	515,558,210
322 Reactor Plant Equipment	1,509,994,609	40,297,099	(3,193,057)	-	-	1,547,098,650
323 Turbogenerator Units	541,957,269	87,240,268	(1,434,740)	-	-	627,762,797
324 Accessory Electric Equipment	442,495,101	35,391,882	(823,703)	-	-	477,063,280
325 Miscellaneous Power Plant Equipment	161,782,425	37,050,731	-	-	-	198,833,156
Electric Nuclear Production Plant Total	**$ 3,366,726,347**	**$ 251,366,379**	**$ (5,980,659)**	**$ -**	**$ -**	**$ 3,612,112,067**
ELECTRIC HYDRO PRODUCTION						
302 Franchises & Consents	$ 2,857,039	$ -	$ -	$ -	$ -	$ 2,857,039
330 Land & Land Rights - Fee	292,863	-	-	-	-	292,863
330 Land & Land Rights - Other	1,400,213	-	-	-	-	1,400,213
331 Structures & Improvements	1,387,647	-	-	-	-	1,387,647
332 Reservoirs, Dams & Waterways	8,782,564	1,808,265	-	-	-	10,590,829
333 Water Wheels, Turbines & Generators	10,038,996	-	-	-	-	10,038,996
334 Accessory Electric Equipment	3,256,972	-	-	-	-	3,256,972
335 Miscellaneous Power Plant Equipment	60,824	-	-	-	-	60,824
Electric Hydro Production Plant Total	**$ 28,077,119**	**$ 1,808,265**	**$ -**	**$ -**	**$ -**	**$ 29,885,384**
ELECTRIC OTHER PRODUCTION						
340 Land & Land Rights - Fee	$ 4,660,735	$ -	$ -	$ 952,692	$ -	$ 5,613,427
340 Land & Land Rights - Other	10,368,887	-	-	-	-	10,368,887
340 Wind Rights	3,884,834	-	-	-	-	3,884,834
341 Structures & Improvements	169,744,272	49,673,624	(289,718)	31,405,596	-	250,533,773
342 Fuel Holders, Producers & Accessories	75,615,290	982,098	(34,765)	7,729,067	-	84,291,690
343 Prime Movers	-	-	-	-	-	-
344 Generators	1,401,538,377	491,132,767	(7,842,656)	22,012,827	-	1,906,841,315
345 Accessory Electric Equipment	166,974,313	71,570,879	(102,298)	12,411,822	-	250,854,716
346 Miscellaneous Power Plant Equipment	22,510,768	540,834	(89,473)	8,373,236	-	31,335,365
348 Energy Storage Equipment	4,128,902	-	-	-	-	4,128,902
Electric Other Production Plant Total	**$ 1,859,426,378**	**$ 613,900,202**	**$ (8,358,911)**	**$ 82,885,241**	**$ -**	**$ 2,547,852,910**
TOTAL ELECTRIC UTILITY	**$ 11,036,562,890**	**$ 1,520,338,564**	**$ (134,188,060)**	**$ 22,057,350**	**$ -**	**$ 12,444,770,745**

	Account Description	Beginning Balance 1/1/2015	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2015
COMMON INTANGIBLE							
301	Intangible Organization Costs	$ 100,608	$ -	$ -	$ -	$ -	$ 100,608
302	Franchise and Consents	-	-	-	-	-	-
303	Computer Software 3 Year	-	-	-	-	-	-
303	Computer Software 5 Year	-	-	-	-	-	-
303	Computer Software 7 Year	-	-	-	-	-	-
303	Computer Software 10 Year	-	-	-	-	-	-
303	Computer Software 15 year	-	-	-	-	-	-
303	Computer Software - All	293,017,533	38,752,935	(5,674,212)	-	-	326,096,256
	Common Intangible Plant Total	**$ 293,118,141**	**$ 38,752,935**	**$ (5,674,212)**	**$ -**	**$ -**	**$ 326,196,864**
COMMON GENERAL							
389	Land - Fee	$ 6,171,657	$ 19,679	$ -	$ -	$ -	$ 6,191,336
389	Land - Other	5,572	-	-	-	-	5,572
390	Structures and Improvements	142,808,958	9,271,121	(1,033,009)	(58,682)	-	150,988,388
390	Structures and Improvements - Leasehold Improvements	1,202,240	-	-	58,682	-	1,260,922
391	Office Furniture and Equipment	22,752,776	648,614	-	-	-	23,401,389
391	Network Equipment	71,547,007	21,016,030	(9,137,814)	-	-	83,425,223
392	Automobiles	755,694	182,366	(165,915)	-	-	772,145
392	Light Trucks	5,207,145	191,955	(254,091)	-	-	5,145,009
392	Trailers	1,172,999	-	(116,343)	-	-	1,056,656
392	Heavy Trucks	5,065,398	439,185	-	-	-	5,504,584
393	Stores Equipment	176,183	-	-	-	-	176,183
394	Tools, Shop, and Garage Equipment	3,148,434	670,930	(145,898)	-	-	3,673,466
395	Laboratory Equipment	36,686	-	-	-	-	36,686
396	Power Operated Equipment	948,702	11,126	(4,968)	-	-	954,860
397	Comm. & Telecomm. Equipment	1,095,456	-	(126,372)	-	-	969,084
397	Communication Equipment - Two Way	3,692,157	-	(59,122)	-	-	3,633,035
397	Communication Equipment - Smart Grid	-	-	-	-	-	-
398	Miscellaneous Equipment	678,509	8,247	(46,651)	-	-	640,105
	Common General Plant Total	**$ 266,465,573**	**$ 32,459,254**	**$ (11,090,182)**	**$ -**	**$ -**	**$ 287,834,644**
	TOTAL COMMON UTILITY	**$ 559,583,714**	**$ 71,212,189**	**$ (16,764,395)**	**$ -**	**$ -**	**$ 614,031,508**
	TOTAL - ALL UTILITIES	**$ 11,596,146,604**	**$ 1,591,550,753**	**$ (150,952,455)**	**$ 22,057,350**	**$ -**	**$ 13,058,802,253**

Note: 322 Reactor Plant Equipment excludes amounts in FERC 105 - Plant Held for Future Use

Account Description	Beginning Balance 1/1/2016	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2016
ELECTRIC INTANGIBLE						
302 Franchise and Consents	$ 263,307	$ -	$ -	$ -	$ -	$ 263,307
303 Computer Software 3 Year	-	-	-	201,839	-	201,839
303 Computer Software 5 Year	113,270,858	1,901,697	-	(823,816)	-	114,348,738
303 Computer Software 7 Year	-	-	-	621,977	-	621,977
Electric Intangible Plant Total	**$ 113,534,164**	**$ 1,901,697**	**$ -**	**$ -**	**$ -**	**$ 115,435,861**
ELECTRIC TRANSMISSION						
350 Land - Fee	$ 29,696,924	$ (1,884,491)	$ -	$ -	$ -	$ 27,812,433
350 Land - Other	118,546,434	6,349,152	-	-	-	124,895,586
352 Structures and Improvements	78,984,222	24,136,683	(34,538)	-	-	103,086,366
353 Station Equipment	1,144,133,399	34,040,538	(718,155)	3,993,428	-	1,181,449,210
354 Towers and Fixtures	118,506,371	125,488	-	-	-	118,631,858
355 Poles and Fixtures	1,235,590,730	94,796,313	169,019	-	-	1,330,556,061
356 Overhead Conductors and Devices	507,473,281	24,812,943	417,878	-	-	532,704,102
357 Underground Conduit	25,647,719	262,419	-	-	-	25,910,138
358 Underground Conductor and Devices	30,951,193	(240,619)	-	-	-	30,710,573
Electric Transmission Plant Total	**$ 3,289,530,273**	**$ 182,398,425**	**$ (165,797)**	**$ 3,993,428**	**$ -**	**$ 3,475,756,328**
ELECTRIC DISTRIBUTION (ND ONLY)						
360 Land - Fee	$ 614,755	$ -	$ -	$ -	$ -	$ 614,755
361 Structures and Improvements	1,201,179	16,128	(407)	-	-	1,216,900
362 Station Equipment	26,852,999	812,868	(1,601,774)	-	-	26,064,093
364 Poles, Towers, and Fixtures	13,824,330	825,732	(23,942)	-	-	14,626,120
365 Overhead Conductors and Devices	19,429,057	1,394,495	(167,576)	-	-	20,655,977
366 Underground Conduit	6,356,053	360,078	(3,352)	-	-	6,712,778
367 Underground Conductor and Devices	58,542,570	1,062,687	(96,678)	-	-	59,508,579
368 Line Transformers	23,899,480	1,472,919	(1,424,738)	-	-	23,947,661
368 Line Capacitors	488,064	165,211	(5,246)	-	-	648,029
369 Overhead Services	5,368,745	52,026	(27,146)	-	-	5,393,625
369 Underground Services	8,249,845	167,724	(6,103)	-	-	8,411,467
370 Meters	7,723,568	352,235	(326,522)	-	-	7,749,280
370 Meters - Old	-	-	-	-	-	-
373 Street Lighting and Signal Systems	2,099,445	1,428,878	(106,373)	-	-	3,421,950
Electric Distribution Plant Total (ND Only)	**$ 174,650,090**	**$ 8,110,981**	**$ (3,789,857)**	**$ -**	**$ -**	**$ 178,971,215**

Account Description	Beginning Balance 1/1/2016	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2016
ELECTRIC GENERAL						
389 Land - Fee	$ 4,438,256	$ -	$ -	$ -	$ -	$ 4,438,256
389 Land - Other	665	-	-	-	-	665
390 Structures and Improvements	63,319,583	561,932	(373,209)	-	-	63,508,306
390 Structures and Improvements - Leasehold Improvements	35,652	-	-	-	-	35,652
391 Office Furniture and Equipment	25,383,711	2,377,282	(167,132)	-	-	27,593,861
391 Network Equipment	24,067,038	10,907,725	(2,576,703)	-	-	32,398,061
392 Automobiles	585,233	523,580	-	-	-	1,108,813
392 Light Trucks	31,845,205	1,640,294	(653,030)	-	-	32,832,470
392 Trailers	17,343,530	565,062	(30,514)	-	-	17,878,078
392 Heavy Trucks	95,315,285	2,274,076	-	-	-	97,589,361
393 Stores Equipment	1,724,162	-	(75,371)	-	-	1,648,791
394 Tools, Shop, and Garage Equipment	77,082,854	6,427,414	(2,209,131)	-	-	81,301,137
395 Laboratory Equipment	3,539,038	145,418	(474,723)	-	-	3,209,733
396 Power Operated Equipment	42,091,879	3,871,307	(828,369)	-	-	45,134,817
397 General Communication Equipment	16,530,804	646,583	(59,926)	-	-	17,117,461
397 Communication Equipment - Two Way	1,971,084	4,709,186	(147,907)	-	-	6,532,362
397 Comm. & Telecomm. Equipment - AES	7,071,726	-	-	-	-	7,071,726
397 Comm. & Telecomm. Equipment - EMS	23,389,475	23,815,049	-	71,334	-	47,275,858
398 Miscellaneous Equipment	2,866,811	-	(142,970)	-	-	2,723,841
Electric General Plant Total	**$ 438,601,991**	**$ 58,464,907**	**$ (7,738,984)**	**$ 71,334**	**$ -**	**$ 489,399,248**
ELECTRIC STEAM PRODUCTION						
310 Land & Land Rights - Fee	$ 8,489,605	$ -	$ -	$ -	$ -	$ 8,489,605
310 Land & Land Rights - Other	8,024	-	-	-	-	8,024
311 Structures & Improvements	288,408,494	242,993	(281,753)	(23,680)	-	288,346,053
312 Boiler Plant Equipment	1,409,201,404	16,808,206	(2,577,356)	(471,947)	-	1,422,960,307
314 Turbogenerator Units	295,303,384	20,940,947	(1,721,463)	(8,768,433)	-	305,754,435
314 Turbogenerator Units - Sherco 3 HFU	-	-	-	-	-	-
315 Accessory Electric Equipment	183,259,903	704,329	(240,768)	(152,512)	-	183,570,952
315 Accessory Electric Equipment - Sherco 3 HFU	-	-	-	-	-	-
316 Miscellaneous Power Plant Equipment	53,933,051	110,708	(46,890)	-	-	53,996,869
Electric Steam Production Plant Total	**$ 2,238,603,866**	**$ 38,807,184**	**$ (4,868,230)**	**$ (9,416,573)**	**$ -**	**$ 2,263,126,246**

Account Description	Beginning Balance 1/1/2016	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2016
ELECTRIC NUCLEAR PRODUCTION						
302 Franchises & Consents	$ 244,641,160	$ 255,644	$ -	$ -	$ -	$ 244,896,804
320 Land & Land Rights - Fee	1,153,084	607,496	-	-	-	1,760,581
320 Land and Land Rights - Other	1,729	-	-	-	-	1,729
321 Structures & Improvements	515,558,210	39,529,177	(5,163,001)	-	-	549,924,386
322 Reactor Plant Equipment	1,547,098,650	65,349,260	(17,759,844)	-	-	1,594,688,066
323 Turbogenerator Units	627,762,797	5,504,787	(2,248,256)	-	-	631,019,328
324 Accessory Electric Equipment	477,063,280	7,170,937	(565,078)	-	-	483,669,139
325 Miscellaneous Power Plant Equipment	198,833,156	10,532,255	(3,941,922)	-	-	205,423,490
Electric Nuclear Production Plant Total	**$ 3,612,112,067**	**$ 128,949,556**	**$ (29,678,101)**	**$ -**	**$ -**	**$ 3,711,383,523**
ELECTRIC HYDRO PRODUCTION						
302 Franchises & Consents	$ 2,857,039	$ -	$ -	$ -	$ -	$ 2,857,039
330 Land & Land Rights - Fee	292,863	-	-	-	-	292,863
330 Land & Land Rights - Other	1,400,213	-	-	-	-	1,400,213
331 Structures & Improvements	1,387,647	-	-	-	-	1,387,647
332 Reservoirs, Dams & Waterways	10,590,829	215,855	-	-	-	10,806,684
333 Water Wheels, Turbines & Generators	10,038,996	-	-	-	-	10,038,996
334 Accessory Electric Equipment	3,256,972	-	-	-	-	3,256,972
335 Miscellaneous Power Plant Equipment	60,824	-	-	-	-	60,824
Electric Hydro Production Plant Total	**$ 29,885,384**	**$ 215,855**	**$ -**	**$ -**	**$ -**	**$ 30,101,238**
ELECTRIC OTHER PRODUCTION						
340 Land & Land Rights - Fee	$ 5,613,427	$ -	$ -	$ -	$ -	$ 5,613,427
340 Land & Land Rights - Other	10,368,887	-	-	-	-	10,368,887
340 Wind Rights	3,884,834	2,090,672	-	-	-	5,975,507
341 Structures & Improvements	250,533,773	8,500,336	(24,205)	23,680	-	259,033,584
342 Fuel Holders, Producers & Accessories	84,291,690	(31,817)	(112,959)	471,947	-	84,618,861
343 Prime Movers	-	-	-	-	-	-
344 Generators	1,906,841,315	270,947,705	(3,843,201)	8,768,433	-	2,182,714,252
345 Accessory Electric Equipment	250,854,716	18,100,417	(27,938)	152,512	-	269,079,707
346 Miscellaneous Power Plant Equipment	31,335,365	36,400	(95,713)	-	-	31,276,052
348 Energy Storage Equipment	4,128,902	-	-	-	-	4,128,902
Electric Other Production Plant Total	**$ 2,547,852,910**	**$ 299,643,713**	**$ (4,104,017)**	**$ 9,416,573**	**$ -**	**$ 2,852,809,179**
TOTAL ELECTRIC UTILITY	**$ 12,444,770,745**	**$ 718,492,317**	**$ (50,344,986)**	**$ 4,064,761**	**$ -**	**$ 13,116,982,837**

Account	Account Description	Beginning Balance 1/1/2016	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2016
COMMON INTANGIBLE							
301	Intangible Organization Costs	$ 100,608	$ -	$ -	$ -	$ -	$ 100,608
302	Franchise and Consents	-	-	-	-	-	-
303	Computer Software 3 Year	-	-	-	7,673,530	-	7,673,530
303	Computer Software 5 Year	-	-	-	197,541,349	-	197,541,349
303	Computer Software 7 Year	-	-	-	44,140,612	-	44,140,612
303	Computer Software 10 Year	-	-	-	68,449,240	-	68,449,240
303	Computer Software 15 year	-	-	-	61,015,418	-	61,015,418
303	Computer Software - All	326,096,256	58,837,506	(6,113,612)	(378,820,150)	-	-
	Common Intangible Plant Total	**$ 326,196,864**	**$ 58,837,506**	**$ (6,113,612)**	**$ -**	**$ -**	**$ 378,920,757**
COMMON GENERAL							
389	Land - Fee	$ 6,191,336	$ -	$ -	$ -	$ -	$ 6,191,336
389	Land - Other	5,572	-	-	-	-	5,572
390	Structures and Improvements	150,988,388	1,653,449	(828,431)	-	-	151,813,406
390	Structures and Improvements - Leasehold Improvements	1,260,922	17,248,527	-	-	-	18,509,449
391	Office Furniture and Equipment	23,401,389	3,740,171	-	-	-	27,141,560
391	Network Equipment	83,425,223	26,514,853	(9,493,912)	-	-	100,446,164
392	Automobiles	772,145	51,320	-	-	-	823,465
392	Light Trucks	5,145,009	307,716	(2,021,256)	-	-	3,431,469
392	Trailers	1,056,656	79,011	(35,980)	-	-	1,099,687
392	Heavy Trucks	5,504,584	859	-	-	-	5,505,442
393	Stores Equipment	176,183	82,000	(12,021)	-	-	246,162
394	Tools, Shop, and Garage Equipment	3,673,466	372,133	(3,890)	-	-	4,041,708
395	Laboratory Equipment	36,686	-	(36,686)	-	-	-
396	Power Operated Equipment	954,860	36,053	-	-	-	990,912
397	Comm. & Telecomm. Equipment	969,084	19,488	(24,140)	-	-	964,432
397	Communication Equipment - Two Way	3,633,035	75,068	(3,633,035)	-	-	75,068
397	Communication Equipment - Smart Grid	-	-	-	-	-	-
398	Miscellaneous Equipment	640,105	-	(57,878)	-	-	582,227
	Common General Plant Total	**$ 287,834,644**	**$ 50,180,646**	**$ (16,147,229)**	**$ -**	**$ -**	**$ 321,868,061**
	TOTAL COMMON UTILITY	**$ 614,031,508**	**$ 109,018,152**	**$ (22,260,841)**	**$ -**	**$ -**	**$ 700,788,819**
	TOTAL - ALL UTILITIES	**$ 13,058,802,253**	**$ 827,510,469**	**$ (72,605,827)**	**$ 4,064,761**	**$ -**	**$ 13,817,771,655**

Note: 322 Reactor Plant Equipment excludes amounts in FERC 105 - Plant Held for Future Use

Account Description	Beginning Balance 1/1/2017	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2017
ELECTRIC INTANGIBLE						
302 Franchise and Consents	$ 263,307	$ -	$ -	$ -	$ -	$ 263,307
303 Computer Software 3 Year	201,839	-	-	-	-	201,839
303 Computer Software 5 Year	114,348,738	4,697,127	(6,968,483)	-	-	112,077,383
303 Computer Software 7 Year	621,977	-	(621,977)	-	-	-
Electric Intangible Plant Total	**$ 115,435,861**	**$ 4,697,127**	**$ (7,590,460)**	**$ -**	**$ -**	**$ 112,542,528**
ELECTRIC TRANSMISSION						
350 Land - Fee	$ 27,812,433	$ 4,759,378	$ -	$ -	$ -	$ 32,571,811
350 Land - Other	124,895,586	4,706,330	-	-	-	129,601,916
352 Structures and Improvements	103,086,366	4,205,323	(293,468)	62	-	106,998,283
353 Station Equipment	1,181,449,210	39,250,830	(5,564,753)	936	-	1,215,136,223
354 Towers and Fixtures	118,631,858	38,199	(234,767)	-	-	118,435,290
355 Poles and Fixtures	1,330,556,061	64,044,761	(12,670,748)	30,352	-	1,381,960,426
356 Overhead Conductors and Devices	532,704,102	19,768,423	(11,125,861)	(30,352)	-	541,316,313
357 Underground Conduit	25,910,138	3,074,051	(7,882)	-	-	28,976,307
358 Underground Conductor and Devices	30,710,573	6,516,004	-	-	-	37,226,577
Electric Transmission Plant Total	**$ 3,475,756,328**	**$ 146,363,299**	**$ (29,897,479)**	**$ 997**	**$ -**	**$ 3,592,223,145**
ELECTRIC DISTRIBUTION (ND ONLY)						
360 Land - Fee	$ 614,755	$ -	$ -	$ -	$ -	$ 614,755
361 Structures and Improvements	1,216,900	(0)	-	-	-	1,216,900
362 Station Equipment	26,064,093	558,975	(340,417)	-	-	26,282,651
364 Poles, Towers, and Fixtures	14,626,120	799,987	(72,991)	-	-	15,353,116
365 Overhead Conductors and Devices	20,655,977	598,006	(450,849)	-	-	20,803,135
366 Underground Conduit	6,712,778	176,103	(3,446)	-	-	6,885,435
367 Underground Conductor and Devices	59,508,579	2,225,399	(225,333)	-	-	61,508,645
368 Line Transformers	23,947,661	1,189,811	(728,726)	-	-	24,408,746
368 Line Capacitors	648,029	32,345	(5,246)	-	-	675,129
369 Overhead Services	5,393,625	102,019	(28,532)	-	-	5,467,112
369 Underground Services	8,411,467	142,645	(5,193)	-	-	8,548,919
370 Meters	7,749,280	372,608	(696,672)	-	-	7,425,216
370 Meters - Old	-	-	-	-	-	-
373 Street Lighting and Signal Systems	3,421,950	221,235	(564,416)	-	-	3,078,769
Electric Distribution Plant Total (ND Only)	**$ 178,971,215**	**$ 6,419,134**	**$ (3,121,820)**	**$ -**	**$ -**	**$ 182,268,528**

Account Description	Beginning Balance 1/1/2017	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2017
ELECTRIC GENERAL						
389 Land - Fee	$ 4,438,256	$ 45,181	$ -	$ -	$ -	$ 4,483,437
389 Land - Other	665	-	-	-	-	665
390 Structures and Improvements	63,508,306	2,810,087	(1,071,008)	(96,034)	-	65,151,352
390 Structures and Improvements - Leasehold Improvements	35,652	-	-	-	-	35,652
391 Office Furniture and Equipment	27,593,861	392,919	(10,500)	-	-	27,976,279
391 Network Equipment	32,398,061	6,487,812	(1,028,106)	-	-	37,857,767
392 Automobiles	1,108,813	3,398,297	(274,981)	-	-	4,232,129
392 Light Trucks	32,832,470	1,070,207	(4,334,154)	-	-	29,568,523
392 Trailers	17,878,078	1,291,442	-	0	-	19,169,520
392 Heavy Trucks	97,589,361	13,114,082	-	(0)	-	110,703,443
393 Stores Equipment	1,648,791	9,615	(26,668)	0	-	1,631,738
394 Tools, Shop, and Garage Equipment	81,301,137	8,867,825	(267,599)	(0)	-	89,901,364
395 Laboratory Equipment	3,209,733	215,972	(428,134)	-	-	2,997,571
396 Power Operated Equipment	45,134,817	2,150,060	(1,180,759)	-	-	46,104,118
397 General Communication Equipment	17,117,461	440,387	(697,762)	-	-	16,860,086
397 Communication Equipment - Two Way	6,532,362	18,013,622	-	107	-	24,546,091
397 Comm. & Telecomm. Equipment - AES	7,071,726	24,144	-	-	-	7,095,870
397 Comm. & Telecomm. Equipment - EMS	47,275,858	6,687,257	(110,237)	-	-	53,852,877
398 Miscellaneous Equipment	2,723,841	695,422	(82,583)	0	-	3,336,680
Electric General Plant Total	**$ 489,399,248**	**$ 65,714,330**	**$ (9,512,490)**	**$ (95,927)**	**$ -**	**$ 545,505,161**
ELECTRIC STEAM PRODUCTION						
310 Land & Land Rights - Fee	$ 8,489,605	$ 64,855	$ (88)	$ -	$ -	$ 8,554,373
310 Land & Land Rights - Other	8,024	-	-	-	-	8,024
311 Structures & Improvements	288,346,053	541,183	(173,423)	-	96,034	288,809,847
312 Boiler Plant Equipment	1,422,960,307	30,783,283	(10,477,695)	-	-	1,443,265,895
314 Turbogenerator Units	305,754,435	4,448,610	(2,891,641)	(462,541)	-	306,848,863
314 Turbogenerator Units - Sherco 3 HFU	-	-	-	-	-	-
315 Accessory Electric Equipment	183,570,952	2,232,630	(338,279)	127	-	185,465,430
315 Accessory Electric Equipment - Sherco 3 HFU	-	-	-	-	-	-
316 Miscellaneous Power Plant Equipment	53,996,869	67,535	(19,499)	-	-	54,044,905
Electric Steam Production Plant Total	**$ 2,263,126,246**	**$ 38,138,096**	**$ (13,900,625)**	**$ (462,414)**	**$ 96,034**	**$ 2,286,997,337**

Account Description	Beginning Balance 1/1/2017	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2017
ELECTRIC NUCLEAR PRODUCTION						
302 Franchises & Consents	$ 244,896,804	$ 649,542	$ -	$ -	$ -	$ 245,546,345
320 Land & Land Rights - Fee	1,760,581	53	-	-	-	1,760,634
320 Land and Land Rights - Other	1,729	-	-	-	-	1,729
321 Structures & Improvements	549,924,386	30,591,071	(3,280,743)	-	-	577,234,715
322 Reactor Plant Equipment	1,594,688,066	49,560,656	(8,794,065)	106,272,224	-	1,741,726,881
323 Turbogenerator Units	631,019,328	5,473,284	(3,609,645)	(106,272,224)	-	526,610,742
324 Accessory Electric Equipment	483,669,139	30,088,613	(1,413,541)	-	-	512,344,212
325 Miscellaneous Power Plant Equipment	205,423,490	1,575,614	(298,817)	-	-	206,700,287
Electric Nuclear Production Plant Total	**$ 3,711,383,523**	**$ 117,938,833**	**$ (17,396,810)**	**$ -**	**$ -**	**$ 3,811,925,546**
ELECTRIC HYDRO PRODUCTION						
302 Franchises & Consents	$ 2,857,039	$ -	$ -	$ -	$ -	$ 2,857,039
330 Land & Land Rights - Fee	292,863	-	-	-	-	292,863
330 Land & Land Rights - Other	1,400,213	-	-	-	-	1,400,213
331 Structures & Improvements	1,387,647	-	-	-	-	1,387,647
332 Reservoirs, Dams & Waterways	10,806,684	24,440	(1,259)	-	-	10,829,865
333 Water Wheels, Turbines & Generators	10,038,996	18,494	-	-	-	10,057,490
334 Accessory Electric Equipment	3,256,972	-	-	-	-	3,256,972
335 Miscellaneous Power Plant Equipment	60,824	-	-	-	-	60,824
Electric Hydro Production Plant Total	**$ 30,101,238**	**$ 42,934**	**$ (1,259)**	**$ -**	**$ -**	**$ 30,142,914**
ELECTRIC OTHER PRODUCTION						
340 Land & Land Rights - Fee	$ 5,613,427	$ -	$ (15,949)	$ -	$ -	$ 5,597,478
340 Land & Land Rights - Other	10,368,887	-	-	-	-	10,368,887
340 Wind Rights	5,975,507	(4,365)	-	-	-	5,971,141
341 Structures & Improvements	259,033,584	2,817,830	(195,757)	-	-	261,655,657
342 Fuel Holders, Producers & Accessories	84,618,861	(107,436)	(23,977)	-	-	84,487,448
343 Prime Movers	-	-	-	-	-	-
344 Generators	2,182,714,252	7,469,969	(8,989,441)	462,541	-	2,181,657,321
345 Accessory Electric Equipment	269,079,707	3,529,178	(710,215)	(127)	-	271,898,543
346 Miscellaneous Power Plant Equipment	31,276,052	166,229	(175)	-	-	31,442,106
348 Energy Storage Equipment	4,128,902	-	-	-	-	4,128,902
Electric Other Production Plant Total	**$ 2,852,809,179**	**$ 13,871,404**	**$ (9,935,514)**	**$ 462,414**	**$ -**	**$ 2,857,207,483**
TOTAL ELECTRIC UTILITY	**$ 13,116,982,837**	**$ 393,185,158**	**$ (91,356,457)**	**$ (94,930)**	**$ 96,034**	**$ 13,418,812,642**

Account Description	Beginning Balance 1/1/2017	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2017
COMMON INTANGIBLE						
301 Intangible Organization Costs	$ 100,608	$ -	$ -	$ -	$ -	$ 100,608
302 Franchise and Consents	-	-	-	-	-	-
303 Computer Software 3 Year	7,673,530	-	-	-	-	7,673,530
303 Computer Software 5 Year	197,541,349	28,239,741	(42,169,992)	-	-	183,611,097
303 Computer Software 7 Year	44,140,612	-	(22,334,391)	-	-	21,806,222
303 Computer Software 10 Year	68,449,240	-	(57,983,522)	-	-	10,465,718
303 Computer Software 15 year	61,015,418	85,475,325	-	-	-	146,490,743
303 Computer Software - All	-	-	-	-	-	-
Common Intangible Plant Total	**$ 378,920,757**	**$ 113,715,066**	**$ (122,487,905)**	**$ -**	**$ -**	**$ 370,147,918**
COMMON GENERAL						
389 Land - Fee	$ 6,191,336	$ -	$ -	$ -	$ -	$ 6,191,336
389 Land - Other	5,572	-	-	-	-	5,572
390 Structures and Improvements	151,813,406	9,192,592	1,979,036	(831,393)	-	162,153,641
390 Structures and Improvements - Leasehold Improvements	18,509,449	6,903	(1,260,922)	831,393	-	18,086,824
391 Office Furniture and Equipment	27,141,560	1,998,864	(3,309,111)	-	-	25,831,314
391 Network Equipment	100,446,164	25,951,890	(15,858,954)	-	-	110,539,100
392 Automobiles	823,465	445,109	-	-	-	1,268,574
392 Light Trucks	3,431,469	491,788	(481,177)	-	-	3,442,079
392 Trailers	1,099,687	-	(48,119)	-	-	1,051,568
392 Heavy Trucks	5,505,442	471,842	(1,252,353)	-	-	4,724,931
393 Stores Equipment	246,162	0	-	-	-	246,162
394 Tools, Shop, and Garage Equipment	4,041,708	369,434	(10,892)	-	-	4,400,251
395 Laboratory Equipment	-	-	-	-	-	-
396 Power Operated Equipment	990,912	(36,053)	(281,183)	-	-	673,676
397 Comm. & Telecomm. Equipment	964,432	-	(248,569)	-	-	715,864
397 Communication Equipment - Two Way	75,068	1,802	-	-	-	76,870
397 Communication Equipment - Smart Grid	-	-	-	-	-	-
398 Miscellaneous Equipment	582,227	-	(126,075)	-	-	456,153
Common General Plant Total	**$ 321,868,061**	**$ 38,894,171**	**$ (20,898,318)**	**$ -**	**$ -**	**$ 339,863,914**
TOTAL COMMON UTILITY	**$ 700,788,819**	**$ 152,609,237**	**$ (143,386,223)**	**$ -**	**$ -**	**$ 710,011,832**
TOTAL - ALL UTILITIES	**$ 13,817,771,655**	**$ 545,794,395**	**$ (234,742,680)**	**$ (94,930)**	**$ 96,034**	**$ 14,128,824,474**

Note: 322 Reactor Plant Equipment excludes amounts in FERC 105 - Plant Held for Future Use

Account Description	Beginning Balance 1/1/2018	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2018
ELECTRIC INTANGIBLE						
302 Franchise and Consents	$ 263,307	$ -	$ -	$ -	$ -	$ 263,307
303 Computer Software 3 Year	201,839	-	-	-	-	201,839
303 Computer Software 5 Year	112,077,383	36,003,167	(9,453,519)	-	-	138,627,032
303 Computer Software 7 Year	-	-	-	-	-	-
Electric Intangible Plant Total	**$ 112,542,528**	**$ 36,003,167**	**$ (9,453,519)**	**$ -**	**$ -**	**$ 139,092,177**
ELECTRIC TRANSMISSION						
350 Land - Fee	$ 32,571,811	$ 1,082,935	$ (10,132,064)	$ (612,169)	$ -	$ 22,910,512
350 Land - Other	129,601,916	2,381,426	-	496,838	-	132,480,180
352 Structures and Improvements	106,998,283	10,288,417	(165,875)	(148,846)	-	116,971,979
353 Station Equipment	1,215,136,223	42,712,680	(5,643,840)	(150,831)	-	1,252,054,232
354 Towers and Fixtures	118,435,290	(167,047)	(125,948)	-	-	118,142,295
355 Poles and Fixtures	1,381,960,426	18,828,148	(1,073,328)	(5,906)	-	1,399,709,340
356 Overhead Conductors and Devices	541,316,313	51,662,748	567,196	7,430	-	593,553,686
357 Underground Conduit	28,976,307	12,045	(47,205)	-	-	28,941,147
358 Underground Conductor and Devices	37,226,577	89,649	(117)	-	-	37,316,110
Electric Transmission Plant Total	**$ 3,592,223,145**	**$ 126,891,002**	**$ (16,621,182)**	**$ (413,484)**	**$ -**	**$ 3,702,079,481**
ELECTRIC DISTRIBUTION (ND ONLY)						
360 Land - Fee	$ 614,755	$ -	$ -	$ -	$ -	$ 614,755
361 Structures and Improvements	1,216,900	333	-	-	-	1,217,233
362 Station Equipment	26,282,651	2,022,945	(544,430)	-	-	27,761,166
364 Poles, Towers, and Fixtures	15,353,116	666,895	(33,591)	-	-	15,986,420
365 Overhead Conductors and Devices	20,803,135	507,812	(160,213)	-	-	21,150,733
366 Underground Conduit	6,885,435	339,939	(1,770)	-	-	7,223,604
367 Underground Conductor and Devices	61,508,645	2,368,532	(50,515)	-	-	63,826,662
368 Line Transformers	24,408,746	1,923,388	(608,588)	-	-	25,723,546
368 Line Capacitors	675,129	99,731	-	-	-	774,860
369 Overhead Services	5,467,112	93,053	(1,333)	-	-	5,558,832
369 Underground Services	8,548,919	295,007	(505)	-	-	8,843,421
370 Meters	7,425,216	36,912	(159,068)	-	-	7,303,060
370 Meters - Old	-	-	-	-	-	-
373 Street Lighting and Signal Systems	3,078,769	145,216	(102,865)	-	-	3,121,121
Electric Distribution Plant Total (ND Only)	**$ 182,268,528**	**$ 8,499,762**	**$ (1,662,877)**	**$ -**	**$ -**	**$ 189,105,413**

Account Description	Beginning Balance 1/1/2018	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2018
ELECTRIC GENERAL						
389 Land - Fee	$ 4,483,437	$ -	$ -	$ -	$ -	$ 4,483,437
389 Land - Other	665	-	-	-	-	665
390 Structures and Improvements	65,151,352	7,392,710	(107,445)	1,206,726	-	73,643,342
390 Structures and Improvements - Leasehold Improvements	35,652	1,032,766	-	-	-	1,068,418
391 Office Furniture and Equipment	27,976,279	2,333,263	-	-	-	30,309,543
391 Network Equipment	37,857,767	2,184,414	(5,902,021)	-	-	34,140,160
392 Automobiles	4,232,129	1,451,394	-	-	-	5,683,523
392 Light Trucks	29,568,523	4,654,320	(64,457)	-	-	34,158,386
392 Trailers	19,169,520	1,719,412	(151,940)	-	-	20,736,992
392 Heavy Trucks	110,703,443	5,454,952	(2,154,591)	-	-	114,003,804
393 Stores Equipment	1,631,738	-	-	-	-	1,631,738
394 Tools, Shop, and Garage Equipment	89,901,364	8,730,298	(45,193)	-	-	98,586,469
395 Laboratory Equipment	2,997,571	178,132	(31,275)	-	-	3,144,428
396 Power Operated Equipment	46,104,118	4,655,427	-	-	-	50,759,545
397 General Communication Equipment	16,860,086	685,722	(172,388)	1,281	-	17,374,702
397 Communication Equipment - Two Way	24,546,091	24,106,357	-	-	-	48,652,448
397 Comm. & Telecomm. Equipment - AES	7,095,870	-	-	-	-	7,095,870
397 Comm. & Telecomm. Equipment - EMS	53,852,877	(8,946,501)	-	-	-	44,906,377
398 Miscellaneous Equipment	3,336,680	30,302	(5,230)	-	-	3,361,752
Electric General Plant Total	**$ 545,505,161**	**$ 55,662,967**	**$ (8,634,539)**	**$ 1,208,007**	**$ -**	**$ 593,741,596**
ELECTRIC STEAM PRODUCTION						
310 Land & Land Rights - Fee	$ 8,554,373	$ -	$ -	$ -	$ -	$ 8,554,373
310 Land & Land Rights - Other	8,024	-	-	-	-	8,024
311 Structures & Improvements	288,809,847	7,421,223	(4,289,575)	-	-	291,941,494
312 Boiler Plant Equipment	1,443,265,895	30,545,878	(13,080,002)	-	-	1,460,731,771
314 Turbogenerator Units	306,848,863	20,556,650	(2,693,934)	(250,076)	-	324,461,502
314 Turbogenerator Units - Sherco 3 HFU	-	-	-	-	-	-
315 Accessory Electric Equipment	185,465,430	2,350,212	(750,946)	-	-	187,064,696
315 Accessory Electric Equipment - Sherco 3 HFU	-	-	-	-	-	-
316 Miscellaneous Power Plant Equipment	54,044,905	71,294	(313,358)	84,854	-	53,887,695
Electric Steam Production Plant Total	**$ 2,286,997,337**	**$ 60,945,257**	**$ (21,127,816)**	**$ (165,222)**	**$ -**	**$ 2,326,649,555**

Account Description	Beginning Balance 1/1/2018	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2018
ELECTRIC NUCLEAR PRODUCTION						
302 Franchises & Consents	$ 245,546,345	$ 1,614,699	$ -	$ -	$ -	$ 247,161,045
320 Land & Land Rights - Fee	1,760,634	-	-	-	-	1,760,634
320 Land and Land Rights - Other	1,729	-	-	-	-	1,729
321 Structures & Improvements	577,234,715	13,375,547	(1,115,961)	(1,206,726)	-	588,287,575
322 Reactor Plant Equipment	1,741,726,881	121,654,588	(6,894,554)	6,687,377	-	1,863,174,292
323 Turbogenerator Units	526,610,742	97,437,213	(2,629,062)	-	-	621,418,893
324 Accessory Electric Equipment	512,344,212	28,636,650	(1,848,222)	-	-	539,132,640
325 Miscellaneous Power Plant Equipment	206,700,287	441,882	(432,465)	(84,854)	-	206,624,850
Electric Nuclear Production Plant Total	**$ 3,811,925,546**	**$ 263,160,581**	**$ (12,920,265)**	**$ 5,395,797**	**$ -**	**$ 4,067,561,658**
ELECTRIC HYDRO PRODUCTION						
302 Franchises & Consents	$ 2,857,039	$ -	$ -	$ -	$ -	$ 2,857,039
330 Land & Land Rights - Fee	292,863	-	-	-	-	292,863
330 Land & Land Rights - Other	1,400,213	-	-	-	-	1,400,213
331 Structures & Improvements	1,387,647	833	-	-	-	1,388,480
332 Reservoirs, Dams & Waterways	10,829,865	429,783	(193,367)	-	-	11,066,280
333 Water Wheels, Turbines & Generators	10,057,490	171,881	(73,631)	-	-	10,155,741
334 Accessory Electric Equipment	3,256,972	-	-	-	-	3,256,972
335 Miscellaneous Power Plant Equipment	60,824	-	-	-	-	60,824
Electric Hydro Production Plant Total	**$ 30,142,914**	**$ 602,497**	**$ (266,998)**	**$ -**	**$ -**	**$ 30,478,412**
ELECTRIC OTHER PRODUCTION						
340 Land & Land Rights - Fee	$ 5,597,478	$ (2)	$ (80,612)	$ (1,985,634)	$ -	$ 3,531,231
340 Land & Land Rights - Other	10,368,887	-	(1,236)	-	-	10,367,652
340 Wind Rights	5,971,141	(646)	-	10,672,452	-	16,642,947
341 Structures & Improvements	261,655,657	5,488,845	(648,828)	145,443	-	266,641,117
342 Fuel Holders, Producers & Accessories	84,487,448	10,721,661	(2,532,482)	(65,244,551)	-	27,432,076
343 Prime Movers	-	-	-	139,802,454	-	139,802,454
344 Generators	2,181,657,321	87,939,941	(2,747,445)	(82,324,110)	-	2,184,525,708
345 Accessory Electric Equipment	271,898,543	15,705,211	(353,213)	(924,214)	-	286,326,327
346 Miscellaneous Power Plant Equipment	31,442,106	1,437,455	(0)	-	-	32,879,561
348 Energy Storage Equipment	4,128,902	-	-	-	-	4,128,902
Electric Other Production Plant Total	**$ 2,857,207,483**	**$ 121,292,465**	**$ (6,363,815)**	**$ 141,841**	**$ -**	**$ 2,972,277,974**
TOTAL ELECTRIC UTILITY	**$ 13,418,812,642**	**$ 673,057,697**	**$ (77,051,011)**	**$ 6,166,939**	**$ -**	**$ 14,020,986,266**

Account Description	Beginning Balance 1/1/2018	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2018
COMMON INTANGIBLE						
301 Intangible Organization Costs	$ 100,608	$ -	$ -	$ -	$ -	$ 100,608
302 Franchise and Consents	-	-	-	-	-	-
303 Computer Software 3 Year	7,673,530	7,096,953	-	-	-	14,770,483
303 Computer Software 5 Year	183,611,097	38,871,710	(16,129,376)	-	-	206,353,432
303 Computer Software 7 Year	21,806,222	-	(18,792,908)	-	-	3,013,314
303 Computer Software 10 Year	10,465,718	-	43,267,319	-	-	53,733,037
303 Computer Software 15 year	146,490,743	8,232,429	-	-	-	154,723,172
303 Computer Software - All	-	-	-	-	-	-
Common Intangible Plant Total	**$ 370,147,918**	**$ 54,201,092**	**$ 8,345,036**	**$ -**	**$ -**	**$ 432,694,045**
COMMON GENERAL						
389 Land - Fee	$ 6,191,336	$ -	$ -	$ -	$ -	$ 6,191,336
389 Land - Other	5,572	-	-	-	-	5,572
390 Structures and Improvements	162,153,641	19,629,703	(44,458)	19,995	-	181,758,881
390 Structures and Improvements - Leasehold Improvements	18,086,824	129,631	-	-	-	18,216,455
391 Office Furniture and Equipment	25,831,314	1,256,499	(327,301)	-	-	26,760,512
391 Network Equipment	110,539,100	14,963,019	(16,899,056)	-	-	108,603,063
392 Automobiles	1,268,574	158,853	-	-	-	1,427,427
392 Light Trucks	3,442,079	328,700	-	-	-	3,770,779
392 Trailers	1,051,568	51,457	(56,230)	-	-	1,046,795
392 Heavy Trucks	4,724,931	502,796	-	-	-	5,227,727
393 Stores Equipment	246,162	-	-	-	-	246,162
394 Tools, Shop, and Garage Equipment	4,400,251	552,023	(21,290)	-	-	4,930,984
395 Laboratory Equipment	-	-	-	-	-	-
396 Power Operated Equipment	673,676	-	(14,690)	-	-	658,987
397 Comm. & Telecomm. Equipment	715,864	-	(567,014)	-	-	148,850
397 Communication Equipment - Two Way	76,870	-	-	-	-	76,870
397 Communication Equipment - Smart Grid	-	-	-	-	-	-
398 Miscellaneous Equipment	456,153	-	(220,544)	-	-	235,608
Common General Plant Total	**$ 339,863,914**	**$ 37,572,680**	**$ (18,150,582)**	**$ 19,995**	**$ -**	**$ 359,306,007**
TOTAL COMMON UTILITY	**$ 710,011,832**	**$ 91,773,772**	**$ (9,805,547)**	**$ 19,995**	**$ -**	**$ 792,000,053**
TOTAL - ALL UTILITIES	**$ 14,128,824,474**	**$ 764,831,469**	**$ (86,856,558)**	**$ 6,186,934**	**$ -**	**$ 14,812,986,319**

Note: 322 Reactor Plant Equipment and 353 Station Equipment exclude amounts in FERC 105 - Plant Held for Future Use

Account Description	Beginning Balance 1/1/2019	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2019
ELECTRIC INTANGIBLE						
302 Franchise and Consents	$ 263,307	$ -	$ -	$ -	$ -	$ 263,307
303 Computer Software 3 Year	201,839	-	-	-	-	201,839
303 Computer Software 5 Year	138,627,032	9,621,837	(4,395,343)	-	-	143,853,526
303 Computer Software 7 Year	-	-	-	-	-	-
Electric Intangible Plant Total	**$ 139,092,177**	**$ 9,621,837**	**$ (4,395,343)**	**$ -**	**$ -**	**$ 144,318,672**
ELECTRIC TRANSMISSION						
350 Land - Fee	$ 22,910,512	$ 1,122,348	$ -	$ 46,353	$ -	$ 24,079,212
350 Land - Other	132,480,180	8,855,193	-	(1,174)	-	141,334,199
352 Structures and Improvements	116,971,979	6,999,774	(164,469)	2,059,336	-	125,866,620
353 Station Equipment	1,252,054,232	36,091,019	(6,069,396)	472,749	-	1,282,548,604
354 Towers and Fixtures	118,142,295	(21,127)	-	(98,889)	-	118,022,279
355 Poles and Fixtures	1,399,709,340	42,623,082	(1,364,944)	56,834	-	1,441,024,312
356 Overhead Conductors and Devices	593,553,686	2,645,884	(630,832)	32,203	-	595,600,941
357 Underground Conduit	28,941,147	942,259	-	-	-	29,883,406
358 Underground Conductor and Devices	37,316,110	(330,140)	-	-	-	36,985,970
Electric Transmission Plant Total	**$ 3,702,079,481**	**$ 98,928,291**	**$ (8,229,640)**	**$ 2,567,412**	**$ -**	**$ 3,795,345,544**
ELECTRIC DISTRIBUTION (ND ONLY)						
360 Land - Fee	$ 614,755	$ -	$ -	$ (45,179)	$ -	$ 569,576
361 Structures and Improvements	1,217,233	418,468	-	(546,301)	-	1,089,400
362 Station Equipment	27,761,166	7,593,330	(41,307)	(850,166)	-	34,463,023
364 Poles, Towers, and Fixtures	15,986,420	1,315,367	(59,718)	-	-	17,242,070
365 Overhead Conductors and Devices	21,150,733	1,711,124	(288,260)	-	-	22,573,598
366 Underground Conduit	7,223,604	100,892	(5,446)	-	-	7,319,050
367 Underground Conductor and Devices	63,826,662	2,803,700	(174,495)	-	-	66,455,866
368 Line Transformers	25,723,546	1,214,119	(464,975)	-	-	26,472,691
368 Line Capacitors	774,860	0	(7,773)	-	-	767,086
369 Overhead Services	5,558,832	90,635	(4,455)	-	-	5,645,012
369 Underground Services	8,843,421	551,596	(10,023)	-	-	9,384,994
370 Meters	7,303,060	120,797	(177,612)	-	-	7,246,245
370 Meters - Old	-	-	-	-	-	-
373 Street Lighting and Signal Systems	3,121,121	125,397	(40,471)	-	-	3,206,047
Electric Distribution Plant Total (ND Only)	**$ 189,105,413**	**$ 16,045,426**	**$ (1,274,536)**	**$ (1,441,646)**	**$ -**	**$ 202,434,657**

Account Description	Beginning Balance 1/1/2019	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2019
ELECTRIC GENERAL						
389 Land - Fee	$ 4,483,437	$ -	$ -	$ -	$ -	$ 4,483,437
389 Land - Other	665	-	-	-	-	665
390 Structures and Improvements	73,643,342	3,109,818	(1,654,214)	(2,128,434)	-	72,970,511
390 Structures and Improvements - Leasehold Improvements	1,068,418	7,015	-	-	-	1,075,433
391 Office Furniture and Equipment	30,309,543	1,802,753	-	-	-	32,112,296
391 Network Equipment	34,140,160	14,447,099	-	-	-	48,587,258
392 Automobiles	5,683,523	699,986	-	-	-	6,383,510
392 Light Trucks	34,158,386	904,465	-	-	-	35,062,851
392 Trailers	20,736,992	1,361,619	-	-	-	22,098,610
392 Heavy Trucks	114,003,804	2,636,038	-	-	-	116,639,842
393 Stores Equipment	1,631,738	-	-	-	-	1,631,738
394 Tools, Shop, and Garage Equipment	98,586,469	7,273,710	(2,721,004)	8,920	-	103,148,094
395 Laboratory Equipment	3,144,428	-	(159,528)	-	-	2,984,900
396 Power Operated Equipment	50,759,545	1,226,512	-	-	-	51,986,057
397 General Communication Equipment	17,374,702	65,175	5,835	-	-	17,445,712
397 Communication Equipment - Two Way	48,652,448	9,315,052	-	441,889	-	58,409,389
397 Comm. & Telecomm. Equipment - AES	7,095,870	(24,144)	-	-	-	7,071,726
397 Comm. & Telecomm. Equipment - EMS	44,906,377	(3,231,684)	-	-	-	41,674,693
398 Miscellaneous Equipment	3,361,752	257,860	-	-	-	3,619,613
Electric General Plant Total	**$ 593,741,596**	**$ 39,851,275**	**$ (4,528,911)**	**$ (1,677,626)**	**$ -**	**$ 627,386,334**
ELECTRIC STEAM PRODUCTION						
310 Land & Land Rights - Fee	$ 8,554,373	$ -	$ (35,179)	$ -	$ -	$ 8,519,194
310 Land & Land Rights - Other	8,024	-	-	-	-	8,024
311 Structures & Improvements	291,941,494	1,317,811	(566,545)	(783,616)	-	291,909,144
312 Boiler Plant Equipment	1,460,731,771	14,494,153	(10,197,440)	(118,327)	-	1,464,910,157
314 Turbogenerator Units	324,461,502	(3,951,899)	(1,472,027)	(68,159)	-	318,969,418
314 Turbogenerator Units - Sherco 3 HFU	-	-	-	-	-	-
315 Accessory Electric Equipment	187,064,696	1,588,314	(912,219)	-	-	187,740,791
315 Accessory Electric Equipment - Sherco 3 HFU	-	-	-	-	-	-
316 Miscellaneous Power Plant Equipment	53,887,695	186,592	(8,525)	-	-	54,065,763
Electric Steam Production Plant Total	**$ 2,326,649,555**	**$ 13,634,972**	**$ (13,191,935)**	**$ (970,101)**	**$ -**	**$ 2,326,122,491**

Account Description	Beginning Balance 1/1/2019	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2019
ELECTRIC NUCLEAR PRODUCTION						
302 Franchises & Consents	$ 247,161,045	$ 4,071,774	$ -	$ -	$ -	$ 251,232,819
320 Land & Land Rights - Fee	1,760,634	-	-	-	-	1,760,634
320 Land and Land Rights - Other	1,729	-	-	-	-	1,729
321 Structures & Improvements	588,287,575	3,289,706	(11,876,346)	357,914	-	580,058,850
322 Reactor Plant Equipment	1,863,174,292	50,576,606	(5,095,394)	-	-	1,908,655,504
323 Turbogenerator Units	621,418,893	13,709,657	(1,313,060)	-	-	633,815,490
324 Accessory Electric Equipment	539,132,640	15,928,597	(1,131,564)	-	-	553,929,673
325 Miscellaneous Power Plant Equipment	206,624,850	2,446,280	(1,584,192)	146,945	-	207,633,882
Electric Nuclear Production Plant Total	**$ 4,067,561,658**	**$ 90,022,621**	**$ (21,000,557)**	**$ 504,859**	**$ -**	**$ 4,137,088,581**
ELECTRIC HYDRO PRODUCTION						
302 Franchises & Consents	$ 2,857,039	$ -	$ -	$ -	$ -	$ 2,857,039
330 Land & Land Rights - Fee	292,863	-	-	-	-	292,863
330 Land & Land Rights - Other	1,400,213	-	-	-	-	1,400,213
331 Structures & Improvements	1,388,480	-	-	57,124	-	1,445,604
332 Reservoirs, Dams & Waterways	11,066,280	293	-	-	-	11,066,573
333 Water Wheels, Turbines & Generators	10,155,741	21,326	-	-	-	10,177,067
334 Accessory Electric Equipment	3,256,972	-	-	-	-	3,256,972
335 Miscellaneous Power Plant Equipment	60,824	-	-	-	-	60,824
Electric Hydro Production Plant Total	**$ 30,478,412**	**$ 21,619**	**$ -**	**$ 57,124**	**$ -**	**$ 30,557,156**
ELECTRIC OTHER PRODUCTION						
340 Land & Land Rights - Fee	$ 3,531,231	$ 1,105,334	$ -	$ -	$ -	$ 4,636,565
340 Land & Land Rights - Other	10,367,652	-	-	-	-	10,367,652
340 Wind Rights	16,642,947	146,853	-	-	-	16,789,800
341 Structures & Improvements	266,641,117	66,938,771	(65,969)	817,630	-	334,331,548
342 Fuel Holders, Producers & Accessories	27,432,076	361,734	(684,738)	-	-	27,109,072
343 Prime Movers	139,802,454	652,252	-	-	-	140,454,706
344 Generators	2,184,525,708	346,157,659	(11,429,551)	186,485	-	2,519,440,301
345 Accessory Electric Equipment	286,326,327	11,916,587	(2,626,774)	-	-	295,616,140
346 Miscellaneous Power Plant Equipment	32,879,561	23,919	-	-	-	32,903,480
348 Energy Storage Equipment	4,128,902	-	-	-	-	4,128,902
Electric Other Production Plant Total	**$ 2,972,277,974**	**$ 427,303,109**	**$ (14,807,032)**	**$ 1,004,115**	**$ -**	**$ 3,385,778,166**
TOTAL ELECTRIC UTILITY	**$ 14,020,986,266**	**$ 695,429,150**	**$ (67,427,953)**	**$ 44,137**	**$ -**	**$ 14,649,031,600**

Account Description	Beginning Balance 1/1/2019	Additions	Retirements	Transfers	Adjustments/Other	Ending Balance 12/31/2019
COMMON INTANGIBLE						
301 Intangible Organization Costs	$ 100,608	$ -	$ -	$ -	$ -	$ 100,608
302 Franchise and Consents	-	-	-	-	-	-
303 Computer Software 3 Year	14,770,483	2,505,698	-	(62,381)	-	17,213,800
303 Computer Software 5 Year	206,353,432	36,901,019	(14,668,656)	62,381	-	228,648,176
303 Computer Software 7 Year	3,013,314	-	(157,657)	-	-	2,855,656
303 Computer Software 10 Year	53,733,037	1,110,368	-	-	-	54,843,405
303 Computer Software 15 year	154,723,172	11,106,757	-	-	-	165,829,929
303 Computer Software - All	-	-	-	-	-	-
Common Intangible Plant Total	**$ 432,694,045**	**$ 51,623,842**	**$ (14,826,313)**	**$ -**	**$ -**	**$ 469,491,574**
COMMON GENERAL						
389 Land - Fee	$ 6,191,336	$ -	$ -	$ -	$ -	$ 6,191,336
389 Land - Other	5,572	-	-	-	-	5,572
390 Structures and Improvements	181,758,881	11,186,176	(4,375,946)	(668,904)	-	187,900,208
390 Structures and Improvements - Leasehold Improvements	18,216,455	-	(122,125)	-	-	18,094,329
391 Office Furniture and Equipment	26,760,512	4,341,242	(1,424,126)	(1,525,701)	-	28,151,926
391 Network Equipment	108,603,063	41,195,934	(4,110,531)	-	-	145,688,465
392 Automobiles	1,427,427	54,757	-	-	-	1,482,184
392 Light Trucks	3,770,779	226,895	-	-	-	3,997,674
392 Trailers	1,046,795	66,065	-	-	-	1,112,860
392 Heavy Trucks	5,227,727	697,606	-	-	-	5,925,333
393 Stores Equipment	246,162	-	-	-	-	246,162
394 Tools, Shop, and Garage Equipment	4,930,984	(2,770)	(48,446)	38,530	-	4,918,298
395 Laboratory Equipment	-	-	-	-	-	-
396 Power Operated Equipment	658,987	368,135	-	-	-	1,027,122
397 Comm. & Telecomm. Equipment	148,850	-	-	-	-	148,850
397 Communication Equipment - Two Way	76,870	-	-	-	-	76,870
397 Communication Equipment - Smart Grid	-	529,266	-	-	-	529,266
398 Miscellaneous Equipment	235,608	-	-	-	-	235,608
Common General Plant Total	**$ 359,306,007**	**$ 58,663,306**	**$ (10,081,174)**	**$ (2,156,074)**	**$ -**	**$ 405,732,065**
TOTAL COMMON UTILITY	**$ 792,000,053**	**$ 110,287,148**	**$ (24,907,488)**	**$ (2,156,074)**	**$ -**	**$ 875,223,638**
TOTAL - ALL UTILITIES	**$ 14,812,986,319**	**$ 805,716,298**	**$ (92,335,441)**	**$ (2,111,937)**	**$ -**	**$ 15,524,255,238**

Note: 322 Reactor Plant Equipment excludes amounts in FERC 105 - Plant Held for Future Use

Functional Class	Balance from Schedule 2a	Reconciling items (see notes below)	Note	Beginning Balance 1/1/2020	Additions	Retirements	Transfers & Adjustments	Ending Balance 12/31/2020	Additions	Retirements	Transfers & Adjustments	Ending Balance 12/31/2021
Electric Intangible Plant	144,318,672	254,089,857	(1)	398,408,529	15,775,071	-	-	414,183,600	37,114,828	-	-	451,298,428
Electric Transmission Plant	3,795,345,544	532,495	(2)	3,795,878,039	177,763,329	(11,654,781)	40,229	3,962,026,816	270,875,823	(11,296,177)	-	4,221,606,463
Electric Distribution Plant - ND located only	202,434,657	-		202,434,657	9,987,807	(1,870,523)	-	210,551,941	5,960,425	(1,688,977)	-	214,823,389
Electric General Plant	627,386,334	-		627,386,334	47,737,590	(5,501,478)	(10,395)	669,612,052	120,310,127	-	-	789,922,179
Electric Steam Production Plant	2,326,122,491	-		2,326,122,491	28,706,883	(8,029,568)	(1,614)	2,346,798,192	46,474,180	-	-	2,393,272,372
Electric Nuclear Production Plant	4,137,088,581	(237,671,880)	(1) (3)	3,899,416,701	67,005,629	(16,437,959)	-	3,949,984,371	81,386,327	-	-	4,031,370,698
Electric Hydro Production Plant	30,557,156	(2,857,039)	(1)	27,700,117	90,263	(20,492)	-	27,769,889	135,306	-	-	27,905,195
Electric Other Production Plant	3,385,778,166	-		3,385,778,166	1,269,350,179	(20,906,371)	(28,221)	4,634,193,753	769,942,588	-	-	5,404,136,341
Total Electric Utility	**14,649,031,600**	**14,093,434**		**14,663,125,034**	**1,616,416,752**	**(64,421,172)**	**-**	**16,215,120,614**	**1,332,199,603**	**(12,985,154)**	**-**	**17,534,335,062**
Common Intangible Plant	469,491,574	-		469,491,574	65,568,429	-	-	535,060,002	71,378,484	-	-	606,438,486
Common General Plant	405,732,065	-		405,732,065	55,445,477	(1,085,760)	-	460,091,781	54,003,199	-	-	514,094,980
Total Common Utility	**875,223,638**	**-**		**875,223,638**	**121,013,905**	**(1,085,760)**	**-**	**995,151,783**	**125,381,683**	**-**	**-**	**1,120,533,467**
Total	**15,524,255,238**	**14,093,434**		**15,538,348,672**	**1,737,430,657**	**(65,506,933)**	**-**	**17,210,272,397**	**1,457,581,286**	**(12,985,154)**	**-**	**18,654,868,529**

Note 1. FERC 302 Franchises and Consents is in the Electric Intangible function. A large portion of FERC 302 relates to the nuclear and hydro operating licenses. Therefore on Schedule 2a, they were presented under each of those functions to capture the underlying driver of the account. In the forecast, all of FERC 302 falls under Electric Intangible.

Note 2. FERC 114 Acquisition Adjustment was excluded in Schedule 2a. The 2019 ending balance of this account in Electric Transmission was $0.5 million.

Note 3. Plant Held for Future Use in FERC 105 was excluded in Schedule 2a. The 2019 ending balance of this account in Electric Nuclear Production was $13.6 million.

			2020		2020 Total	2021		2021 Total	Grand Total
Witness	**Major Category**	**Functional Class**	**CWIP spend**	**RWIP spend**		**CWIP spend**	**RWIP spend**		
Bloch	AGIS	Common General Plant	570,674		570,674	350,000		350,000	920,674
Bloch	AGIS	Electric General Plant	8,355,606	-	8,355,606	11,637,115	-	11,637,115	19,992,720
Bloch	AGIS	Electric Intangible Plant	9,764,905	-	9,764,905	12,614,034	-	12,614,034	22,378,939
Bloch	ASSET HEALTH & RELIABILITY	Electric Distribution Plant	2,826,761	220,821	3,047,583	4,855,572	329,435	5,185,007	8,232,590
Bloch	ASSET HEALTH & RELIABILITY	Electric General Plant				418,500	31,500	450,000	450,000
Bloch	CAPACITY	Electric Distribution Plant	(92,623)	827,489	734,866	106,500	3,500	110,000	844,866
Bloch	FLEET, TOOLS & COMM	Common General Plant	246,793	1,102	247,895	420,718	3,282	424,000	671,895
Bloch	FLEET, TOOLS & COMM	Electric Distribution Plant	201,213	40,652	241,865	138,000		138,000	379,865
Bloch	FLEET, TOOLS & COMM	Electric General Plant	3,284,247	240,084	3,524,331	10,912,998	88,946	11,001,944	14,526,275
Bloch	MANDATES	Electric Distribution Plant	363,480	49,832	413,312	1,167,250	153,750	1,321,000	1,734,312
Bloch	NEW BUSINESS	Electric Distribution Plant	906,121	123,555	1,029,676	2,234,800	31,200	2,266,000	3,295,676
Bloch	SOLAR	Electric General Plant	(127,613)		(127,613)				(127,613)
Bloch Total			**26,299,563**	**1,503,535**	**27,803,098**	**44,855,487**	**641,613**	**45,497,100**	**73,300,198**
Moeller	Aging Technology	Common General Plant	24,670,695	(10,936)	24,659,759	13,891,096		13,891,096	38,550,855
Moeller	Aging Technology	Common Intangible Plant	42,673,039		42,673,039	29,844,721		29,844,721	72,517,760
Moeller	Aging Technology	Electric General Plant	12,736,919		12,736,919	13,550,551		13,550,551	26,287,470
Moeller	Aging Technology	Electric Intangible Plant	8,335,556		8,335,556	6,627,948		6,627,948	14,963,504
Moeller	ASSET RENEWAL	Electric General Plant	1,805,192	57,325	1,862,518	3,602,628	8,820	3,611,448	5,473,966
Moeller	ASSET RENEWAL	Electric Transmission Plant	50,186,981	5,495,846	55,682,827	60,808,608	806,892	61,615,500	117,298,327
Moeller	BASE	Electric General Plant	135,114		135,114	805,002	991	805,993	941,107
Moeller	BASE	Electric Hydro Production Plant	23,835	129	23,964	20,004		20,004	43,968
Moeller	BASE	Electric Other Production Plant	19,681	60,401	80,082				80,082
Moeller	BASE	Electric Steam Production Plant	2,031	(2,566)	(535)		480,850	480,850	480,315
Moeller	COAL	Electric General Plant	132,291		132,291	350,000		350,000	482,291
Moeller	COAL	Electric Steam Production Plant	29,881,831	3,361,672	33,243,503	27,044,077	1,920,304	28,964,381	62,207,884
Moeller	COMM INFRASTRUCTURE	Electric General Plant	387,721	(10,510)	377,211	5,210,000	80,000	5,290,000	5,667,211
Moeller	COMM INFRASTRUCTURE	Electric Transmission Plant	291,644	(49,588)	242,055				242,055
Moeller	Customer	Common Intangible Plant	16,959,312	-	16,959,312	20,317,194	-	20,317,194	37,276,506
Moeller	Cyber Security	Common General Plant	700,766		700,766	787,010		787,010	1,487,776
Moeller	Cyber Security	Common Intangible Plant	7,173,085		7,173,085	1,751,413		1,751,413	8,924,498
Moeller	Cyber Security	Electric Intangible Plant	307,500		307,500				307,500
Moeller	DRY CASK STORAGE	Electric Intangible Plant				120,000		120,000	120,000
Moeller	DRY CASK STORAGE	Electric Nuclear Production Plant	17,750,989		17,750,989	18,296,690		18,296,690	36,047,679
Moeller	Emergent Demand	Common General Plant	(4,289,988)		(4,289,988)	(5,965,296)		(5,965,296)	(10,255,284)
Moeller	Emergent Demand	Common Intangible Plant	(17,703,168)		(17,703,168)	14,835,601		14,835,601	(2,867,567)
Moeller	Enhance Capabilities	Common General Plant	7,495,472	(712)	7,494,760	6,833,635		6,833,635	14,328,395
Moeller	Enhance Capabilities	Common Intangible Plant	10,336,045		10,336,045	5,357,208		5,357,208	15,693,253
Moeller	Enhance Capabilities	Electric General Plant	2,597,962		2,597,962	284,684		284,684	2,882,646
Moeller	Enhance Capabilities	Electric Intangible Plant	2,466,917		2,466,917	1,645,033		1,645,033	4,111,950
Moeller	ENTERPRISE SECURITY CAPITAL	Common General Plant	19,577	940	20,517	12,001,192		12,001,192	12,021,709
Moeller	ENTERPRISE SECURITY CAPITAL	Electric General Plant	116,779		116,779				116,779

Witness	Major Category	Functional Class	2020 CWIP spend	2020 RWIP spend	2020 Total	2021 CWIP spend	2021 RWIP spend	2021 Total	Grand Total
Moeller	FACILITIES & OTHER	Electric General Plant	309,754		309,754	100,000		100,000	409,754
Moeller	FACILITIES & OTHER	Electric Intangible Plant	1,500,000		1,500,000	711,000		711,000	2,211,000
Moeller	FACILITIES & OTHER	Electric Nuclear Production Plant	1,429,759	260,360	1,690,119	1,505,592	100,000	1,605,592	3,295,711
Moeller	Fleet Asset Additions	Common General Plant				735,000		735,000	735,000
Moeller	Fleet Asset Additions	Electric General Plant				35,000		35,000	35,000
Moeller	Fueling Depots and Garage Tools	Common General Plant	1,135,211		1,135,211	750,000		750,000	1,885,211
Moeller	HYDRO	Electric General Plant				15,000		15,000	15,000
Moeller	HYDRO	Electric Hydro Production Plant	130,628	8,644	139,272	70,000	10,000	80,000	219,272
Moeller	IMPROVEMENTS	Electric General Plant	5,756,201	20,031	5,776,233	6,369,212		6,369,212	12,145,445
Moeller	IMPROVEMENTS	Electric Intangible Plant	5,136,071		5,136,071	3,896,246		3,896,246	9,032,318
Moeller	IMPROVEMENTS	Electric Nuclear Production Plant	12,245,339	116,251	12,361,591	10,900,117		10,900,117	23,261,708
Moeller	INTERCONNECTION	Electric General Plant	(19,105)	(29,534)	(48,639)				(48,639)
Moeller	INTERCONNECTION	Electric Transmission Plant	20,195,197	(696,918)	19,498,279	40,249,898	717,700	40,967,598	60,465,877
Moeller	INTERMEDIATE	Electric General Plant	3,722		3,722	150,315		150,315	154,037
Moeller	INTERMEDIATE	Electric Other Production Plant	22,376,845	1,946,597	24,323,441	28,976,504	1,593,771	30,570,275	54,893,716
Moeller	INTERMEDIATE	Electric Steam Production Plant	39,987	6,492	46,479				46,479
Moeller	MAJOR	Electric Other Production Plant	2,188,473	2,297,935	4,486,408	2,490,000		2,490,000	6,976,408
Moeller	MAJOR	Electric Steam Production Plant		1,612,504	1,612,504		6,776,842	6,776,842	8,389,346
Moeller	MANDATED COMPLIANCE	Electric Intangible Plant	1,000,000		1,000,000	2,700,000		2,700,000	3,700,000
Moeller	MANDATED COMPLIANCE	Electric Nuclear Production Plant	6,414,319	51,658	6,465,977	3,539,335	50,000	3,589,335	10,055,312
Moeller	NUCLEAR FUEL	Nuclear Fuel	54,646,337		54,646,337	104,406,565		104,406,565	159,052,902
Moeller	OTHER	Common General Plant	5,023,696	105,289	5,128,985	4,811,501	-	4,811,501	9,940,486
Moeller	OTHER	Common Intangible Plant	2,458,957		2,458,957				2,458,957
Moeller	OTHER	Electric General Plant	(733)	(18,613)	(19,346)				(19,346)
Moeller	OTHER	Electric Intangible Plant	(1,759,770)		(1,759,770)				(1,759,770)
Moeller	OTHER	Electric Other Production Plant	(148)		(148)				(148)
Moeller	OTHER	Electric Transmission Plant	1,074,111	400,443	1,474,554				1,474,554
Moeller	PEAKING & RDF	Electric General Plant	60,736		60,736	404,997		404,997	465,733
Moeller	PEAKING & RDF	Electric Other Production Plant	4,428,766	(62,370)	4,366,395	14,820,698	293,871	15,114,569	19,480,964
Moeller	PEAKING & RDF	Electric Steam Production Plant	2,817,439	359,963	3,177,402	8,196,279	599,314	8,795,593	11,972,995
Moeller	PROPERTY SERVICES CAPITAL	Common General Plant	14,815,570	(179,329)	14,636,242	34,040,697	239,281	34,279,978	48,916,220
Moeller	PROPERTY SERVICES CAPITAL	Electric General Plant	1,446,212	(59,008)	1,387,203	6,881,036	412,973	7,294,009	8,681,212
Moeller	REGIONAL EXPANSION	Electric Transmission Plant	38,895,275	202,408	39,097,683	40,927,282	126,724	41,054,006	80,151,689
Moeller	RELIABILITY	Electric General Plant	1,699,734	8,656	1,708,390	3,733,348	10,900	3,744,248	5,452,638
Moeller	RELIABILITY	Electric Nuclear Production Plant	35,094,032	1,039,746	36,133,778	64,977,448	2,423,221	67,400,669	103,534,447
Moeller	RELIABILITY REQUIREMENT	Electric General Plant	531,195	5,399	536,594	776,260	2,240	778,500	1,315,094
Moeller	RELIABILITY REQUIREMENT	Electric Intangible Plant	11		11				11
Moeller	RELIABILITY REQUIREMENT	Electric Transmission Plant	18,399,792	653,633	19,053,425	47,446,240	276,728	47,722,968	66,776,393
Moeller	Replacements, Additions, & Repairs	Common General Plant	1,071,613	(11,193)	1,060,420	1,650,000		1,650,000	2,710,420
Moeller	Replacements, Additions, & Repairs	Electric General Plant	14,960,495	(542,001)	14,418,494	18,850,000		18,850,000	33,268,494
Moeller	SECURITY\RESILIENCY	Electric General Plant	1,656,934		1,656,934	7,142,013		7,142,013	8,798,947
Moeller	SECURITY\RESILIENCY	Electric Intangible Plant				93,000		93,000	93,000
Moeller	SECURITY\RESILIENCY	Electric Transmission Plant	5,034,493	291,206	5,325,699	24,591,102	171,500	24,762,602	30,088,301
Moeller	WIND	Electric General Plant	163,806		163,806	400,438		400,438	564,244
Moeller	WIND	Electric Intangible Plant	115,254		115,254	1,707,048		1,707,048	1,822,302
Moeller	WIND	Electric Other Production Plant	1,109,261,955	485,922	1,109,747,877	296,220,611	894,740	297,115,351	1,406,863,228
Moeller	WIND	Electric Transmission Plant	47,723,193	129,266	47,852,459	10,949,943		10,949,943	58,802,402
Moeller Total			**1,654,675,134**	**17,305,436**	**1,671,980,570**	**1,034,238,724**	**17,997,662**	**1,052,236,386**	**2,724,216,956**
Grand Total			**1,680,974,698**	**18,808,971**	**1,699,783,668**	**1,079,094,210**	**18,639,275**	**1,097,733,486**	**2,797,517,154**

Witness	Major Category	Functional Class	2020	2021	Total
Bloch	AGIS	Common General Plant	939,863	1,750,732	2,690,595
Bloch	AGIS	Electric General Plant	1,334,235	57,072,620	58,406,855
Bloch	AGIS	Electric Intangible Plant	10,252,056	12,762,047	23,014,104
Bloch	ASSET HEALTH & RELIABILITY	Electric Distribution Plant	5,469,360	3,202,114	8,671,474
Bloch	ASSET HEALTH & RELIABILITY	Electric General Plant		369,920	369,920
Bloch	CAPACITY	Electric Distribution Plant	2,935,199	106,096	3,041,295
Bloch	FLEET, TOOLS & COMM	Common General Plant	1,002,178	486,862	1,489,040
Bloch	FLEET, TOOLS & COMM	Electric Distribution Plant	171,504	150,875	322,379
Bloch	FLEET, TOOLS & COMM	Electric General Plant	4,998,077	9,682,393	14,680,470
Bloch	MANDATES	Electric Distribution Plant	528,611	321,842	850,453
Bloch	NEW BUSINESS	Electric Distribution Plant	881,170	2,179,498	3,060,668
Bloch	SOLAR	Electric General Plant	9,045	(196,808)	(187,762)
Bloch Total			**28,521,299**	**87,888,192**	**116,409,490**
Moeller	Aging Technology	Common General Plant	31,012,144	16,704,945	47,717,088
Moeller	Aging Technology	Common Intangible Plant	25,762,257	47,565,909	73,328,165
Moeller	Aging Technology	Electric General Plant	1,509,458	5,076,364	6,585,823
Moeller	Aging Technology	Electric Intangible Plant	3,692,060	6,990,836	10,682,896
Moeller	ASSET RENEWAL	Electric General Plant	1,711,727	3,881,598	5,593,325
Moeller	ASSET RENEWAL	Electric Transmission Plant	52,947,496	63,711,094	116,658,590
Moeller	BASE	Electric General Plant	135,114	800,002	935,116
Moeller	BASE	Electric Other Production Plant	19,550	142	19,691
Moeller	BASE	Electric Steam Production Plant	2,035		2,035
Moeller	COAL	Electric General Plant	137,856	350,000	487,856
Moeller	COAL	Electric Steam Production Plant	26,421,733	38,999,854	65,421,588
Moeller	COMM INFRASTRUCTURE	Electric General Plant	504,518	4,110,446	4,614,964
Moeller	COMM INFRASTRUCTURE	Electric Transmission Plant	745,830		745,830
Moeller	Customer	Common Intangible Plant	19,525,662	19,429,842	38,955,504
Moeller	Cyber Security	Common General Plant	1,041,936	524,031	1,565,967
Moeller	Cyber Security	Common Intangible Plant	9,061,844	3,536,546	12,598,391
Moeller	Cyber Security	Electric General Plant	28,024		28,024
Moeller	Cyber Security	Electric Intangible Plant	309,612		309,612
Moeller	DRY CASK STORAGE	Electric Intangible Plant		120,629	120,629
Moeller	DRY CASK STORAGE	Electric Nuclear Production Plant	11,245,710	13,967,179	25,212,889
Moeller	Emergent Demand	Common General Plant	(1,274,819)	(7,476,343)	(8,751,162)
Moeller	Emergent Demand	Common Intangible Plant	(4,799,771)	(5,047,282)	(9,847,053)
Moeller	Enhance Capabilities	Common General Plant	7,820,994	6,833,635	14,654,629
Moeller	Enhance Capabilities	Common Intangible Plant	14,975,315	5,847,784	20,823,099
Moeller	Enhance Capabilities	Electric General Plant	2,955,196	1,926,584	4,881,780
Moeller	Enhance Capabilities	Electric Intangible Plant	1,053,199	3,212,645	4,265,843
Moeller	ENTERPRISE SECURITY CAPITAL	Common General Plant	188,779	8,717,051	8,905,830
Moeller	ENTERPRISE SECURITY CAPITAL	Electric General Plant	688,434	182,065	870,499

Witness	Major Category	Functional Class	2020	2021	Total
Moeller	FACILITIES & OTHER	Electric General Plant	309,797	100,000	409,797
Moeller	FACILITIES & OTHER	Electric Intangible Plant		3,600,474	3,600,474
Moeller	FACILITIES & OTHER	Electric Nuclear Production Plant	2,336,098	857,460	3,193,558
Moeller	Fleet Asset Additions	Common General Plant		735,000	735,000
Moeller	Fleet Asset Additions	Electric General Plant		35,000	35,000
Moeller	Fueling Depots and Garage Tools	Common General Plant	788,883	823,565	1,612,448
Moeller	HYDRO	Electric General Plant		15,000	15,000
Moeller	HYDRO	Electric Hydro Production Plant	90,263	135,306	225,569
Moeller	IMPROVEMENTS	Electric General Plant	5,551,750	6,451,470	12,003,220
Moeller	IMPROVEMENTS	Electric Intangible Plant	468,133	9,231,911	9,700,043
Moeller	IMPROVEMENTS	Electric Nuclear Production Plant	18,037,292	1,684,842	19,722,134
Moeller	INTERCONNECTION	Electric General Plant	(91,525)		(91,525)
Moeller	INTERCONNECTION	Electric Transmission Plant	21,358,963	38,991,777	60,350,740
Moeller	INTERMEDIATE	Electric General Plant	3,722	150,315	154,037
Moeller	INTERMEDIATE	Electric Other Production Plant	22,548,997	33,832,830	56,381,827
Moeller	INTERMEDIATE	Electric Steam Production Plant	53,674		53,674
Moeller	MANDATED COMPLIANCE	Electric Nuclear Production Plant	9,416,508	3,615,618	13,032,126
Moeller	NUCLEAR FUEL	Nuclear Fuel	81,338,789	150,295,427	231,634,216
Moeller	OTHER	Common General Plant	494,700	8,069,101	8,563,800
Moeller	OTHER	Common Intangible Plant	1,043,122	45,684	1,088,806
Moeller	OTHER	Electric General Plant	28,856	6,291	35,147
Moeller	PEAKING & RDF	Electric General Plant	60,760	404,997	465,757
Moeller	PEAKING & RDF	Electric Other Production Plant	1,526,229	10,789,804	12,316,033
Moeller	PEAKING & RDF	Electric Steam Production Plant	2,243,133	7,474,325	9,717,459
Moeller	PROPERTY SERVICES CAPITAL	Common General Plant	12,409,662	15,189,252	27,598,914
Moeller	PROPERTY SERVICES CAPITAL	Electric General Plant	2,179,049	104,446	2,283,496
Moeller	REGIONAL EXPANSION	Electric Transmission Plant	2,339,410	74,623,503	76,962,914
Moeller	RELIABILITY	Electric General Plant	2,491,531	3,733,348	6,224,879
Moeller	RELIABILITY	Electric Nuclear Production Plant	25,954,635	61,261,227	87,215,862
Moeller	RELIABILITY REQUIREMENT	Electric General Plant	342,792	1,100,937	1,443,729
Moeller	RELIABILITY REQUIREMENT	Electric Intangible Plant	11		11
Moeller	RELIABILITY REQUIREMENT	Electric Transmission Plant	26,200,896	46,678,982	72,879,878
Moeller	Replacements, Additions, & Repairs	Common General Plant	1,019,703	1,645,367	2,665,071
Moeller	Replacements, Additions, & Repairs	Electric General Plant	20,502,019	18,501,471	39,003,490
Moeller	Safety	Common General Plant	12		12
Moeller	SECURITY\RESILIENCY	Electric General Plant	2,027,584	6,051,228	8,078,811
Moeller	SECURITY\RESILIENCY	Electric Transmission Plant	9,034,249	18,845,637	27,879,886
Moeller	WIND	Electric General Plant	311,224	400,438	711,662
Moeller	WIND	Electric Intangible Plant		1,196,286	1,196,286
Moeller	WIND	Electric Other Production Plant	1,245,245,731	725,319,954	1,970,565,684
Moeller	WIND	Electric Transmission Plant	65,163,565	28,024,830	93,188,394
Moeller Total			**1,790,252,106**	**1,519,988,663**	**3,310,240,769**
Grand Total			**1,818,773,405**	**1,607,876,854**	**3,426,650,259**

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DISMANTLING COST STUDY

for

Allen S. King Unit 1
Angus Anson Units 1-4
Black Dog Units 2, 3, 5 and 6
Blue Lake Units 1-4, 7 and 8
Granite City Units 1-4
Hennepin Island
High Bridge Units 1-3
Inver Hills Units 1- 6
Key City Units 1-4
Maplewood Gas Plant
Minnesota Valley Units 1-3
Red Wing Units 1 & 2
Riverside Units 7, 8, 9 and 10
Sherburne County Units 1-3
Sibley Gas Plant
Wescott Gas Plant
Wilmarth Units 1 & 2
Stations

Blazing Star I Wind Farm
Border Winds Project
Courtenay Wind Farm
Foxtail Wind Farm
Grand Meadow Wind Farm
Lake Benton II Wind Farm
Nobles Wind Farm
Pleasant Valley Wind Farm

prepared for

Xcel Energy

prepared by

TLG Services, Inc.
An Entergy Company
148 New Milford Road East
Bridgewater, CT

April 2020

APPROVALS

Project Engineer	Benjamin J. Stochmal	4/1/20
	Benjamin J. Stochmal	**Date**
Project Engineer	Timothy A. Arnold	4/1/2020
	Timothy A. Arnold	**Date**
Project Manager	Roderick Knight	4/1/2020
	Roderick Knight	**Date**
Technical Manager	Francis W. Seymore	4/1/2020
	Francis. W. Seymore	**Date**

TABLE OF CONTENTS

SECTION **PAGE**

ACRONYMS / DEFINITIONS viii

EXECUTIVE SUMMARY ix

1. INTRODUCTION 1-1
1.1 Objective of Study 1-1
1.2 Station Descriptions 1-1
1.3 Scope 1-5
1.4 General Approach 1-6

2. DISMANTLING OPERATIONS 2-1
2.1 Pre-Shutdown Activities 2-1
2.2 Post-Shutdown Plant Staff Transition Activities 2-1
2.3 Dismantling Engineering/Planning and Asbestos Abatement 2-2
2.3.1 Engineering and Planning 2-2
2.3.2 Asbestos / Hazardous Material Abatement (as applicable) 2-3
2.3.3 Dismantling Preparations 2-4
2.4 Dismantling Operations 2-5
2.4.1 Steam Plants 2-5
2.4.2 Combustion Turbines 2-6
2.4.3 Hydroelectric 2-6
2.4.4 Wind Turbines (complete removal) 2-7
2.4.5 Wind Turbines (to 48" depth) 2-7
2.5 Site Restoration 2-8

3. COST ESTIMATE 3-1
3.1 Basis of Estimate 3-1
3.2 Methodology 3-3
3.3 Assumptions 3-6
3.4 Station-Specific Notes 3-9
3.4.1 Allen S. King 3-9
3.4.2 Angus Anson 3-9
3.4.3 Black Dog 3-10
3.4.4 Blue Lake 3-10
3.4.5 Granite City 3-10

TABLE OF CONTENTS
(continued)

SECTION **PAGE**

3.4.6 Hennepin Island 3-10
3.4.7 High Bridge 3-10
3.4.8 Inver Hills 3-11
3.4.9 Key City 3-11
3.4.10 Maplewood Gas Plant 3-11
3.4.11 Minnesota Valley 3-11
3.4.12 Red Wing 3-12
3.4.13 Riverside 3-12
3.4.14 Sherburne County 3-12
3.4.15 Sibley Gas Plant 3-13
3.4.16 Wescott Gas Plant 3-13
3.4.17 Wilmarth 3-14
3.4.18 Wind Farms (Complete Removal): 3-14
Blazing Star I • Border Winds • Courtenay • Foxtail • Grand Meadow • Lake Benton II • Nobles • Pleasant Valley
3.4.19 Wind Farms (Removal to 48" Depth): 3-14
Blazing Star I • Border Winds • Courtenay • Foxtail • Grand Meadow • Lake Benton II • Nobles • Pleasant Valley

4. SCRAP METAL CREDITS 4-1

5. RESULTS 5-1
5.1 Fossil Stations 5-1
5.2 Wind Farms 5-22

6. REFERENCES 6-1

TABLE OF CONTENTS
(continued)

SECTION **PAGE**

TABLES

Summary of Dismantling Costs – Fossil xii
Summary of Dismantling Costs – Wind Farms (Complete Removal) xiv
Summary of Dismantling Costs – Wind Farms (Removal to 48" Depth) xv

4.1a Basis for Scrap Metal Value – Fossil 4-2
4.1b Basis for Scrap Metal Value – Wind Farms 4-3

4.2a Quantity of Scrap Metals by Station – Fossil 4-4
4.2b Quantity of Scrap Metals by Station – Wind Farms (Complete Removal) 4-5
4.2c Quantity of Scrap Metals by Station – Wind Farms (Removal to 48" Depth) .. 4-6

4.3a Scrap Metal Credits by Station – Fossil 4-7
4.3b Scrap Metal Credits by Station – Wind Farms (Complete Removal) 4-8
4.3c Scrap Metal Credits by Station – Wind Farms (Removal to 48" Depth) 4-9

5.1 Summary of Activity Costs – Fossil Stations 5-4
5.1a Allen S. King Station Summary of Activity Costs 5-5
5.1b Angus Anson Station Summary of Activity Costs 5-6
5.1c Black Dog Station Summary of Activity Costs 5-7
5.1d Blue Lake Station Summary of Activity Costs 5-8
5.1e Granite City Station Summary of Activity Costs 5-9
5.1f Hennepin Island Station Summary of Activity Costs 5-10
5.1g High Bridge Station Summary of Activity Costs 5-11
5.1h Inver Hills Station Summary of Activity Costs 5-12
5.1i Key City Station Summary of Activity Costs 5-13
5.1j Maplewood Gas Plant Summary of Activity Costs 5-14
5.1k Minnesota Valley Station Summary of Activity Costs 5-15
5.1l Red Wing Station Summary of Activity Costs 5-16
5.1m Riverside Station Summary of Activity Costs 5-17
5.1n Sherburne County Station Summary of Activity Costs 5-18
5.1o Sibley Gas Plant Summary of Activity Costs 5-19
5.1p Wescott Gas Plant Summary of Activity Costs 5-20
5.1q Wilmarth Station Summary of Activity Costs 5-21

TABLE OF CONTENTS
(continued)

SECTION **PAGE**

TABLES
(continued)

5.2 Summary of Activity Costs – Wind Farms 5-24
5.2a Blazing Star I Wind Farm Summary of Activity Costs 5-25
5.2b Blazing Star I Wind Farm (48 in.) Summary of Activity Costs 5-26
5.2c Border Winds Project Summary of Activity Costs 5-27
5.2d Border Winds Project (48 in.) Summary of Activity Costs 5-28
5.2e Courtenay Wind Farm Summary of Activity Costs 5-29
5.2f Courtenay Wind Farm (48 in.) Summary of Activity Costs 5-30
5.2g Foxtail Wind Farm Summary of Activity Costs 5-31
5.2h Foxtail Wind Farm (48 in.) Summary of Activity Costs 5-32
5.2i Grand Meadow Wind Farm Summary of Activity Costs 5-33
5.2j Grand Meadow Wind Farm (48 in.) Summary of Activity Costs 5-34
5.2k Lake Benton II Wind Farm Summary of Activity Costs 5-35
5.2l Lake Benton II Wind Farm (48 in. Summary of Activity Costs 5-36
5.2m Nobles Wind Farm Summary of Activity Costs 5-37
5.2n Nobles Wind Farm (48 in.) Summary of Activity Costs 5-38
5.2o Pleasant Valley Wind Farm Summary of Activity Costs 5-39
5.2p Pleasant Valley Wind Farm (48 in.) Summary of Activity Costs 5-40

FIGURES

3.1 Dismantling Project Organization Utility Staff 3-4
3.2 Dismantling Project Organization Decommissioning Contractor Staff 3-5

APPENDICES

A. Summary of Station System and Structures Inventories A-1
B. Unit Cost Factor Development B-1
C. Unit Cost Factor Listing C-1

REVISION LOG

Rev. No.	CRA No.	Date	Item Revised	Reason for Revision
0		04/01/2020		Final Issue

ACRONYMS / DEFINITIONS

- AIF Atomic Industrial Forum
- CT Combustion Turbine
- CCGT Combined Cycle Gas Turbine
- DOC Decommissioning Operations Contractor
- DOE Department of Energy
- HRSG Heat Recovery Steam Generator
- LS Lump Sum
- Mtr Motor
- MV Medium Voltage
- Mw Megawatt
- MWe Megawatt (electric) – 2020 Net Max. Capacity (NMC) Rating
- NESP National Environmental Studies Project
- NG Natural Gas
- OSHA Occupational Safety & Health Administration
- PCB Polychlorinated Biphenyl
- RDF Refuse Derived Fuel
- TLG TLG Services, Inc.
- WTG Wind Turbine Generator

EXECUTIVE SUMMARY

This report, prepared by TLG Services, Inc. (TLG), provides estimated costs for the complete dismantling, unless otherwise specified, of the following electric generating stations, wind farms, gas storage and production plants operated by Xcel Energy (Xcel), which either owns or has a share in ownership in each of these facilities:

Generating Stations Located in Minnesota:
- Allen S. King
- Black Dog
- Blue Lake
- Granite City
- Hennepin Island
- High Bridge
- Inver Hills
- Key City
- Minnesota Valley
- Red Wing
- Riverside
- Sherburne County
- Wilmarth

Generating Station Located in South Dakota:
- Angus Anson

Gas production and storage plants (all located in Minnesota):
- Maplewood
- Sibley
- Wescott

Wind Farms Located in Minnesota:
- Blazing Star I Wind Farm
- Grand Meadow Wind Farm
- Lake Benton II Wind Farm
- Nobles Wind Farm
- Pleasant Valley Wind Farm

Wind Farms Located in North Dakota:
- Border Winds Project
- Courtenay Wind Farm
- Foxtail Wind Farm

The dismantling estimate includes the cost of removing the equipment and structures for each of the above-referenced facilities and limited restoration of the sites. The electrical switchyards are assumed to remain in place and are not included in the estimate.

The scope of the dismantling estimate includes the following significant work activities and labor, equipment, material, and waste disposal cost elements:

- Preparation of the units for safe dismantling
- Abatement of asbestos containing materials prior to dismantling (where applicable)
- Removal and disposition of all installed equipment (except where noted)
- Demolition and disposition of subsurface utilities and buildings and foundations (except where noted)
- Removal of below grade foundations (except where noted)
- Coal yard and ash pond remediation (Sherburne County, King, and Minnesota Valley)
- Limited site restoration (grading and seeding for drainage and erosion control)
- Demolition contractor's on-site management, engineering, safety, and administrative staff
- Demolition contractor's expenses, including profit, insurance, permits, and fees
- Xcel's on-site management, oversight, and security staff
- A cost credit associated with the disposition of scrap metals
- Cost contingency

The general approach in assembling the estimate was to develop an inventory of equipment and structures designated to be removed for each facility. This inventory was established using site walk-downs (including discussions with the Operations & Maintenance staff), station-provided equipment databases, and plant drawings. This inventory accounted for similarities between facilities.

The abatement, removal, demolition and restoration activity costs are estimated by applying unit cost factors (developed for each inventory item) against the inventory. Costs for project management, shared equipment and consumables, and similar types of costs are estimated on a period-dependent basis (i.e., the magnitude of the expense depends, in part, on the duration of the project and the types of activities taking place). The potential value of scrap from materials generated in dismantling the plant components and building structural steel is included as a credit in the dismantling cost

estimate. Contingency is provided within this estimate to account for unpredictable project events.

OSHA states that demolition involves additional hazards due to unknown factors which make demolition work particularly dangerous. OSHA further states that the hazards of demolition work can be controlled and eliminated with the proper planning, the right personal protective equipment, necessary training, and compliance with OSHA standards. This cost estimate is intended to provide sufficient monies to allow Xcel management to perform the project using these principles and standards.

The dismantling costs, expressed in thousands of 2019 dollars, are provided in the following table.

SUMMARY OF DISMANTLING COSTS
(All costs are in thousands of 2019 dollars)

Station	Unit	MWe rating	Type	Fuel	In Service	Station Cost
Electric Generation Facilities –Fossil and Hydro						
Allen S. King	1	511	Steam	Coal	1968	65,755
Angus Anson	1		Steam	N/A	1966	12,727
	2	109	CT	NG/Oil	1994	
	3	109	CT	NG/Oil	1994	
	4	168	CT	NG/Oil	2005	
Black Dog	2	117	Steam	(note 1)	1952	48,729
(Unit 3 Retired)	3	108	Steam	Coal/NG	1955	
	5	181	CCGT	NG	2002	
	6	228	CT	NG	2018	
Blue Lake	1	50	CT	NG/Oil	1974	16,670
	2	50	CT	NG/Oil	1974	
	3	46	CT	NG/Oil	1974	
	4	48	CT	NG/Oil	1974	
	7	174	CT	NG/Oil	2005	
	8	177	CT	NG/Oil	2005	
Granite City	1	18	CT	NG/Oil	1969	4,885
(All Units Retired)	2	18	CT	NG/Oil	1969	
	3	18	CT	NG/Oil	1969	
	4	18	CT	NG/Oil	1969	
Hennepin Island	1-5	13.9	Hydro	Water	1882	6,352
High Bridge	1	185	CCGT	NG/Oil	2008	16,983
	2	185	CCGT	NG/Oil	2008	
	3	236	Steam	(note 2)	2008	
Inver Hills	1	62	CT	NG/Oil	1972	11,777
	2	62	CT	NG/Oil	1972	
	3	62	CT	NG/Oil	1972	
	4	62	CT	NG/Oil	1972	
	5	61	CT	NG/Oil	1972	
	6	62	CT	NG/Oil	1972	

SUMMARY OF DISMANTLING COSTS
(continued)
(All costs are in thousands of 2019 dollars)

Station	Unit	MWe rating	Type	Fuel	In Service	Station Cost
Electric Generation Facilities -Fossil						
Key City	1	18	CT	NG/Oil	1970	4,530
(All Units Retired)	2	18	CT	NG/Oil	1970	
	3	18	CT	NG/Oil	1970	
	4	18	CT	NG/Oil	1970	
Minnesota Valley	1	10	Steam	Coal	1949	22,508
(All Units Retired)	2	10	Steam	Coal	1949	
	3	44	Steam	Coal	1953	
Red Wing	1	9	Steam	RDF	1949	15,549
	2	9	Steam	RDF	1949	
Riverside	7	160	Steam	(note 3)	1964	40,725
(Unit 8 Retired)	8	231	Steam	Coal	2009	
	9	171	CT	NG/Oil	2009	
	10	171	CT	NG/Oil	2009	
Sherburne County	1	680	Steam	Coal	1976	168,356
	2	682	Steam	Coal	1977	
	3	876	Steam	Coal	1987	
Wilmarth	1	9	Steam	RDF	1948	15,903
	2	9	Steam	RDF	1951	
Gas Production/Storage Facilities						
Maplewood					1957	5,113
Sibley					1953	4,589
Wescott					1972	11,242
Fleet Totals		**6,439**				**$472,396**

NOTES:
1 Unit 2 receives steam from Units 5 HRSG
2 Unit 3 receives steam from Units 1 and 2 HRSGs
3 Unit 7 receives steam from Units 9 and 10 HRSGs

SUMMARY OF DISMANTLING COSTS
Wind Farms (Complete Removal)
(All costs are in thousands of 2019 dollars)

Station	Units	MWe rating	Type	Wind Farm Cost
Electric Generation Facilities -WTG				
Blazing Star I	100	200	Wind Turbine Generator	34,766
Border Winds	75	148	Wind Turbine Generator	30,974
Courtenay	100	190	Wind Turbine Generator	36,313
Foxtail	75	150	Wind Turbine Generator	27,558
Grand Meadow	67	99	Wind Turbine Generator	25,036
Lake Benton II	44	99	Wind Turbine Generator	16,829
Nobles	134	197	Wind Turbine Generator	43,589
Pleasant Valley	100	196	Wind Turbine Generator	38,738
Fleet Totals		**1,279**		**$253,804**

SUMMARY OF DISMANTLING COSTS
Wind Farms (Removal to 48 inches below grade)
(All costs are in thousands of 2019 dollars)

Station	Units	MWe rating	Type	Wind Farm Cost
Electric Generation Facilities -WTG				
Blazing Star I	100	200	Wind Turbine Generator	28,362
Border Winds	75	148	Wind Turbine Generator	25,046
Courtenay	100	190	Wind Turbine Generator	29,087
Foxtail	75	150	Wind Turbine Generator	22,288
Grand Meadow	67	99	Wind Turbine Generator	21,697
Lake Benton II	44	99	Wind Turbine Generator	14,197
Nobles	134	197	Wind Turbine Generator	35,955
Pleasant Valley	100	196	Wind Turbine Generator	31,505
Fleet Totals		**1,279**		**$208,138**

1. INTRODUCTION

1.1 OBJECTIVE OF STUDY

The objective of this dismantling cost study prepared by TLG Services is to present an estimate of the costs to dismantle Xcel Energy's fossil-fueled and wind farm generating electrical generating facilities, plus their gas production and storage facilities, in Minnesota, South Dakota, and North Dakota. This study is not intended to be a dismantling plan for each of the stations, but a cost estimate prepared to support current financial planning for future dismantling.

1.2 FACILITY DESCRIPTIONS

Electric Generation Facilities

Allen S. King is a single unit coal fired generating facility with a cyclone-fired boiler. It has a generating capacity of 511 MWe while burning low sulfur Wyoming coal. The plant is located in Oak Park Heights, Minnesota, on the St. Croix River. The unit was installed in 1968. From 2004 to 2007 the unit was completely refurbished as part of an emissions reduction project.

Angus Anson is a three-unit simple cycle combustion gas turbine peaking facility, capable of firing on oil or natural gas. Units 1 and 2 were placed in service in 1994. Unit 3 was placed in service in 2005. The station generating capacity is 386 megawatts. Unit 1, 2, and 3 are rated at 109, 109, and 168 MWe, respectively. The station is located in Sioux Falls, South Dakota adjacent to the decommissioned Pathfinder nuclear facility. The remaining Pathfinder facility features holds the non-nuclear remnants of the test nuclear power plant (minus the reactor) built in 1965.

Black Dog generating station is located on the Minnesota River just south of the Twin Cities. Unit 5, which is a natural gas fired combined cycle combustion gas turbine, replaced the original Unit 1 boiler and steam turbine. The exhaust heat from Unit 5 gas turbine generates steam in the HRSG and powers the original Unit 2 steam turbine that was installed in the 1950's. The Unit 2 boiler has been abandoned in place. The boiler chimney has been removed. Units 3 is abandoned in place and Unit 4 was mostly removed to make room for a new simple cycle combustion gas turbine, Unit 6. The Unit 4 primary precipitator, air heater, forced draft, induced draft and gas recirculation fans, deaerator and storage tank, and one feed-water heater remain in place. The coal yard facilities have been removed as well as the boiler chimneys.

Blue Lake is a six-unit simple cycle combustion gas turbine peaking facility, capable of firing on oil or natural gas. The station generating capacity is 545 megawatts. Units 1-4 are rated at 50 MWe, 50 MWe, 46 MWe, 48 MWe, respectively. Units 7 and 8 are rated at 174 MWe and 177 MWe. The station is located in Shakopee, Minnesota along the Minnesota River. Units 1-4 were placed in service in 1974. Units 7 and 8 were placed in service in 2005.

Granite City is a four-unit simple cycle combustion gas turbine peaking facility, capable of firing on oil or natural gas. The station generating capacity was 72 megawatts with each of the four units rated at 18 MWe. The station is located in St. Cloud, Minnesota. The units were installed in 1970. The station was retired from service in June 2019.

Hennepin Island is a hydroelectric power plant located on the Mississippi River in Minneapolis, MN, on the west side of Hennepin Island. The station consists of five turbine-generator sets, and has a combined generating capacity is 13.9 Mw. The plant was installed in 1882; it was last refurbished in 2010.

High Bridge is a three-unit facility consisting of two combined cycle combustion gas turbines and one steam turbine. The combustion turbines are each direct coupled to a 185 MWe electric generator. The exhaust gas of each combustion turbine is ducted through its own HRSG. The steam from the HRSG is piped to a 236 MWe steam turbine. The station has a net dependable capacity of 606 MWe. The station was placed in service in 2008. It is located in downtown St. Paul, Minnesota, on the Mississippi River.

Inver Hills is a six-unit simple cycle combustion gas turbine peaking facility, capable of firing on oil or natural gas. The station generating capacity is 371 megawatts. Units 1-4 and 6 are rated at 62 MWe each. Unit 5 is rated at 61 MWe. The station is located in Inver Grove Heights, Minnesota. The units were placed in service in 1972.

Key City was a four-unit simple cycle combustion gas turbine peaking facility, capable of firing on oil or natural gas. The station generating capacity was 72 megawatts with Units 1-4 at 18 MWe each. The station is located in Mankato, Minnesota. The units were installed in 1970, and retired in March of 2015.

Minnesota Valley is a three-unit facility abandoned in place. The station consists of two 10 MWe and one 44 MWe coal fired units. The station is located in Chippewa County, Granite Falls, Minnesota. The two 10 MWe units were installed in the late 1940's. The third unit was installed in 1953. The station was retired from service in 2013. All coal yard facilities have been removed.

Red Wing is a two-unit generating facility that burns processed municipal solid waste, referred to as refuse-derived fuel (RDF). The station employs a combination duct scrubber with a baghouse to effectively cut emissions from burning RDF. The scrubber treats flue gas with a water spray and dry lime. The baghouse traps particulate by forcing gas streams through large filter bags. The generating capacity of each unit is 9 MWe. The station is located in Red Wing, Minnesota. The units were installed in the early 1950's (coal fired units) and later modified to burn RDF.

Riverside is a three-unit facility consisting of two combined cycle combustion gas turbine generators (Units 9 and 10) and one steam turbine (refurbished Unit 7 steam turbine). The combustion turbines are each direct coupled to a 171 MWe electric generator. The exhaust gas of each combustion turbine is ducted through its own HRSG. The steam from the HRSG is piped to the Unit 7 160 MWe steam turbine. Abandoned in place, and included in this estimate, are the retired Units 6, 7 and 8 boilers, and the Unit 8 steam turbine with all its associated piping and system components. The three operational units went into service in 2009. The station is located northeast of Minneapolis on the Mississippi River.

Sherburne County is a three-unit 2,238 MWe coal-fired facility. The station is located in Becker, Minnesota, 45 miles northwest of the Twin Cities, on the Mississippi River. Units 1, 2 and 3 have a net dependable capacity of 680, 682, and 876 MWe each, respectively. The units were installed in 1976, 1977, and 1987.

Wilmarth is an electric generating facility that burns RDF. The station employs a combination duct scrubber with a baghouse to effectively cut emissions from burning RDF. The scrubber treats flue gas with a water spray and dry lime. The baghouse traps particulate by forcing gas streams through large filter bags. The generating capacity of Unit 1 and 2 is 9 MWe each. The station is located in Mankato, Minnesota. The units were installed in the early 1950's and modified in 1987 to burn RDF.

Gas Production/Storage Facilities

Maplewood is a propane storage facility with an effective propane storage capacity of 1.355 million gallons. The plant, located in Maplewood, Minnesota, was placed in-service in 1957.

Sibley is a propane storage facility used to supplement natural gas supplies during peak demand periods, with an effective propane storage capacity of 1.2

million gallons. The plant, located in Mendota Heights, Minnesota, was placed in service in 1953.

Wescott is a liquefied natural gas peak-shaving plant. The facility collects and stores natural gas for future supply to the local natural gas distribution systems during cold winter periods when regional natural gas supplies may not meet the increased demand. The facility is located in Inver Grove Heights, Minnesota, and was completed in 1972.

Wind Farms

Blazing Star I is a 100-unit wind turbine complex located on privately owned farmland in Lincoln County in southwestern Minnesota. The wind farm is composed of 10, 2.0 MWe V-110 and 90, 2.0 MWe V-120 Vestas wind turbines for a complex total of 200 MWe. The units are expected to be placed into full service in 2020.

Border Winds Project is a 75-unit wind turbine complex located on privately owned farmland in Rolla, North Dakota. The wind farm is composed of 75, 2.0 Mwe (nominal) V-100-2.0 Vestas wind turbines for a complex total of 148 MWe. The units were placed into service in 2015.

Courtenay is a 100-unit wind turbine complex located on privately owned farmland in Jamestown, North Dakota. The wind farm is composed of 100, 2.0 MWe (nominal) V-100-2.0 Vestas wind turbines for a complex total of 190 MWe. The units were placed into service in 2016.

Foxtail is a 75-unit wind turbine complex located on privately owned farmland in Kulm, North Dakota. The wind farm is composed of 7, 2.0 MWe V-110 and 68, 2.0 MWe V-120 Vestas wind turbines for a complex total of 150 MWe. The units were placed into service in 2019.

Grand Meadow is a 67-unit wind turbine complex located in a stretch of farm fields six miles long and four miles wide. The farm is spread out over roughly 10,000 acres southeast of Interstate 90 in Grand Meadow, Clayton, and Dexter Townships in Mower County, Minnesota. Each GE 1.5-77 wind turbine / generator set has a rated capacity of 1.5 Mwe (nominal) for a complex total of 99 MWe. The units were placed in service in 2008.

Lake Benton II is a 44-unit wind turbine complex located on privately owned farmland in Ruthton, Minnesota. The wind farm is composed of 5, 2.1 Mwe (nominal) GE 2.1-116 and 39, 2.3 Mwe (nominal) GE 2.3-116 General Electric

wind turbines for a complex total of 99 MWe. The units were placed into service in 2019.

Nobles is a 134-unit wind turbine complex located in the Buffalo Ridge area of Minnesota. The wind farm is spread out over roughly 42 square miles in Nobles County, Minnesota, in Olney, Dewald, Larkin, and Summit Lake townships. Each GE 1.5-77 wind turbine / generator set has a rated capacity of 1.5 Mwe (nominal) for a complex total of 197 MWe. The units were placed in service in 2011.

Pleasant Valley is a 100-unit wind turbine complex located on privately owned farmland in Dexter, Minnesota. The wind farm is composed of 100, 2.0 (nominal) MWe V-100-2.0 Vestas wind turbines for a complex total of 196 MWe. The units were placed into service in 2015.

1.3 SCOPE

The scope of the dismantling estimate includes the following significant cost elements:

- Preparation for safe dismantling;
    - Hazardous materials characterization for such items as ACM (asbestos-containing materials), lead, mercury, PCBs, hydrocarbons in soil, etc.
    - Isolation of the units in preparation for safe dismantling (e.g. ensuring systems are de-energized, fuel and chemical storage tanks are drained and cleaned, etc. (where applicable)
- Abatement of ACM prior to dismantling (where applicable)
- Labor, equipment, and material costs associated with the removal and disposition of all installed equipment
- Labor, equipment, and material costs associated with the demolition and disposition of buildings and foundations
- Demolition contractor's on-site management, engineering, safety, and administrative staff
- Demolition contractor's expenses, including insurance, permits, and fees.
- Xcel's on-site management, oversight, and security staff
- A cost credit associated with the disposition of scrap metals
- Cost contingency

Costs are provided for each generating station or facility, identified by significant cost element. The cost per station includes the costs for dismantling the generating unit and the common station facilities. Costs are provided in 2019 dollars.

1.4 GENERAL APPROACH

The general approach in assembling the estimate was to develop an inventory of equipment and structures designated to be removed for each facility. This inventory was established using site walk-downs (including discussions with the Operations & Maintenance staff), station-provided equipment databases, and plant drawings. This inventory accounted for similarities between facilities.

The abatement, removal, demolition and restoration activity costs are estimated by applying unit cost factors (developed for each inventory item) against the inventory. Costs for project management, shared equipment and consumables, and similar types of costs are estimated on a period-dependent basis (i.e., the magnitude of the expense depends, in part, on the duration of the project and the types of activities taking place). The potential value of scrap from materials generated in dismantling the plant components and building structural steel is included as a credit in the dismantling cost estimate. Contingency is provided within this estimate to account for unpredictable project events.

OSHA states that demolition involves additional hazards due to unknown factors which make demolition work particularly dangerous. OSHA further states that the hazards of demolition work can be controlled and eliminated with the proper planning, the right personal protective equipment, necessary training, and compliance with OSHA standards. The cost estimate is intended to provide sufficient monies to allow Xcel management to perform the project using these principles and standards.

Limited site landscaping is included, which covers grading and seeding for drainage and erosion control.

Section 2 of this report identifies the activities and sequence of activities necessary to dismantle a generating station. Section 3 provides the specific bases for the estimate. Section 4 discusses scrap metal and associated credits to the dismantling costs. Section 5 provides the results. Appendices, noted throughout this report, provide additional information important to understanding this estimate.

2. DISMANTLING OPERATIONS

The estimate for dismantling the stations is based on the complete removal of the units and common station facilities (except where noted). The following sections describe the project organization, basic activities, and special equipment necessary for accomplishing the dismantling project.

The actual dismantling program begins once the station owner has decided to dismantle the site, either immediately following final shutdown, or after a period of storage following final shutdown. The dismantling program has been organized into three distinct periods: Period 1 - Engineering/Planning and Asbestos and Other Hazardous Material Abatement (if necessary); Period 2 - Dismantling Operations; and Period 3 - Site Restoration. This section summarizes the activities performed under each Period of the program.

For the purposes of this estimate it is assumed that once the decision to dismantle has been made and a project start date established, the work in each of these periods will be completed successively (no delay between periods). This report does not attempt to describe all of the activities necessary to dismantle a station, but identifies representative activities appropriate to this type of project.

2.1 PRE-SHUTDOWN ACTIVITIES

The estimates include a planning staff for a year prior to final shutdown to plan for the dismantling program. A staff of seven full-time equivalent personnel is included in this estimate; smaller stations will have a reduced staffing amount.

2.2 POST-SHUTDOWN PLANT STAFF TRANSITION ACTIVITIES

The estimate is based on each station being shut down and placed into a post-shutdown configuration by the plant staff. The length of time that the facility is in this configuration is indeterminate and the costs for maintaining the facility in this configuration is not included within the scope of this dismantling effort. The activities to be completed post-shutdown, but prior to station dismantling, include:

- Removal of consumables and supplies not needed in the post-shutdown configuration
- Removal of residual fuels (including oil/coal)
- Removal of acids and caustics; flushing and cleaning of storage tanks

- Disposition of surplus bulk chemicals and gas storage containers
- Removal of miscellaneous hazardous wastes and combustible materials
- Installation of any appropriate physical barriers (sealing circulating water system) and/or security barriers

The estimate does not account for an extended period of time between final shutdown of the unit(s) and onset of the dismantling program. As such, the plant operations and maintenance staff would be expected to perform the following activities in the interval of time between final plant shutdown, and the onset of the dismantling program.

- If the unit is to be maintained in a condition where lighting, electricity, heating, water, sanitary, and similar services are to remain active, reconfigure these systems to minimize maintenance requirements
- Maintenance of the facility (maintaining roofs and windows, drain systems, and electrical systems to preclude creating hazardous working conditions in the future)

2.3 DISMANTLING ENGINEERING / PLANNING AND ASBESTOS ABATEMENT

When the decision is made to begin physical dismantling of a station, Xcel Energy will begin field dismantling activities, beginning with engineering and planning, and removal of asbestos and other hazardous materials from the station.

2.3.1 Engineering and Planning

A preliminary planning phase of the program begins once it is has been determined that a station will be dismantled and the project has been authorized to proceed. During this phase, the owner assembles its dismantling management organization, makes appropriate decisions regarding the extent of dismantling and the approach to managing the activities, and accomplishes those site preparation activities necessary to transition from a plant shutdown configuration to site dismantling. For purposes of this estimate it is assumed that the intent is to dismantle the entire station as a single project. Costs incurred during this preliminary phase of the program are included in the dismantling costs presented in this study.

Xcel Energy prepares the stations for dismantling by performing the following activities:

- Prepare specifications that identify and describe the objectives and major work activities to be accomplished (establishing the final site configuration)
- Assemble plant documentation that may be relevant to dismantling (drawings, hazardous material reports, environmental studies, etc.)
- Select an asbestos abatement contractor (if required) and Dismantling Contractor
- Assemble and mobilize the management and oversight team responsible for the project
- Documenting hazardous materials location and inventory

2.3.2 Asbestos / Hazardous Material Abatement (as applicable)

The asbestos abatement contractor prepares for this work by thoroughly understanding the scope of the asbestos remediation work and obtaining the permits necessary to initiate the work. Abatement of asbestos is considered an important prerequisite to dismantling the station's systems and structures. The method by which asbestos is abated is strictly controlled by federal and/or state regulations and includes the following requirements:

- Work will be done inside enclosures designed to capture any asbestos-containing particles. With the exception of removal of small quantities of asbestos in local areas, it would be expected that most work will be done in large enclosures (containment tents). The enclosures will have a filtered exhaust and be maintained under negative air pressure (air will leak into the enclosure rather than leak out).
- The air outside of the enclosures will be monitored to ensure barriers are effective.
- Workers, while working inside enclosures, will wear respiratory protective equipment as well as protective clothing.
- All materials removed from the enclosure will be packaged in accordance with regulations (minimum double-bag), and will be removed via a materials handling access area.
- Workers will enter and exit the enclosures through a personnel decontamination chamber in a controlled manner (ensuring asbestos contamination does not spread beyond the containment).

- After the asbestos abatement is complete, the effectiveness of the process will be established via regulatory-specified processes (generally verifying that there is no asbestos containing material capable of becoming airborne).
- Asbestos containing materials will be disposed of at a properly licensed disposal facility.
- After ensuring that all asbestos has been removed, the enclosures will be taken down in accordance with regulatory requirements and disposed of at a licensed facility.
- Clean coal-fired boilers by washing down all surfaces interior to the boilers.
- Clean fly-ash handling equipment, e.g., filters and holding tanks.
- De-water ash settling ponds and/or basins.

2.3.3 Dismantling Preparations

The dismantling contractor prepares the station for dismantling by performing the following activities:

- Installing environmental barriers and monitoring equipment
- Reviewing plant drawings and specifications that may be useful for the dismantling project
- Identifying the processes to achieve the final desired station configuration
- Identifying the major work sequence
- Preparing dismantling activity specifications and work orders/forms
- Preparing detailed dismantling procedures
- Preparing a dismantling plan
- Preparing permit application(s) for plant demolition
- Mobilizing site staff
- Configuring temporary services/facilities to support dismantling operations
- Arranging for heavy lift and dismantling equipment, rigging, and tooling
- Hiring and training the labor force

2.4 DISMANTLING OPERATIONS

Dismantling activities are initiated after completing the engineering and planning process, and after asbestos abatement and removal of hazardous materials is complete. The sequence of activities will be determined at the time of dismantling, but typically a sequence would include the following items. Dismantling sequences are presented for each of the Xcel Energy facility types. In all types the station is electrically disconnected from all power sources; the Dismantling Contractor will provide temporary power as needed to support the removal activities.

2.4.1 Steam Plants

- Removing coal yard equipment (if required), including unloading structures, conveyors, transfer towers, and reclaim systems
- Removing above-ground storage tanks
- Removing large equipment from rooftops or at higher elevations
- Removing equipment that must be removed prior to start of boiler structure removal, including fly-ash handling, coal handling, burner fuel supply, scrubbers, air and flue gas ducts, etc.
- Removing electrostatic precipitator and bag houses by cutting casings and connecting gas ducts
- Removing the top of the boiler enclosure to allow access to the platens
- Removing the boiler waterwalls
- Removing steam drum and deaerator by severing all connections and lowering to grade
- Removing boiler structural steel
- Disassembling the turbine/generator and condenser
- Removing all other equipment and components required prior to structures demolition
- Removing the turbine building superstructure and interior floors
- Blasting/dismantling the concrete turbine-generator pedestal(s)
- Removing siding from buildings
- Dismantling steel framing
- Demolishing structural concrete

- Removing the stack(s)
- Removing cooling tower(s) and / or cooling water intake and discharge structures
- Removing all other site structures within the scope of the dismantling program
- Sorting and organizing materials for pickup by the scrap dealer(s)
- Size reducing concrete rubble to remove reinforcing steel
- Removing any temporary services used to support the dismantling effort (lighting / ventilation / electrical / groundwater management)

2.4.2 Combustion Turbines

- Removing above-ground storage tanks
- Removing large equipment from rooftops or at higher elevations
- Disassembling the turbine and generator
- Removing all other equipment and components required prior to building demolition
- Blasting/dismantling the concrete turbine-generator foundation(s)
- Demolishing remaining concrete
- Removing cooling tower(s) and / or cooling water intake and discharge structures (High Bridge only)
- Removing all other site structures within the scope of the dismantling program
- Sorting and organizing materials for pickup by the scrap dealer(s)
- Size reducing concrete rubble to remove reinforcing steel

2.4.3 Hydroelectric Plants

- Installing cofferdams at inlet to power channel and discharge channel
- Removing large equipment from rooftops or at higher elevations
- Disassembling and removing the generators
- Disassembling and removing the water turbines
- Removing all other equipment and components required prior to structures demolition

- Removing the powerhouse structure and interior floors
- Blasting/dismantling the concrete turbine-generator foundations
- Dismantling steel framing
- Demolishing brick walls and structural concrete
- Removing all other site structures within the scope of the dismantling program
- Sorting and organizing materials for pickup by the scrap dealer(s)
- Size reducing concrete rubble to remove reinforcing steel

2.4.4 Wind Turbines (complete removal)

- Removing turbine blades from turbine shaft
- Removing turbine-generator housings from towers
- Removing towers from foundations
- Removing all other equipment and components required prior to structures demolition
- Blasting/dismantling the concrete tower foundations
- Excavating and removing all buried electrical cables
- Removing all other site structures within the scope of the dismantling program
- Sorting and organizing materials for pickup by the scrap dealer(s)
- Size reducing concrete rubble to enhance its suitability for backfill

2.4.5 Wind Turbines (removal to 48" below grade)

- Removing turbine blades from turbine shaft
- Removing turbine-generator housings from towers
- Removing towers from foundations
- Removing all other equipment and components required prior to structures demolition
- Removing the concrete tower foundation pedestal to 48" below grade
- Buried electrical cables below 48" left in place
- Removing all other site structures within the scope of the dismantling program

- Sorting and organizing materials for pickup by the scrap dealer(s)
- Size reducing concrete rubble to enhance its suitability for backfill

2.5 SITE RESTORATION

Site restoration activities are initiated following completion of the dismantling operations. The objective of site restoration in this estimate is to restore the station grounds to a configuration that does not pose a safety hazard; and plant vegetation for erosion control. As such, landscaping will be limited to grading, placement of top soil, and seeding. Site restoration as used in this estimate is not intended to re-configure the station for redevelopment, e.g. use as a recreational or industrial facility.

A typical site restoration sequence would be:

- Crush all concrete rubble and remove reinforcing steel. Concrete debris will be shipped off site for disposal as construction debris. Reinforcing steel will be recycled
- Backfill below grade voids with clean compactible fill as necessary.
- General grading of the station
- Placement of top soil or other suitable surface material necessary to maintain erosion control
- Landscaping to the extent necessary to re-vegetate the station (grass or similar plant materials), and
- Demobilizing personnel and equipment

3. COST ESTIMATE

The basis, methodology, and assumptions for the site-specific cost estimate are described in the following paragraphs.

3.1 BASIS OF ESTIMATE

Inventory of Materials to be Removed

The inventory is an essential element of the estimate, since dismantling costs are determined by applying unit cost factors against the corresponding inventory quantities. For each of these estimates a site-specific inventory of materials to be removed was developed using a combination of methods. The inventory used in developing the estimate for each station is provided in Appendix A.

Comparable Boiler / Turbine Unit Information Available to TLG Where TLG had previously developed inventory information for a boiler and turbine of similar size, fuel type and vintage, referred to as "reference unit", this information was used to represent the boiler / turbine systems inventory for the comparable Xcel Energy unit. In the same manner, non-steam power facilities were also used as reference units for other, similar Xcel Energy facilities. The inventory was adjusted to reflect the difference between the rating of the Xcel Energy reference unit and the rating of the comparable unit.

There are expected differences in other facilities, even if the power generating equipment are similar between comparable units. These include systems and structures associated with cooling water intake and discharge, fuel handling, exhaust gas, maintenance buildings and shops, pollution-control, and the quantity and extent of asbestos containing material (if applicable). For these systems and structures TLG developed the inventory by conducting a walk-down of the station, and extracting information from station-specific drawings and photos.

Comparable Plant Information Not Available to TLG Where the Xcel Energy unit(s) had no comparable match in the TLG database, the site specific inventory was developed "from scratch", by completing a physical walk-down of each such unit, discussions with the stations' Operations & Maintenance staff, and extracting data from station-specific maintenance databases (lists of equipment), drawings, and photos.

Economic Cost Drivers (Reference in Section 6)

In developing an estimate, the cost of labor, equipment and material, credit for scrap, and similar costs will influence the results of the estimate. The basis for the significant cost drivers are:

1. Craft labor rates are based on existing contracts with craft labor contractors. These rates were provided by Xcel Energy (Ref. 1).
2. Utility labor rates are based on labor costs for positions likely to be employed during the dismantling project. The 2014 rates were escalated to 2019 values, per Xcel Energy approval, using U.S. Department of Labor's Bureau of Labor Statistics, Consumer Price Index Series ID:CUUR0000SAS (Ref. 2).
3. Material and equipment costs for conventional demolition and/or construction activities, Contractors Insurance, Small Tools Allowance, Permit / Fees, and Contractor's Fee are based on R.S. Means Construction Cost Data (Ref. 3).
4. Scrap metal prices are based on a five-year average of published indices (Ref. 4).
5. Contingency, contractor fee, contractor insurance, environmental sampling, and permits & fees are based upon R.S. Means Construction Cost Data.
6. Costs in this estimate are in 2019 dollars.
7. Property taxes (or payments in lieu of taxes) are not included within the estimate.
8. The estimate to dismantle the stations does not address credit associated with the residual value of the land.

Project Organization

For the purposes of this study, the dismantling project for each station is assumed to be managed by Xcel Energy's Project Director, who would have the primary responsibility for dismantling the station. A Dismantling Contractor, experienced in dismantling similar facilities, would be hired as the prime contractor for the removal of plant components and site facilities. The Dismantling Contractor's Project Manager would report to the Project Director. The Dismantling Contractor would manage and supervise the dismantling activities of the station and be responsible for completing the work in an expeditious and safe manner. Contractor personnel would manage and direct the labor force in accordance with approved procedures and in accordance with a health and safety program. The Xcel staff would maintain and/or provide the engineering, safety, and environmental compliance oversight, and the security

services necessary to support dismantling operations. Figures 3.1 and 3.2 identify typical organizations for the plant/utility staff and the associated contractor personnel during the dismantling phase of the project. The smaller facilities included within this estimate would have a commensurately smaller project organization e.g. Angus Anson, Blue Lake, and Grand Meadow.

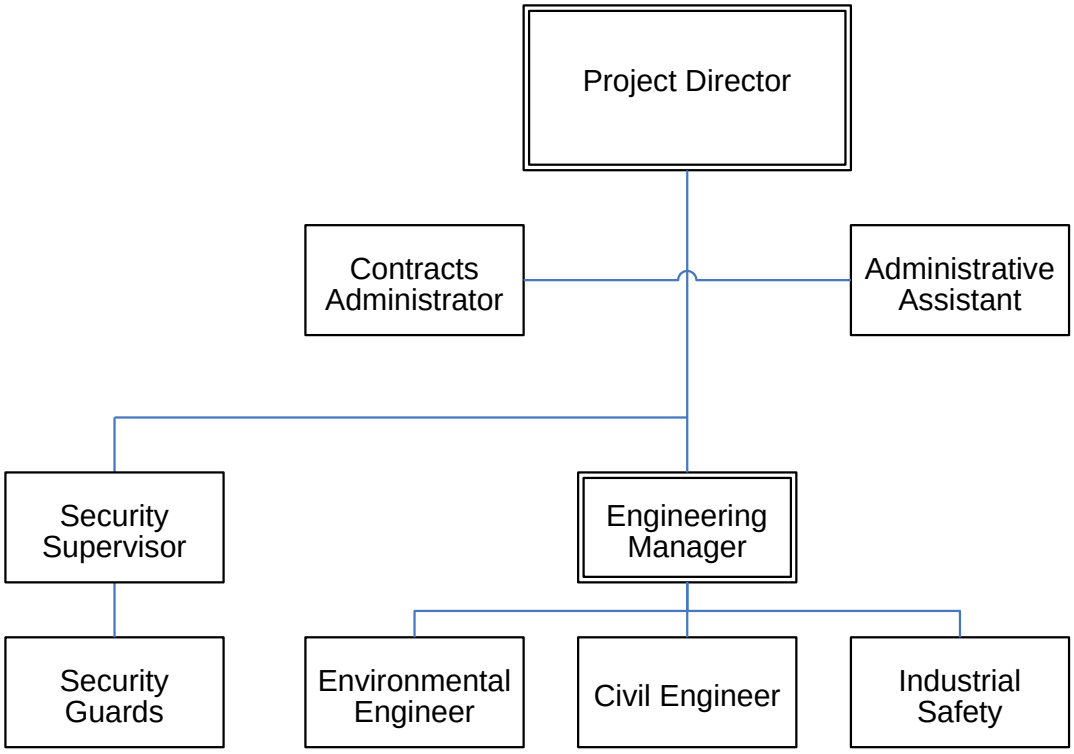
3.2 METHODOLOGY

The methodology used to develop the cost estimate follows the basic approach presented in the AIF/NESP-036, "Guidelines for Producing Commercial Nuclear Power Plant Decommissioning Cost Estimates" (Ref. 5) and the US DOE "Decommissioning Handbook" (Ref. 6). These publications utilize a unit cost factor method for estimating decommissioning activity costs to simplify the estimating calculations. Unit cost factors for concrete removal ($/cubic yard), steel removal ($/ton), and cutting costs ($/in) are developed from the labor cost information from R. S. Means. The activity-dependent costs are estimated using item quantities (cubic yards, tons, inches, etc.) developed from plant drawings and inventory documents. The unit factors used in this study reflect the latest available information on worker productivity in plant dismantling. A sample unit cost factor is provided in Appendix B. A list of unit cost factors is provided in Appendix C.

An activity duration critical path is developed to determine the total dismantling program schedule. This program schedule is then used to determine the period-dependent costs for program management, administration, field engineering, equipment rental, quality assurance, and security. TLG escalated 2014 Xcel Energy salary and hourly rates for personnel associated with period-dependent costs. The costs for conventional demolition of structures, materials, backfill, landscaping, and equipment rental are obtained from R.S. Means. Examples of such unit cost factor development are presented in AIF/NESP-036.

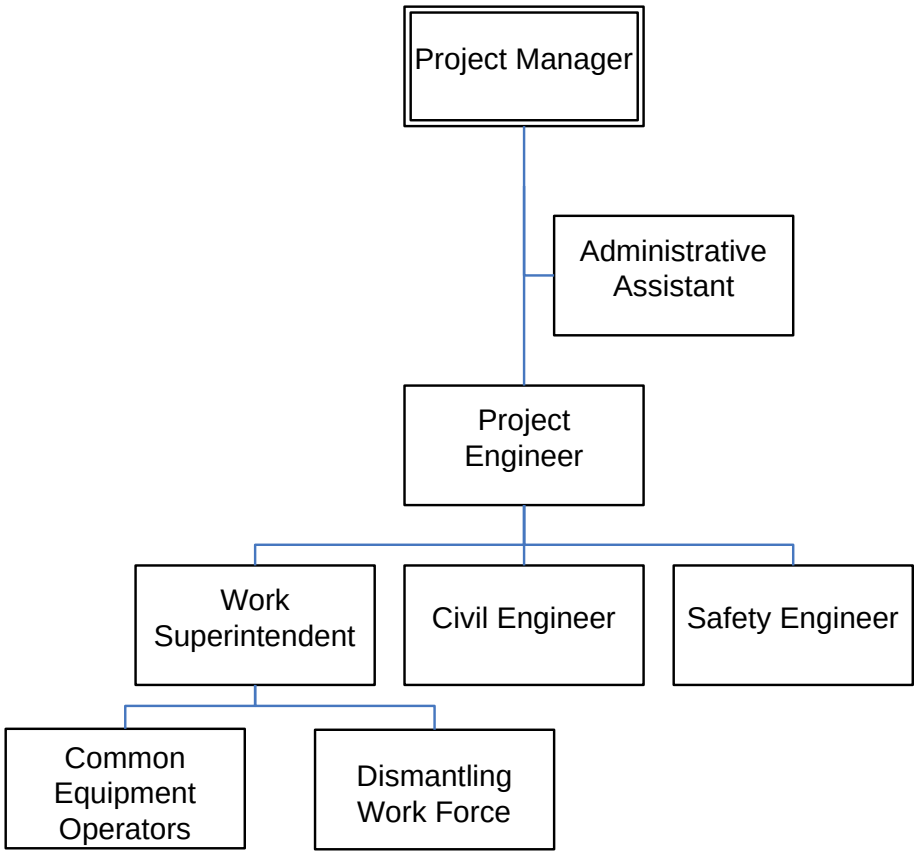
The unit cost factor method provides a demonstrable basis for establishing reliable cost estimates. The detail of activities for labor costs, equipment and consumables costs provide assurance that cost elements have not been omitted. Detailed unit cost factors, coupled with the site-specific inventory of piping, components and structures provide confidence in the cost estimates.

FIGURE 3.1
DISMANTLING PROJECT ORGANIZATION
UTILITY STAFF



For a large station such as Sherburne County, this represents a full-time equivalent staffing level of six personnel. This value is reduced for smaller stations.

FIGURE 3.2
DISMANTLING PROJECT ORGANIZATION
DECOMMISSIONING CONTRACTOR STAFF



For a large station such as Sherburne County, this represents a full-time equivalent staffing level of 11.5 personnel. This value is reduced for smaller stations.

The activity-dependent and period-dependent costs are combined with applicable collateral costs to yield the direct decommissioning cost. A contingency is then applied. "Contingencies" are defined in the American Association of Cost Engineers "Project and Cost Engineers' Handbook" (Ref. 7) as "specific provision for unforeseeable elements of cost within the defined project scope; particularly important where previous experience relating estimates and actual costs has shown that unforeseeable events which will increase costs are likely to occur." The cost elements in this estimate are based on ideal conditions; therefore, a contingency factor has been applied.

Examples of items that could occur but have not otherwise been accounted for in this estimate include: labor work stoppages, bad weather delays, equipment/tool breakage, changes in the anticipated plant shutdown conditions, etc. These types of unforeseeable events are discussed in the AIF/NESP-036 study. Guidelines are also provided for applying contingency.

3.3 ASSUMPTIONS

The following assumptions were used in developing the dismantling estimate.

Pre-requisite Activities

1. Dismantling of the station will not commence until all units are retired (cost estimate is not based on independent dismantling of units while adjacent units are operating).
2. The arrangements of the unit facilities as they exist in 2019 based upon walk-downs conducted by TLG, and databases and drawings provided by owner.
3. The dismantling process will be an engineered process with substantial consideration for occupational (worker) safety.
4. The demolition will be performed by a Dismantling Contractor who is responsible to provide adequate staff and equipment to complete the dismantling in a safe manner.
5. Site security costs to restrict access to the demolition project by unauthorized personnel are included.
6. The estimates are based on industrial safety and environmental regulations effective in 2019.
7. All power to the structures will be disconnected prior to beginning removal activities ("Cold and Dark"). The Decommissioning Contractor will provide for temporary power as needed to support dismantling activities.

8. End of life water inventory management in regulated ponds will be addressed in accordance with federal and state rules and closed in place after shutdown.
9. On-site fuel inventories will be used and/or removed prior to start of dismantling.
10. Silos, precipitators, hoppers, tanks, etc., will be emptied by operations and maintenance staff after shutdown.
11. Acids, caustics, and similar hazardous materials will be removed by operations and maintenance staff after shutdown.
12. Consumables, such as ion exchange materials and filters, will also be removed by operations and maintenance staff after shutdown.
13. Stores, spare parts, gas storage containers, laboratory equipment, office furniture, etc., will be removed by the owner after shutdown.
14. Oils used in station transformers may contain PCBs. Lubricating and transformer oils are drained and removed by operations and maintenance staff after shutdown. If any PCB contaminated oil is encountered, it will be removed and disposed of properly.
15. Asbestos (if present) will be removed prior to the start of dismantling. Asbestos insulation and PACM (presumed asbestos containing materials) will be disposed of at licensed facilities. Quantities of asbestos are based on owner-provided information where available. Where such information was not available, the quantities of asbestos were estimated.
16. Prior to initiating dismantling, essentially all live circuits will have been de-energized (to preclude creating an industrial hazard). If required, temporary services systems (air, water, electrical, fire water, etc.) will be used to support dismantling operations and will remain in service throughout the project until no longer required.

Economic Assumptions

17. Post-shutdown "dormancy" costs (i.e., security and maintenance on any of the units retired prematurely) are not included in the study.
18. Escalation/inflation of the costs over the remaining operating life is not included.
19. An allowance of 2% of craft labor costs is used for small tools.
20. A 12.5% fee is added to the Demolition Contractor's cost to account for its overhead and profit.
21. A 25% contingency is applied to asbestos remediation activities.

22. A 15% contingency is applied to all remaining dismantling-related costs.
23. A credit for scrap metal cost recovery is included in the estimates. Retired plant equipment is assumed to have no value as salvage (sold for re-use).

Physical Work Assumptions

24. The costs for disposition (if required) of contaminated soil (e.g., PCBs, hydrocarbons, lead, asbestos, mercury, acids or caustics) are outside the scope of this estimate.
25. Large equipment and components will be removed prior to structures demolition.
26. An environmental hazards crew will be maintained throughout the demolition period to address such items as lead paint and asbestos that was inaccessible during the asbestos remediation period (where applicable).
27. Turbine pedestals and powerhouse building foundations will be removed by demolition equipment and back-filled to grade.
28. Structures and foundations will be removed with any resulting voids back-filled to grade level. An additional scenario is provided for the wind farms where the equipment and structures are removed only to a depth of 48 inches.
29. Chimney stacks will be blasted to the ground and broken into rubble, the steel liners cut and removed, and the foundations removed.
30. The dismantling of the electrical equipment terminates at the switch yard boundary. The switch yard is left intact.
31. Concrete rubble generated during dismantling will be crushed, reinforcing steel removed, and the concrete disposed of offsite as construction debris.
32. The site will be graded; however, no effort was included in this estimate to restore the original contour of the land. Ground cover will be established for erosion control.
33. Roads, parking lots, etc., are removed after the facility is dismantled (with the exception of the immediate area around the switchyard).

Scheduling Assumptions

34. All work is performed during an eight-hour workday, five days per week, with no overtime.
35. Multiple crews work parallel activities to the maximum extent possible, consistent with efficiency (adequate access for cutting, removal, and

laydown space) and with industrial safety appropriate for demolition of heavy components and structures.

36. Scheduling was calculated without constraints on availability of labor, equipment, or materials.

3.4 STATION-SPECIFIC NOTES

3.4.1 Allen S. King

- All currently operational coal handling equipment and the abandoned-in-place coal barge unloader facility with the twenty-two dolphin-type barge piers are included in the estimate.
- A cofferdam will be installed to allow removal of the condenser cooling water discharge structure and the discharge structure from the cooling tower.
- The boiler and precipitator will be cleaned prior to dismantling.
- Lead paint on concrete surfaces will be removed prior to demolition of the concrete structures.
- Rockbestos-insulated electrical cabling and other ACM in cable trays will be removed (all cable trays & cabling disposed of as ACM).
- The soil beneath the area of the coal pile will be removed to a depth of five feet; the soil will be disposed of offsite as solid waste.
- The ash pond will be backfilled with clean fill prior to placement of the closure cap.

3.4.2 Angus Anson

- The Pathfinder Unit 1 building has been included in this estimate.
- There is a reduced decommissioning management and contractor staff due to the smaller size of this facility.
- Lead paint on concrete surfaces will be removed prior to demolition of the concrete structures.
- Concrete will only be removed to three feet below grade.
- Two large oil storage tanks are included in the estimate. One tank is currently in service. The other tank has been cleaned and remains on stand-by.

3.4.3 Black Dog

- The abandoned-in-place Unit 2 boiler is included in the estimate.
- All chimneys from the coal burning operation have been removed.
- All operational coal handling equipment external to the building e.g. conveyors, rail car unloader, transfer towers, stacker conveyor etc. have been removed. Coal conveyors inside the plant have been abandoned in place but not yet removed.
- A cofferdam will be installed to remove the intake condenser cooling water structure.

3.4.4 Blue Lake

- There is a reduced decommissioning management and contractor staff due to the smaller size of this facility.
- Two large oil storage tanks are included in the estimate. One tank is currently in service. The other tank has been cleaned and remains on stand-by.

3.4.5 Granite City

- There is a reduced decommissioning management and contractor staff due to the smaller size of this facility.
- Two large oil storage tanks are included in the estimate. The tanks have been cleaned.

3.4.6 Hennepin Island

- There is a reduced decommissioning management and contractor staff due to the smaller size of this facility.
- The estimate does not include dam or earthworks removal, or ongoing maintenance.
- Inlet channel to turbines will be backfilled.
- Lead paint on concrete surfaces will be removed prior to demolition of the concrete structures.

3.4.7 High Bridge

- There is a reduced decommissioning management and contractor staff due to the smaller size of this facility.

- A cofferdam will be installed to remove the river intake and discharge structure.

3.4.8 Inver Hills

- Gas supply lines will be cut and capped at the source.
- There is a reduced decommissioning management and contractor staff due to the smaller size of this facility.

3.4.9 Key City

- There is a reduced decommissioning management and contractor staff due to the smaller size of this facility.
- Two large oil storage tanks are included in the estimate. The tanks have been cleaned.

3.4.10 Maplewood Gas Plant

- Facility includes multiple liquefied natural gas storage tanks.
- There is a reduced decommissioning management and contractor staff due to the smaller size of this facility.

3.4.11 Minnesota Valley

- All three of the abandoned in-place units are included in the estimate.
- The asbestos quantities were calculated considering Unit 3 to be all asbestos and Units 1 and 2 to only have small amounts on the partially dismantled boilers.
- A cofferdam will be installed to remove the river intake and discharge structure.
- There is a reduced decommissioning management and contractor staff due to the smaller size of this facility.
- The boiler and precipitator will be cleaned prior to dismantling.
- Lead paint on concrete surfaces will be removed prior to demolition of the concrete structures.
- Rockbestos-insulated electrical cabling and other ACM in cable trays will be removed (all cable trays & cabling disposed of as ACM).
- All coal yard facilities have been removed and the ash ponds have been closed.

3.4.12 Red Wing

- The RDF unloading facility and the conveyor transport system are included in the estimate.
- A cofferdam will be installed to remove the cooling water intake and discharge structure.
- The barge unloading facility in not included in the estimate.
- The boiler and precipitator will be cleaned prior to dismantling.
- Lead paint on concrete surfaces will be removed prior to demolition of the concrete structures.
- Rockbestos-insulated electrical cabling and other ACM in cable trays will be removed (all cable trays & cabling disposed of as ACM).
- The ash landfills will be closed in place by capping with a synthetic liner, placing cover over the cap, and seeding.

3.4.13 Riverside

- Included in this estimate are the following abandoned-in-place facilities and equipment:
    - Unit 6, 7 and 8 building structure
    - Unit 6 and 7 boilers
    - Unit 8 boiler, turbine and associated equipment
- Cofferdams will be installed to remove the four cooling water intake and discharge structures.
- Includes barge unloading dock and concrete piles.
- Rockbestos-insulated electrical cabling and other ACM in cable trays will be removed (all cable trays & cabling disposed of as ACM).

3.4.14 Sherburne County

- All coal handling facilities e.g. coal barn, rail car dumper building, coal yard control and maintenance facility, earthen storage berms, conveyor systems, transfer towers etc. are included in this estimate.
- All warehouse/storage type buildings on the site are included in the estimate.
- A cofferdam will be installed to remove the cooling water intake and discharge structure.

- The boiler and precipitator/baghouse will be cleaned prior to dismantling.
- Rockbestos-insulated electrical cabling and other ACM in cable trays will be removed (all cable trays & cabling disposed of as ACM) – Units 1 and 2 only.
- The soil beneath the area of the coal pile will be removed to a depth of five feet; the soil will be disposed of on site in the ash pond.
- The ash pond will be backfilled with coal yard soil prior to placement of the closure cap.
- The Unit 3 dry ash landfill will be closed and capped in accordance with Minnesota's solid waste permit requirements and applicable federal coal combustion residual rules.
- Some of the planning for Sherburne County includes a unit shutdown with the other units remaining in operation for a number of years. In this event, the costs in Table 5.1n, for the shutdown unit only, should be increased by some fraction to allow for constraints on demolition activities on the shutdown with the other units operational. Based upon discussions with Xcel Energy personnel, an increase of 20% can be used for planning purposes.
- The ash landfills will be closed in place by capping with a synthetic liner, placing cover over the cap, and seeding.
- Two large settling tanks are included in the estimate.

3.4.15 Sibley Gas Plant

- Facility includes multiple liquefied natural gas storage tanks.
- There is a reduced decommissioning management and contractor staff due to the smaller size of this facility.

3.4.16 Wescott Gas Plant

- Facility includes two large insulated liquefied natural gas storage tanks.
- There is a reduced decommissioning management and contractor staff due to the smaller size of this facility.

3.4.17 Wilmarth

- The RDF bulk storage facility is not included in the estimate. Only the transport section of the facility with conveyor systems and transfer towers is included.
- There is a reduced decommissioning management and contractor staff due to the smaller size of this facility.
- The boiler and precipitator will be cleaned prior to dismantling.
- Lead paint on concrete surfaces will be removed prior to demolition of the concrete structures.
- Rockbestos-insulated electrical cabling and other ACM in cable trays will be removed (all cable trays & cabling disposed of as ACM).
- The ash landfills will be closed in place by capping with a synthetic liner, placing cover over the cap, and seeding.

3.4.18 Wind Farms – Blazing Star I, Border Winds, Courtenay, Foxtail, Grand Meadow, Lake Benton II, Nobles, Pleasant Valley

- All underground power and control cables will be excavated and removed.
- Tower foundations are completely removed.
- All access roads surfaces will be excavated and removed. The excavated areas will be back-filled with soil.
- There is a reduced decommissioning management and contractor staff due to the smaller size of this facility.

3.4.19 Wind Farms (Removal to 48-inch depth) – Blazing Star I, Border Winds, Courtenay, Foxtail, Grand Meadow, Lake Benton II, Nobles, Pleasant Valley

- All underground power and control cables will be excavated and removed to a depth of 48 inches below grade.
- Tower foundations pedestals will be removed to 48 inches below grade.
- All access roads surfaces will be excavated and removed. The excavated areas will be back-filled with soil.
- There is a reduced decommissioning management and contractor staff due to the smaller size of this facility.

4. SCRAP METAL CREDITS

The dismantling of a typical fossil plant occurs after a lengthy plant operating life. The existing plant equipment is considered obsolete and suitable for scrap as deadweight quantities only. Xcel Energy will make economically reasonable efforts to salvage equipment following final plant shutdown. However, dismantling techniques assumed by TLG for equipment in this analysis are not consistent with removal techniques required for salvage (resale) of equipment. Experience has indicated that buyers prefer equipment stripped down to very specific requirements before they would consider purchase. This can require expensive work to remove the equipment from its installed location, which is inconsistent with the rapid dismantling approach assumed in this estimate. Since placing a salvage value on this machinery and equipment would be speculative, and the value would be small in comparison to the overall cost of dismantling, this analysis does not attempt to quantify the value that an owner may realize based upon those efforts.

Furniture, tools, mobile equipment such as forklifts, trucks, bulldozers, and other property is removed at no cost or credit to the decommissioning project. Disposition may include relocation to other facilities. Spare parts are made available for alternative use.

The materials used in the equipment and buildings are suitable for recycle as scrap metals. As such, an estimated value of the scrap metal credit has been developed and applied to each station's cost estimate. The value of scrap was estimated using a five-year average of market values extracted from published sources and applying this value to the estimated quantities of materials generated from the dismantling project. There were four basic types of metals used in the scrap estimates; carbon steel (the most common material used at the station), copper, stainless steel (high alloy steel) and aluminum. The scrap credit, in addition to considering the quantity and types of materials, also considered the cost of handling and transporting these materials to a major scrap processing location in the Twin Cities area where scrap is used or sold. The value of the scrap is reduced by the transportation costs.

The basis for scrap metal value is summarized in Table 4.1. A summary of the basis for the scrap credit is provided in Tables 4.2 which details the scrap quantities by material type from each unit, and Table 4.3 lists the dollar value of these quantities.

TABLE 4.1a
BASIS FOR SCRAP METAL VALUE
(2019 dollars)

Fossil Stations

Type of Material	Scrap Category [1]	Market Value [2]	Units	Transport Cost [3]	Scrap Metal Credit [4] (per ton)
Carbon Steel	Cast Iron	202.40	Per Ton	46.85	155.56
	No. 1	253.01	Per Ton	46.85	206.16
	Mixed Scrap	202.40	Per Ton	46.85	155.56
	Galvanized	55.66	Per Ton	46.85	8.81
Stainless Steel	SS-1	0.77	Per Pound	0.02	1,490.20
Copper	Insulated Cable	1.32	Per Pound	0.02	2,586.11
	No. 2 Copper	2.11	Per Pound	0.02	4,168.50
	Copper-Nickel	3.20	Per Pound	0.02	6,355.94
	Large Motor	0.32	Per Pound	0.02	585.41
Non-Ferrous	Aluminum	0.29	Per Pound	0.02	532.27

Note 1: Scrap categories are consistent with information provided in Recycler's World.

Note 2: The market value for scrap metal used in this estimate is based on Recycler's World U.S. Scrap Metal Index Spot Market Prices. Values shown represent the average over a 5-year period from January 1, 2015 to December 31, 2019 (See Section 6, reference 4).

Note 3: The estimated cost for handling and transporting the materials to a major scrap processing center in the Twin Cities area is $46.85 / ton or $0.023 / pound.

Note 4: The scrap metal credit reflects the market value of scrap adjusted for handling and transport cost to local scrap metal recycler.

TABLE 4.1b
BASIS FOR SCRAP METAL VALUE
(2019 dollars)

Wind Farms

Type of Material	Scrap Category [1]	Market Value [2]	Units	Scrap Metal Credit [3] (per ton)
Carbon Steel	Cast Iron	202.40	Per Ton	202.40
	No. 1	253.01	Per Ton	253.01
	Mixed Scrap	202.40	Per Ton	202.40
	Galvanized	55.66	Per Ton	55.66
Stainless Steel	SS-1	0.77	Per Pound	1,537.05
Copper	Insulated Cable	1.32	Per Pound	2,632.95
	No. 2 Copper	2.11	Per Pound	4,215.35
	Copper-Nickel	3.20	Per Pound	6,402.79
	Large Motor	0.32	Per Pound	632.26
Non-Ferrous	Aluminum	0.29	Per Pound	579.12

Note 1: Scrap categories are consistent with information provided in Recycler's World.

Note 2: The market value for scrap metal used in this estimate is based on Recycler's World U.S. Scrap Metal Index Spot Market Prices. Values shown represent the average over a 5-year period from January 1, 2015 to December 31, 2019 (See Section 6, Reference 4).

Note 3: The scrap metal credit reflects the market value of scrap cost to local scrap metal recycler. Scrap from the wind farms does not include transportation costs; the transport of the scrap from wind farms is separately accounted for in the cost tables *within "Item 1b. Haul Off of Materials (Trucking / Rail).".*

TABLE 4.2a
QUANTITY OF SCRAP METALS BY STATION
(pounds)

Fossil Stations

	Carbon Steel			Stainless Steel	Galvanized	Copper			Copper		
Station Name	**Cast Iron**	**No. 1**	**Mixed Scrap**	**SS-1**	**Steel**	**Insul Cbl**	**No. 2 Cu**	**Large Mtr**	**Nickel**	**Aluminum**	**Total**
Allen S . King	2,976,846	41,253,822	53,751,220	231,075	1,010,675	157,197	590,394	1,816,821	515,763	-	102,303,814
Angus Anson	944,532	7,869,287	10,367,485	366,129	262,382	62,845	555,614	235,889	90,000	-	20,754,163
Black Dog	1,643,294	27,421,437	35,094,140	770,520	691,748	203,840	500,072	1,777,520	221,615	-	68,324,186
Blue Lake	562,895	7,151,454	16,794,779	471,749	151,311	66,137	534,704	167,052	-	-	25,900,081
Granite City	415,622	1,347,785	3,827,752	14,999	123,454	19,672	117,956	37,557	-	-	5,904,796
Hennepin Island	-	696,327	1,821,010	1,204	32,320	17,700	44,413	-	-	-	2,612,973
High Bridge	844,602	11,853,600	18,671,353	312,326	572,357	113,539	661,690	1,016,734	-	-	34,046,202
Inver Hills	203,824	4,050,420	12,115,948	911,580	66,005	-	537,241	6,408	-	-	17,891,426
Key City	415,622	1,000,333	3,795,209	14,999	123,454	19,672	107,108	37,557	-	-	5,513,953
Maplewood	55,689	2,277,558	514,983	109,319	31,504	6,904	16,564	374	-	-	3,012,895
Minnesota Valley	638,559	12,944,074	20,225,105	554,769	397,131	68,843	241,236	1,395,489	294,202	-	36,759,408
Red Wing	269,371	5,792,041	7,537,990	459,747	242,290	29,016	21,797	235,896	34,301	-	14,622,450
Riverside	717,166	26,334,947	48,412,618	275,384	437,669	61,010	596,359	1,432,370	-	-	78,267,523
Sherburne County	4,008,245	133,744,558	185,765,812	2,132,542	3,718,089	836,673	893,799	5,411,303	-	103	336,511,124
Sibley	53,710	1,828,422	373,174	103,107	43,503	6,703	13,829	7,250	-	-	2,429,699
Wescott	47,236	7,963,162	1,606,330	189,165	68,387	33,887	16,236	2,591	-	1,398,204	11,325,198
Wilmarth	303,646	5,170,263	7,265,649	153,131	168,520	29,016	21,797	235,896	80,000	-	13,427,919
Total	**14,100,859**	**298,699,489**	**427,940,558**	**7,071,745**	**8,140,800**	**1,732,655**	**5,470,810**	**13,816,706**	**1,235,881**	**1,398,307**	**779,607,809**

TABLE 4.2b
QUANTITY OF SCRAP METALS BY STATION
(pounds)

Wind Farms (Complete Removal)

	Carbon Steel		Copper			
Station Name	**No. 1**	**Mixed Scrap**	**No. 2 Cu**	**Large Mtr**	**Aluminum**	**Total**
Blazing Star I	5,913,057	43,858,999	534,453	6,015,842	2,085,396	58,407,747
Border Winds Project	4,404,257	23,658,643	400,839	3,819,509	1,564,047	33,847,295
Courtenay	5,906,025	35,509,601	534,453	5,092,678	2,085,396	49,128,153
Foxtail	5,655,813	32,880,310	400,839	4,514,897	1,564,047	45,015,907
Grand Meadow	3,862,624	33,764,540	358,083	5,302,782	1,397,215	44,685,245
Lake Benton II	3,244,453	22,905,242	261,714	3,326,828	1,026,369	30,764,606
Nobles	10,771,870	51,911,086	716,166	10,639,600	2,794,431	76,833,154
Pleasant Valley	6,238,545	37,955,390	534,453	5,092,678	2,085,396	51,906,462
Total (Complete Removal)	**45,996,644**	**282,443,812**	**3,741,000**	**43,804,815**	**14,602,298**	**390,588,569**

TABLE 4.2c
QUANTITY OF SCRAP METALS BY STATION
(pounds**)**

Wind Farms (Down to 48 inches below grade)

	Carbon Steel		Copper			
Station Name	**No. 1**	**Mixed Scrap**	**No. 2 Cu**	**Large Mtr**	**Aluminum**	**Total**
Blazing Star I (48 in.)	669,104	43,858,999	11,641	6,015,842	-	50,555,586
Border Winds Project (48 in.)	485,434	23,658,643	8,731	3,819,509	-	27,972,316
Courtenay (48 in.)	662,072	35,509,601	11,641	5,092,678	-	41,275,992
Foxtail (48 in.)	610,801	32,880,310	8,731	4,514,897	-	38,014,739
Grand Meadow (48 in.)	561,512	33,764,540	7,799	5,302,782	-	39,636,634
Lake Benton II (48 in.)	385,519	22,905,242	5,122	3,326,828	-	26,622,712
Nobles (48 in.)	1,306,946	51,911,086	15,599	10,639,600	-	63,873,231
Pleasant Valley (48 in.)	658,709	37,955,390	11,641	5,092,678	-	43,718,418
Total (Down 48 inch Removal)	**5,340,099**	**282,443,812**	**80,903**	**43,804,815**	**-**	**331,669,629**

TABLE 4.3a
SCRAP METAL CREDITS BY STATION
(thousands of 2019 dollars)

Fossil Stations

	Carbon Steel			Stainless Steel	Galvanized	Copper			Copper		
Station Name	**Cast Iron**	**No. 1**	**Mixed Scrap**	**SS-1**	**Steel**	**Insul Cbl**	**No. 2 Cu**	**Large Mtr**	**Nickel**	**Aluminum**	**Total**
Allen S . King	$ 232	$ 4,252	$ 4,181	$ 172	$ 4	$ 203	$ 1,231	$ 532	$ 1,639	$ -	$ 12,446
Angus Anson	$ 73	$ 811	$ 806	$ 273	$ 1	$ 81	$ 1,158	$ 69	$ 286	$ -	$ 3,559
Black Dog	$ 128	$ 2,827	$ 2,730	$ 574	$ 3	$ 264	$ 1,042	$ 520	$ 704	$ -	$ 8,792
Blue Lake	$ 44	$ 737	$ 1,306	$ 352	$ 1	$ 86	$ 1,114	$ 49	$ -	$ -	$ 3,688
Granite City	$ 32	$ 139	$ 298	$ 11	$ 1	$ 25	$ 246	$ 11	$ -	$ -	$ 763
Hennepin Island	$ -	$ 72	$ 142	$ 1	$ 0	$ 23	$ 93	$ -	$ -	$ -	$ 330
High Bridge	$ 66	$ 1,222	$ 1,452	$ 233	$ 3	$ 147	$ 1,379	$ 298	$ -	$ -	$ 4,799
Inver Hills	$ 16	$ 418	$ 942	$ 679	$ 0	$ -	$ 1,120	$ 2	$ -	$ -	$ 3,177
Key City	$ 32	$ 103	$ 295	$ 11	$ 1	$ 25	$ 223	$ 11	$ -	$ -	$ 702
Maplewood	$ 4	$ 235	$ 40	$ 81	$ 0	$ 9	$ 35	$ 0	$ -	$ -	$ 404
Minnesota Valley	$ 50	$ 1,334	$ 1,573	$ 413	$ 2	$ 89	$ 503	$ 408	$ 935	$ -	$ 5,307
Red Wing	$ 21	$ 597	$ 586	$ 343	$ 1	$ 38	$ 45	$ 69	$ 109	$ -	$ 1,809
Riverside	$ 56	$ 2,715	$ 3,766	$ 205	$ 2	$ 79	$ 1,243	$ 419	$ -	$ -	$ 8,484
Sherburne County	$ 312	$ 13,786	$ 14,449	$ 1,589	$ 16	$ 1,082	$ 1,863	$ 1,584	$ -	$ 0	$ 34,681
Sibley	$ 4	$ 188	$ 29	$ 77	$ 0	$ 9	$ 29	$ 2	$ -	$ -	$ 338
Wescott	$ 4	$ 821	$ 125	$ 141	$ 0	$ 44	$ 34	$ 1	$ -	$ 372	$ 1,541
Wilmarth	$ 24	$ 533	$ 565	$ 114	$ 1	$ 38	$ 45	$ 69	$ 254	$ -	$ 1,643
$											
Total	**$ 1,097**	**$ 30,790**	**$ 33,285**	**$ 5,269**	**$ 36**	**$ 2,240**	**$ 11,403**	**$ 4,044**	**$ 3,928**	**$ 372**	**$ 92,464**

TABLE 4.3b
SCRAP METAL CREDITS BY STATION
(thousands of 2019 dollars)

Wind Farms (Complete Removal)

	Carbon Steel		Copper			
Station Name	**No. 1**	**Mixed Scrap**	**No. 2 Cu**	**Large Mtr**	**Aluminum**	**Total**
Blazing Star I	$ 748	$ 4,439	$ 1,126	$ 1,902	$ 604	$ 8,819
Border Winds Project	$ 557	$ 2,394	$ 845	$ 1,207	$ 453	$ 5,457
Courtenay	$ 747	$ 3,594	$ 1,126	$ 1,610	$ 604	$ 7,681
Foxtail	$ 715	$ 3,327	$ 845	$ 1,427	$ 453	$ 6,768
Grand Meadow	$ 489	$ 3,417	$ 755	$ 1,676	$ 405	$ 6,741
Lake Benton II	$ 410	$ 2,318	$ 552	$ 1,052	$ 297	$ 4,629
Nobles	$ 1,363	$ 5,253	$ 1,509	$ 3,363	$ 809	$ 12,298
Pleasant Valley	$ 789	$ 3,841	$ 1,126	$ 1,610	$ 604	$ 7,971
Total (Complete Removal)	**$ 5,819**	**$ 28,583**	**$ 7,885**	**$ 13,848**	**$ 4,228**	**$ 60,363**

TABLE 4.3c
SCRAP METAL CREDITS BY STATION
(thousands of 2019 dollars)

Wind Farms (Down to 48 inches below grade)

	Carbon Steel		Copper			
Station Name	**No. 1**	**Mixed Scrap**	**No. 2 Cu**	**Large Mtr**	**Aluminum**	**Total**
Blazing Star I (48 in.)	$ 85	$ 4,439	$ 25	$ 1,902	$ -	$ 6,449
Border Winds Project (48 in.)	$ 61	$ 2,394	$ 18	$ 1,207	$ -	$ 3,682
Courtenay (48 in.)	$ 84	$ 3,594	$ 25	$ 1,610	$ -	$ 5,312
Foxtail (48 in.)	$ 77	$ 3,327	$ 18	$ 1,427	$ -	$ 4,850
Grand Meadow (48 in.)	$ 71	$ 3,417	$ 16	$ 1,676	$ -	$ 5,181
Lake Benton II (48 in.)	$ 49	$ 2,318	$ 11	$ 1,052	$ -	$ 3,429
Nobles (48 in.)	$ 165	$ 5,253	$ 33	$ 3,363	$ -	$ 8,815
Pleasant Valley (48 in.)	$ 83	$ 3,841	$ 25	$ 1,610	$ -	$ 5,559
Total (Down 48 inch Removal)	**$ 676**	**$ 28,583**	**$ 171**	**$ 13,848**	**$ -**	**$ 43,277**

5. RESULTS

An estimate for dismantling each of the Xcel Energy fossil-fuel and wind farm generating stations in Minnesota and South Dakota was developed by applying the system and structures inventories against the associated unit cost factors and accounting for program support costs. A summary of each station's major cost categories is presented in Table 5.1 for the fossil stations, and in Table 5.2 for the wind farms.

5.1 FOSSIL STATIONS

Breakdowns of the major cost categories by unit and common facilities are provided in Tables 5.1a through 5.1q. Note that columns may not total due to rounding.

The following is an explanation of the contents of each line item in these tables:

Station Unit Rating (MWe) – This is the nominal electrical rating of each unit at the station. In Table 5.1 this represents the sum of all units on site.

Characterization / Temporary Services – The cost associated with performing a hazardous materials survey of the site prior to beginning field activities. Includes costs associated with de-energizing systems and isolation of the electrical systems in the buildings scheduled for dismantling. Costs for installing temporary services to support the dismantling are also included.

Worker Access – The cost associated with providing safe access to areas of the station being dismantled.

Pre-Demolition Cleaning (Boiler / Precipitator / Tanks) – The cost associated with cleaning coal-fired boilers and precipitators / baghouses, and associated flue-gas emission control systems. This line item also includes costs to clean acid and caustic storage tanks.

Asbestos / Lead Paint Remediation– The cost associated with remediating asbestos from the station prior to initiating dismantling activities. It should be noted that dismantling can proceed much more efficiently if asbestos containing materials have been removed. This line item also includes lead paint abatement from concrete surfaces in the buildings.

Equipment Removal – The cost associated with removing all station equipment (piping, valves, heat exchangers, tanks, electrical equipment, etc.).

Boiler(s) – The cost associated with removing the boiler.

Structures Demolition – The cost associated with demolishing the buildings and concrete foundations.

Backfill / Grade / Landscaping / Well Closure – The cost associated with backfilling below grade voids, and grading and landscaping the grounds to preclude erosion of soils. This line item also includes costs to seal groundwater monitoring wells.

Coal Yard Closure – The cost associated with removal and disposal of soil waste beneath the footprint of the coal field to a depth of 5 feet, and backfilling the void.

Ash Landfills / Ash Ponds & Landfills Including Evaporation Ponds / Ash Pond Dewatering – The cost associated with closure of the ponds on site, including placement of a cap on the pond(s) after backfilling.

Utility Management / Oversight – The staff directly assigned to manage the dismantling project, including planning, execution, oversight, and restoration.

Demolition Contractor Mgmt. / Super. / Safety Staff – The contractor's staff assigned to manage, engineer, and supervise the dismantling project, including site safety personnel.

Security – Personnel assigned to control access to the dismantling site.

Property Taxes – Not included in this estimate.

The following six items, grouped as Project Expenses, are calculated on a station basis, but are apportioned among the generating units on site by a ratio of the craft labor hours for each generating unit.

> *Shared Heavy Equipment / Operating Engineers* – The cost for renting / operating equipment in general use throughout the dismantling project (cranes, trucks, forklifts, front-end loaders, etc.).
>
> *Small Tool Allowance* – The cost for procuring small tools; this is consistent with R.S. Means 2019 Item 01 54 39.70-0100.
>
> *Utilities Allowance (Office Equip & Supplies / Telephone, Electric etc.)* – The cost for procuring utility services and office supplies in support of the field office for the utility management and demolition contractor staffs.

Permits – The cost of obtaining permits; this is consistent with R.S. Means 2019 Item 01 41 26.50.

Demolition Contractors Insurance – The cost of the demolition contractors insurance; the value is consistent with the R.S. Means 2019 Item 01 31 13.30, lines 0020, 0200, and 0600.

Demolition Contractors Fee – A fee applied to contractor activities; this represents the Contractors overhead and profit payment for the project and is consistent with R.S. Means 2019 Item 01 31 13.80 lines 0350, 0400 and 0450.

Contingency – The cost to cover expenses for unforeseen events that are likely to occur. The estimate assumes 25% (consistent with TLG's experience for similarly highly regulated activities in the nuclear industry) for the asbestos remediation work, and 15% for all other project activities, consistent with the R.S. Means 2019 Item 01 21 16.50 lines 0050 and 0100.

Scrap Credit – A credit to the project for the recovery of scrap metals. This corresponds to value shown in Table 4.3a through 4.3c.

The following is an explanation of the contents of each column in the 5.1 Tables:

Unit – Costs directly attributed to the physical work associated with dismantling a generating unit.

Common – Costs directly attributed to the physical work associated with dismantling facilities shared by more than one unit.

Station – Costs associated with supporting the physical dismantling work for a station.

Station Total – The summation of all Unit columns, plus Common and Station columns.

This study provides an estimate for dismantling under current requirements, based on present-day costs and available technology. As inputs to the cost model change over time, such as labor rates, equipment costs, scrap metal value, etc., this cost estimate should be reviewed and updated to reflect these changes.

TABLE 5.1

SUMMARY OF ACTIVITY COSTS – FOSSIL STATIONS
(2019 Dollars)

Activities (Costs)	Allen S . King	Angus Anson	Black Dog	Blue Lake	Granite City	Hennepin Island	High Bridge	Inver Hills	Key City	Maplewood	Minnesota Valley	Red Wing	Riverside	Sherburne County	Sibley	Wescott	Wilmarth	Fleet Totals
Station Rating (MWe)	511	386	526	545	0	14	606	371	0	0	0	18	590	2238	0	0	18	5778
Characterization / Temporary Services	351,606	297,606	907,818	330,606	239,606	237,606	456,606	263,439	239,606	125,803	519,212	471,212	1,035,818	1,136,818	125,803	159,404	471,000	7,369,573
Worker Access	630,789	-	793,518	-	-	-	-	-	-	-	187,086	123,388	-	1,988,310	-	-	123,388	3,846,477
Pre-Demolition Cleaning (Boiler / Precipitator / Tanks)	1,080,300	240,000	-	-	-	-	-	342,500	-	-	500,900	515,600	526,800	3,243,150	-	-	515,600	6,964,850
Asbestos / Lead Paint Remediation	4,284,988	142,847	4,731,083	-	-	146,899	-	-	-	-	3,576,022	1,443,877	3,167,908	5,517,768	-	-	1,443,877	24,455,269
Equipment Removal	9,548,255	5,634,452	7,019,825	5,928,449	874,216	316,678	4,605,839	4,440,318	874,216	1,362,397	2,863,962	2,030,731	4,234,148	30,534,794	1,129,907	4,647,516	1,746,502	87,792,206
Boiler(s)	3,460,641	-	3,167,478	-	-	-	-	-	-	-	1,193,285	540,184	2,693,576	12,984,236	-	-	841,285	24,880,685
Structures Demolition	12,492,666	1,769,185	6,719,654	2,723,261	948,877	1,605,413	4,537,604	1,533,028	802,108	116,305	3,871,934	2,505,253	9,411,897	35,356,935	84,384	763,648	1,999,579	87,241,729
Backfill / Grade / Landscaping / Well Closure	3,697,788	1,133,560	2,767,357	1,529,390	383,922	790,474	1,742,979	1,343,018	243,348	161,005	1,432,771	1,079,539	2,498,203	9,987,445	164,731	756,289	780,770	30,492,588
Coal Yard Closure	10,718,358	-	-	-	-	-	-	-	-	-	-	-	-	8,264,365	-	-	-	18,982,723
Ash Landfills / Ash Ponds & Landfills Including Evaporation Ponds / Ash Pond Dewatering	950,000	-	3,215,960	-	-	-	-	-	-	-	-	457,152	-	23,923,905	-	-	1,400,239	29,947,256
Utility Management / Oversight	3,027,199	945,676	3,459,078	1,580,835	784,321	778,453	1,618,917	1,333,298	781,800	871,780	1,979,405	1,119,169	3,482,165	3,860,869	839,852	1,003,663	1,119,169	28,585,648
Demolition Contractor Mgmt / Super. / Safety Staff	3,699,644	886,053	4,873,798	1,562,983	488,361	401,322	1,654,047	971,065	482,147	550,634	2,196,028	1,130,906	4,775,533	6,129,664	499,554	1,028,973	1,130,906	32,461,621
Security	776,195	197,940	960,031	197,940	115,679	145,241	208,222	131,103	114,394	194,084	298,195	272,488	965,867	1,135,113	177,374	227,502	272,488	6,389,856
Property Taxes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Expenses																		
Shared Heavy Equipment / Operating Engineers	3,194,695	882,518	4,301,582	1,441,364	476,691	622,535	1,526,730	886,484	470,350	863,495	2,010,686	1,209,872	4,169,727	5,525,323	781,061	1,028,362	1,209,872	30,601,346
Small Tool Allowance	683,023	173,521	508,038	206,202	44,900	57,909	220,828	147,564	39,153	33,294	262,821	153,819	406,870	1,936,030	28,080	123,849	138,068	5,163,971
Utilities Allowance	52,508	30,400	64,945	30,400	17,766	22,306	31,979	20,135	17,569	29,807	45,797	41,849	65,339	76,789	27,241	34,940	41,849	651,617
Permits	685,566	139,877	488,388	171,908	43,429	52,514	184,708	124,344	39,606	40,534	233,256	146,292	412,323	1,832,569	35,510	106,787	148,037	4,885,649
Demolition Contractors Insurance	1,613,171	329,137	1,149,202	404,509	102,191	123,569	434,626	292,589	93,195	95,379	548,864	344,233	970,216	4,312,127	83,556	251,276	348,338	11,496,176
Demolition Contractors Fee	6,680,544	1,346,638	4,479,356	1,595,761	391,450	496,988	1,717,737	1,174,177	352,394	353,503	2,155,825	1,382,875	3,699,103	18,327,570	307,534	984,009	1,401,050	46,846,515
Sub-Total	67,627,939	14,149,409	49,607,111	17,703,605	4,911,409	5,797,909	18,940,824	13,003,063	4,549,886	4,798,021	23,876,048	14,968,441	42,515,494	176,073,780	4,284,587	11,116,217	15,132,016	489,055,758
Contingency	10,572,690	2,136,696	7,914,175	2,655,541	736,711	884,376	2,841,124	1,950,459	682,483	719,703	3,939,009	2,389,654	6,694,115	26,962,844	642,688	1,667,433	2,414,190	75,803,891
Project Total (before scrap credit)	78,200,628	16,286,105	57,521,286	20,359,146	5,648,121	6,682,285	21,781,947	14,953,523	5,232,369	5,517,724	27,815,058	17,358,094	49,209,609	203,036,624	4,927,275	12,783,650	17,546,206	564,859,649
Scrap Credit	(12,446,046)	(3,559,337)	(8,791,629)	(3,688,291)	(762,978)	(329,908)	(4,798,599)	(3,176,879)	(702,022)	(404,310)	(5,307,403)	(1,808,929)	(8,484,150)	(34,681,107)	(338,307)	(1,541,232)	(1,642,767)	(92,463,894)
Project Total	65,754,582	12,726,768	48,729,657	16,670,855	4,885,143	6,352,377	16,983,348	11,776,644	4,530,347	5,113,414	22,507,655	15,549,165	40,725,459	168,355,517	4,588,968	11,242,417	15,903,439	472,395,755

TABLE 5.1a

ALLEN S. KING STATION
SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

Activities	Unit 1	Common	Station	Station Total
Allen S . King Unit Rating (MWe)	511			511
Characterization / Temporary Services	150,000	-	201,606	351,606
Worker Access	630,789	-		630,789
Pre-Demolition Cleaning (Boiler / Precipitator / Tanks)	1,000,300	80,000		1,080,300
Asbestos / Lead Paint Remediation	4,284,988	-		4,284,988
Equipment Removal	7,865,365	1,682,890		9,548,255
Boiler(s)	3,460,641	-		3,460,641
Structures Demolition	10,016,294	2,476,372		12,492,666
Backfill / Grade / Landscaping / Well Closure	2,605,976	977,821	113,991	3,697,788
Coal Yard Closure		10,718,358		10,718,358
Ash Landfills / Ash Ponds & Landfills Including Evaporation Ponds		950,000		950,000
Utility Management / Oversight			3,027,199	3,027,199
Demolition Contractor Management / Supervisory / Safety Staff			3,699,644	3,699,644
Security			776,195	776,195
Property Taxes	-	-	-	0
Project Expenses				
Shared Heavy Equipment / Operating Engineers			3,194,695	3,194,695
Small Tool Allowance	580,281	102,742	n/a	683,023
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)			52,508	52,508
Permits			685,566	685,566
Demolition Contractors Insurance			1,613,171	1,613,171
Demolition Contractors Fee			6,680,544	6,680,544
Sub-Total				67,627,939
Contingency				10,572,690
Project Total (before scrap credit)				78,200,628
Scrap Credit	(11,244,369)	(1,201,677)	-	(12,446,046)
Project Total				65,754,582

TABLE 5.1b

ANGUS ANSON STATION
SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

Activities	Unit 1	Unit 2	Unit 3	Unit 4	Common	Station	Station Total
Angus Anson Unit Rating (MWe)	0	109	109	168			386
Characterization / Temporary Services	25,000	22,000	22,333	26,667	-	201,606	297,606
Pre-Demolition Cleaning (Tanks)	-	-	-	-	240,000		240,000
Lead Paint Remediation	142,847	-	-	-	-		142,847
Equipment Removal	2,642,304	589,684	592,643	1,471,114	338,707		5,634,452
Structures Demolition	1,044,734	158,683	161,649	343,728	60,391		1,769,185
Backfill / Grade / Landscaping / Well Closure	541,304	74,092	75,477	150,687	192,001	100,000	1,133,560
Utility Management / Oversight						945,676	945,676
Demolition Contractor Management / Supervisory / Safety Staff						886,053	886,053
Security						197,940	197,940
Property Taxes	-	-	-	-	-	-	0
Project Expenses							
Shared Heavy Equipment / Operating Engineers						882,518	882,518
Small Tool Allowance	87,924	16,889	17,042	39,844	11,822	n/a	173,521
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)						30,400	30,400
Permits						139,877	139,877
Demolition Contractors Insurance						329,137	329,137
Demolition Contractors Fee						1,346,638	1,346,638
Sub-Total							14,149,409
Contingency							2,136,696
Project Total (before scrap credit)							16,286,105
Scrap Credit	(1,394,645)	(547,154)	(554,872)	(980,393)	(82,273)	-	(3,559,337)
Project Total							12,726,768

TABLE 5.1c

BLACK DOG STATION
SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

Activities	Unit 2	Unit 3	Unit 5	Unit 6	Common	Station	Station Total
Black Dog Unit Rating (MWe)	117	0	181	228			526
Characterization / Temporary Services	64,000	67,000	79,000	93,000	-	604,818	907,818
Worker Access	387,123	406,395	-	-	-		793,518
Asbestos Remediation	1,956,422	1,969,760	-	800,000	4,902		4,731,083
Equipment Removal	2,289,715	2,297,438	1,366,958	981,902	83,813		7,019,825
Boiler(s)	1,750,299	1,417,179	-	-	-		3,167,478
Structures Demolition	823,953	1,315,352	1,535,212	2,081,747	963,391		6,719,654
Backfill / Grade / Landscaping / Well Closure	438,647	460,484	462,694	435,600	869,932	100,000	2,767,357
Ash Landfills / Ash Ponds & Landfills Including Evaporation Ponds					3,215,960		3,215,960
Utility Management / Oversight						3,459,078	3,459,078
Demolition Contractor Management / Supervisory / Safety Staff						4,873,798	4,873,798
Security						960,031	960,031
Property Taxes	-	-	-	-	-	-	0
Project Expenses							
Shared Heavy Equipment / Operating Engineers						4,301,582	4,301,582
Small Tool Allowance	154,203	158,672	68,877	87,845	38,441	n/a	508,038
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)						64,945	64,945
Permits						488,388	488,388
Demolition Contractors Insurance						1,149,202	1,149,202
Demolition Contractors Fee						4,479,356	4,479,356
Sub-Total							49,607,111
Contingency							7,914,175
Project Total (before scrap credit)							57,521,286
Scrap Credit	(2,502,344)	(2,983,623)	(1,370,844)	(1,737,309)	(197,508)	-	(8,791,629)
Project Total							48,729,657

TABLE 5.1d

BLUE LAKE STATION
SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

Activities	Unit 1	Unit 2	Unit 3	Unit 4	Unit 7	Unit 8	Common	Station	Station Total
Blue Lake Unit Rating (MWe)	50	50	46	48	174	177			545
Characterization / Temporary Services	12,250	12,250	12,250	12,250	40,000	40,000	-	201,606	330,606
Equipment Removal	566,731	566,731	566,731	566,731	1,472,140	1,472,140	717,247		5,928,449
Structures Demolition	234,043	203,009	203,009	203,009	461,241	461,241	957,708		2,723,261
Backfill / Grade / Landscaping	160,053	160,053	160,053	160,053	265,653	265,653	357,874	-	1,529,390
Utility Management / Oversight								1,580,835	1,580,835
Demolition Contractor Management / Supervisory / Safety Staff								1,562,983	1,562,983
Security								197,940	197,940
Property Taxes	-	-	-	-	-	-	-	-	0
Project Expenses									
Shared Heavy Equipment / Operating Engineers								1,441,364	1,441,364
Small Tool Allowance	19,462	18,841	18,841	18,841	44,781	44,781	40,657	n/a	206,202
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)								30,400	30,400
Permits								171,908	171,908
Demolition Contractors Insurance								404,509	404,509
Demolition Contractors Fee								1,595,761	1,595,761
Sub-Total									17,703,605
Contingency (excluding activities currently under contract)									2,655,541
Project Total (before scrap credit)									20,359,146
Scrap Credit	(473,687)	(415,070)	(415,070)	(415,070)	(862,163)	(862,163)	(245,069)	-	(3,688,291)
Project Total									16,670,855

TABLE 5.1e

GRANITE CITY STATION
SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

Activities	Unit 1	Unit 2	Unit 3	Unit 4	Common	Station	Station Total
Granite City Unit Rating (MWe)	0	0	0	0			0
Characterization / Temporary Services	9,500	9,500	9,500	9,500	-	201,606	239,606
Equipment Removal	218,554	218,554	218,554	218,554	-		874,216
Structures Demolition	142,423	142,423	142,423	142,423	379,183		948,877
Backfill / Grade / Landscaping	83,590	83,590	83,590	83,590	49,563	-	383,922
Utility Management / Oversight						784,321	784,321
Demolition Contractor Management / Supervisory / Safety Staff						488,361	488,361
Security						115,679	115,679
Property Taxes	-	-	-	-	-	-	0
Project Expenses							
Shared Heavy Equipment / Operating Engineers						476,691	476,691
Small Tool Allowance	9,081	9,081	9,081	9,081	8,575	n/a	44,900
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)						17,766	17,766
Permits						43,429	43,429
Demolition Contractors Insurance						102,191	102,191
Demolition Contractors Fee						391,450	391,450
Sub-Total							4,911,409
Contingency							736,711
Project Total (before scrap credit)							5,648,121
Scrap Credit	(159,623)	(159,623)	(159,623)	(159,623)	(124,486)	-	(762,978)
Project Total							4,885,143

TABLE 5.1f

HENNEPIN ISLAND STATION
SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

Activities	Unit 1-5	Station	Station Total
Hennepin Island Unit Rating (MWe)	14		14
Characterization / Temporary Services	36,000	201,606	237,606
Lead Paint Remediation	146,899		146,899
Equipment Removal	316,678		316,678
Structures Demolition	1,605,413		1,605,413
Grade / Landscaping	790,474	-	790,474
Utility Management / Oversight		778,453	778,453
Demolition Contractor Management / Supervisory / Safety Staff		401,322	401,322
Security		145,241	145,241
Property Taxes	-	-	0
Project Expenses			
Shared Heavy Equipment / Operating Engineers		622,535	622,535
Small Tool Allowance	57,909	n/a	57,909
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)		22,306	22,306
Permits		52,514	52,514
Demolition Contractors Insurance		123,569	123,569
Demolition Contractors Fee		496,988	496,988
Sub-Total			5,797,909
Contingency			884,376
Project Total (before scrap credit)			6,682,285
Scrap Credit	(329,908)	-	(329,908)
Project Total			6,352,377

TABLE 5.1g

HIGH BRIDGE STATION
SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

Activities	Unit 7	Unit 8	Unit 9	Common	Station	Station Total
High Bridge Unit Rating (MWe)	185	185	236			606
Characterization / Temporary Services	79,000	79,000	97,000	-	201,606	456,606
Equipment Removal	1,393,993	1,393,993	1,452,905	364,947		4,605,839
Boiler(s)	-	-	-	-		0
Structures Demolition	1,109,013	1,109,013	1,777,707	541,872		4,537,604
Backfill / Grade / Landscaping / Well Closure	327,086	327,086	801,030	187,777	100,000	1,742,979
Utility Management / Oversight					1,618,917	1,618,917
Demolition Contractor Management / Supervisory / Safety Staff					1,654,047	1,654,047
Security					208,222	208,222
Property Taxes	-	-	-	-	-	0
Project Expenses						
Shared Heavy Equipment / Operating Engineers					1,526,730	1,526,730
Small Tool Allowance	58,182	58,182	82,573	21,892	n/a	220,828
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)					31,979	31,979
Permits					184,708	184,708
Demolition Contractors Insurance					434,626	434,626
Demolition Contractors Fee					1,717,737	1,717,737
Sub-Total						18,940,824
Contingency						2,841,124
Project Total (before scrap credit)						21,781,947
Scrap Credit	(1,418,437)	(1,418,437)	(1,846,014)	(115,711)	-	(4,798,599)
Project Total						16,983,348

TABLE 5.1h

INVER HILLS STATION
SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

Activities	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Common	Station	Station Total
Inver Hills Unit Rating (MWe)	62	62	62	62	61	62			371
Characterization / Temporary Services	8,833	8,833	8,833	8,833	8,833	8,833	8,833	201,606	263,439
Pre-Demolition Cleaning (Tanks)	-	-	-	-	-	-	342,500		342,500
Equipment Removal	696,798	696,798	696,798	696,798	696,798	696,798	259,531		4,440,318
Boiler(s)	-	-	-	-	-	-	-		0
Structures Demolition	232,167	232,167	232,167	232,167	232,167	232,167	140,023		1,533,028
Backfill / Grade / Landscaping	192,205	192,205	192,205	192,205	192,205	192,205	189,786	-	1,343,018
Utility Management / Oversight								1,333,298	1,333,298
Demolition Contractor Management / Supervisory / Safety Staff								971,065	971,065
Security								131,103	131,103
Property Taxes	-	-	-	-	-	-	-	-	0
Project Expenses									
Shared Heavy Equipment / Operating Engineers								886,484	886,484
Small Tool Allowance	22,600	22,600	22,600	22,600	22,600	22,600	11,963	n/a	147,564
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)								20,135	20,135
Permits								124,344	124,344
Demolition Contractors Insurance								292,589	292,589
Demolition Contractors Fee								1,174,177	1,174,177
Sub-Total									13,003,063
Contingency									1,950,459
Project Total (before scrap credit)									14,953,523
Scrap Credit	(517,223)	(517,223)	(517,223)	(517,223)	(517,223)	(517,223)	(73,541)	-	(3,176,879)
Project Total									11,776,644

TABLE 5.1i

KEY CITY STATION
SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

Activities	Unit 1	Unit 2	Unit 3	Unit 4	Common	Station	Station Total
Key City Unit Rating (MWe)	0	0	0	0			0
Characterization / Temporary Services	9,500	9,500	9,500	9,500	-	201,606	239,606
Equipment Removal	218,554	218,554	218,554	218,554	-		874,216
Structures Demolition	107,785	107,785	107,785	107,785	370,968		802,108
Backfill / Grade / Landscaping	50,591	50,591	50,591	50,591	40,982	-	243,348
Utility Management / Oversight						781,800	781,800
Demolition Contractor Management / Supervisory / Safety Staff						482,147	482,147
Security						114,394	114,394
Property Taxes	-	-	-	-	-	-	0
Project Expenses							
Shared Heavy Equipment / Operating Engineers						470,350	470,350
Small Tool Allowance	7,729	7,729	7,729	7,729	8,239	n/a	39,153
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)						17,569	17,569
Permits						39,606	39,606
Demolition Contractors Insurance						93,195	93,195
Demolition Contractors Fee						352,394	352,394
Sub-Total							4,549,886
Contingency							682,483
Project Total (before scrap credit)							5,232,369
Scrap Credit	(144,885)	(144,885)	(144,885)	(144,885)	(122,482)	-	(702,022)
Project Total							4,530,347

TABLE 5.1j

MAPLEWOOD GAS PLANT
SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

Activities	Unit 1	Station	Station Total
Maplewood Unit Rating (MWe)	0		0
Characterization / Temporary Services	25,000	100,803	125,803
Equipment Removal	1,362,397		1,362,397
Structures Demolition	116,305		116,305
Grade / Landscaping	161,005	-	161,005
Utility Management / Oversight		871,780	871,780
Demolition Contractor Management / Supervisory / Safety Staff		550,634	550,634
Security		194,084	194,084
Property Taxes	-	-	0
Project Expenses			
Shared Heavy Equipment / Operating Engineers		863,495	863,495
Small Tool Allowance	33,294	n/a	33,294
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)		29,807	29,807
Permits		40,534	40,534
Demolition Contractors Insurance		95,379	95,379
Demolition Contractors Fee		353,503	353,503
Sub-Total			4,798,021
Contingency			719,703
Project Total (before scrap credit)			5,517,724
Scrap Credit	(404,310)	-	(404,310)
Project Total			5,113,414

TABLE 5.1k

MINNESOTA VALLEY STATION
SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

Activities	*Unit 1*	*Unit 2*	*Unit 3*	*Common*	*Station*	*Station Total*
Minnesota Valley Unit Rating (MWe)	0	0	0			0
Characterization / Temporary Services	34,000	34,000	48,000		403,212	519,212
Worker Access	-	-	187,086	-		187,086
Pre-Demolition Cleaning (Boiler / Precipitator / Tanks)	166,967	166,967	166,967	-		500,900
Asbestos / Lead Paint Remediation	124,640	124,640	3,326,742	-		3,576,022
Equipment Removal	353,302	353,302	2,157,358	-		2,863,962
Boiler(s)	255,835	255,835	681,615	-		1,193,285
Structures Demolition	756,380	756,380	2,059,095	300,078		3,871,934
Backfill / Grade / Landscaping / Well Closure	415,645	415,645	396,692	104,790	100,000	1,432,771
Utility Management / Oversight					1,979,405	1,979,405
Demolition Contractor Management / Supervisory / Safety Staff					2,196,028	2,196,028
Security					298,195	298,195
-						
Property Taxes	-	-	-	-	-	0
Project Expenses						
Shared Heavy Equipment / Operating Engineers					2,010,686	2,010,686
Small Tool Allowance	38,796	38,796	177,132	8,097	n/a	262,821
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)					45,797	45,797
Permits					233,256	233,256
Demolition Contractors Insurance					548,864	548,864
Demolition Contractors Fee					2,155,825	2,155,825
Sub-Total						23,876,048
Contingency						3,939,009
Project Total (before scrap credit)						27,815,058
Scrap Credit	(1,232,488)	(1,232,488)	(2,840,688)	(1,738)	-	(5,307,403)
Project Total						22,507,655

TABLE 5.1l

RED WING STATION
SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

Activities	Unit 1	Unit 2	Common	Station	Station Total
Red Wing Unit Rating (MWe)	9	9			18
Characterization / Temporary Services	34,000	34,000	-	403,212	471,212
Worker Access	61,694	61,694	-		123,388
Pre-Demolition Cleaning (Boiler / Precipitator / Tanks)	257,800	257,800	-		515,600
Asbestos / Lead Paint Remediation	721,939	721,939	-		1,443,877
Equipment Removal	780,906	780,906	468,918		2,030,731
Boiler(s)	270,092	270,092	-		540,184
Structures Demolition	731,187	731,187	1,042,878		2,505,253
Backfill / Grade / Landscaping / Well Closure	215,931	215,931	547,677	100,000	1,079,539
Ash Landfills / Ash Ponds & Landfills Inculding Evaporation Ponds			457,152		457,152
Utility Management / Oversight				1,119,169	1,119,169
Demolition Contractor Management / Supervisory / Safety Staff				1,130,906	1,130,906
Security				272,488	272,488
Property Taxes	-	-	-	-	0
Project Expenses					
Shared Heavy Equipment / Operating Engineers				1,209,872	1,209,872
Small Tool Allowance	56,315	56,315	41,189	n/a	153,819
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)				41,849	41,849
Permits				146,292	146,292
Demolition Contractors Insurance				344,233	344,233
Demolition Contractors Fee				1,382,875	1,382,875
Sub-Total					14,968,441
Contingency					2,389,654
Project Total (before scrap credit)					17,358,094
Scrap Credit	(662,363)	(662,363)	(484,203)	-	(1,808,929)
Project Total					15,549,165

TABLE 5.1m

RIVERSIDE STATION
SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

Activities	Unit 6 Boiler	Unit 7 Boiler	Unit 7 Turbine	Unit 8	Unit 9	Unit 10	Commom	Station	Station Total
Riverside Unit Rating (MWe)	44	44	160	0	171	171			590
Characterization / Temporary Services	48,000	48,000	80,000	93,000	81,000	81,000	-	604,818	1,035,818
Pre-Demolition Cleaning (Boiler / Precipitator / Tanks)	170,600	170,600	-	170,600	-	-	15,000		526,800
Asbestos Remediation	1,025,353	1,025,353	-	1,117,201	-	-	-		3,167,908
Equipment Removal	-	-	987,364	473,484	1,377,540	1,377,540	18,220		4,234,148
Boiler(s)	875,389	875,389	-	942,798	-	-	-		2,693,576
Structures Demolition	1,041,505	1,041,505	574,865	2,627,561	952,584	952,584	2,221,292		9,411,897
Backfill / Grade / Landscaping / Well Closure	197,838	197,838	364,420	590,917	246,508	246,508	554,174	100,000	2,498,203
Utility Management / Oversight								3,482,165	3,482,165
Demolition Contractor Management / Supervisory / Safety Staff								4,775,533	4,775,533
Security								965,867	965,867
Property Taxes			-		-		-	-	0
Project Expenses									
Shared Heavy Equipment / Operating Engineers								4,169,727	4,169,727
Small Tool Allowance	63,762	63,762	40,133	116,899	33,220	33,220	55,874	n/a	406,870
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)								65,339	65,339
Permits								412,323	412,323
Demolition Contractors Insurance								970,216	970,216
Demolition Contractors Fee								3,699,103	3,699,103
Sub-Total									42,515,494
Contingency									6,694,115
Project Total (before scrap credit)									49,209,609
Scrap Credit	(1,202,298)	(1,202,298)	(1,141,914)	(2,432,111)	(1,179,549)	(1,179,549)	(146,430)	-	(8,484,150)
Project Total									40,725,459

TABLE 5.1n

SHERBURNE COUNTY STATION
SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

Activities	Unit 1	Unit 2	Unit 3	Common	Station	Station Total
Sherburne County Unit Rating (MWe)	680	682	876			2238
Characterization / Temporary Services	171,000	171,000	190,000	-	604,818	1,136,818
Worker Access	642,334	642,334	703,642	-		1,988,310
Pre-Demolition Cleaning (Boiler / Precipitator / Tanks)	1,081,050	1,081,050	1,081,050	-		3,243,150
Asbestos Remediation	2,508,884	2,508,884	-	500,000		5,517,768
Equipment Removal	5,699,637	5,547,162	6,568,928	4,670,760		22,486,487
Boiler(s)	4,182,168	4,182,168	4,619,900	-		12,984,236
Turbine Generator & Condensor	609,899	609,899	686,634			1,906,432
Exhaust Gas Treatment Equipment and Structures	4,245,955	4,398,430	4,741,985			13,386,370
Structures Demolition	7,038,228	7,038,228	7,657,026	6,378,958		28,112,441
Backfill / Grade / Landscaping / Well Closure	1,656,105	1,656,105	1,814,172	4,761,063	100,000	9,987,445
Coal Yard Closure				8,264,365		8,264,365
Ash Landfills / Ash Ponds & Landfills Including Evaporation Ponds / Ash Pond Dewatering			3,169,905	20,754,000		23,923,905
Utility Management / Oversight	1,079,289	1,079,289	1,208,276	494,016		3,860,869
Demolition Contractor Management / Supervisory / Safety Staff	1,713,520	1,713,520	1,918,305	784,319		6,129,664
Security	317,316	317,316	355,239	145,243		1,135,113
Property Taxes	-	-	-	-	-	0
Project Expenses						
Shared Heavy Equipment / Operating Engineers	1,544,579	1,544,579	1,729,174	706,991		5,525,323
Small Tool Allowance	535,084	535,084	539,646	326,216	n/a	1,936,030
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)					76,789	76,789
Permits					1,832,569	1,832,569
Demolition Contractors Insurance					4,312,127	4,312,127
Demolition Contractors Fee					18,327,570	18,327,570
Sub-Total						176,073,780
Contingency						26,962,844
Project Total (before scrap credit)						203,036,624
Scrap Credit	(9,982,485)	(9,982,485)	(12,096,244)	(2,619,893)	-	(34,681,107)
Project Total						168,355,517

TABLE 5.1o

SIBLEY GAS PLANT
SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

Activities	Unit 1	Station	Station Total
Sibley Unit Rating (MWe)	0		0
Characterization / Temporary Services	25,000	100,803	125,803
Equipment Removal	1,129,907		1,129,907
Structures Demolition	84,384		84,384
Grade / Landscaping	164,731	-	164,731
Utility Management / Oversight		839,852	839,852
Demolition Contractor Management / Supervisory / Safety Staff		499,554	499,554
Security		177,374	177,374
Property Taxes	-	-	0
Project Expenses			
Shared Heavy Equipment / Operating Engineers		781,061	781,061
Small Tool Allowance	28,080	n/a	28,080
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)		27,241	27,241
Permits		35,510	35,510
Demolition Contractors Insurance		83,556	83,556
Demolition Contractors Fee		307,534	307,534
Sub-Total			4,284,587
Contingency			642,688
Project Total (before scrap credit)			4,927,275
Scrap Credit	(338,307)	-	(338,307)
Project Total			4,588,968

TABLE 5.1p

WESCOTT GAS PLANT
SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

Activities	Unit 1	Station	Station Total
Wescott Unit Rating (MWe)	0		0
Characterization / Temporary Services	25,000	134,404	159,404
Equipment Removal	4,647,516		4,647,516
Structures Demolition	763,648		763,648
Grade / Landscaping	756,289	-	756,289
Utility Management / Oversight		1,003,663	1,003,663
Demolition Contractor Management / Supervisory / Safety Staff		1,028,973	1,028,973
Security		227,502	227,502
Property Taxes	-	-	0
Project Expenses			
Shared Heavy Equipment / Operating Engineers		1,028,362	1,028,362
Small Tool Allowance	123,849	n/a	123,849
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)		34,940	34,940
Permits		106,787	106,787
Demolition Contractors Insurance		251,276	251,276
Demolition Contractors Fee		984,009	984,009
Sub-Total			11,116,217
Contingency			1,667,433
Project Total (before scrap credit)			12,783,650
Scrap Credit	(1,541,232)	-	(1,541,232)
Project Total			11,242,417

TABLE 5.1q

WILMARTH STATION
SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

Activities	Unit 1	Unit 2	Common	Station	Station Total
Wilmarth Unit Rating (MWe)	9	9			18
Characterization / Temporary Services	34,000	34,000	-	403,000	471,000
Worker Access	61,694	61,694	-		123,388
Pre-Demolition Cleaning (Boiler / Precipitator / Tanks)	257,800	257,800	-		515,600
Asbestos / Lead Paint Remediation	721,939	721,939	-		1,443,877
Equipment Removal	780,906	780,906	184,689		1,746,502
Boiler(s)	420,643	420,643	-		841,285
Structures Demolition	626,917	626,917	745,744		1,999,579
Backfill / Grade / Landscaping / Well Closure	217,690	217,690	245,389	100,000	780,770
Ash Landfills			1,400,239		1,400,239
Utility Management / Oversight				1,119,169	1,119,169
Demolition Contractor Management / Supervisory / Safety Staff				1,130,906	1,130,906
Security				272,488	272,488
Property Taxes	-	-	-	-	0
Project Expenses					
Shared Heavy Equipment / Operating Engineers				1,209,872	1,209,872
Small Tool Allowance	57,276	57,276	23,516	n/a	138,068
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)				41,849	41,849
Permits				148,037	148,037
Demolition Contractors Insurance				348,338	348,338
Demolition Contractors Fee				1,401,050	1,401,050
Sub-Total					15,132,016
Contingency					2,414,190
Project Total (before scrap credit)					17,546,206
Scrap Credit	(737,645)	(737,645)	(167,478)	-	(1,642,767)
Project Total					15,903,439

5.2 WIND FARMS

An estimate for dismantling each of the Xcel Energy wind farm generating stations in Minnesota and North Dakota was developed by applying the system and structures inventories against the associated unit cost factors and accounting for program support costs. A summary of each wind farm's major cost categories is presented in Table 5.2. Breakdowns of the major cost categories by wind farm are provided in Tables 5.2a through 5.2p. Note that columns may not total due to rounding.

The following is an explanation of the contents of each line item in these tables:

TURBINE SITE REMOVAL

Dismantle Wind Turbine Generators – The cost associated with removal of the nacelle, hub, blades and tower. Also included is a percentage of the utility, DOC, and security staffing, miscellaneous expenses, and site characterization costs.

Haul Off of Materials (Trucking/Rail) – The cost associated with the transportation of the scrap material.

Foundation Removal – The cost of removal of the WTG concrete foundation or in the 48-inch scenario, the pedestal removal.

Crane Mobilization & Demobilization – All heavy equipment costs.

SITE CIVIL WORK REMOVAL

Balance of Site Civil Work Removals – The cost associated with backfilling below grade voids, and grading and landscaping the grounds to preclude erosion of soils. Also included is a percentage of the utility, DOC, and security staffing, miscellaneous expenses and site characterization costs.

COLLECTION SYSTEM REMOVAL

Remove Collection Cable, Remove Junction Boxes & Turbine Switchgears – The cost associated with excavation of the cable and back-fill of the trench. Also included is a percentage of the utility, DOC, and security staffing, miscellaneous expenses and site characterization costs.

Contingency (15%) - The cost to cover expenses for unforeseen events that are likely to occur.

Approximate scrap value of components – A credit to the project for the recovery of scrap metals. This corresponds to value shown in Table 4.3b through 4.3c.

TABLE 5.2

SUMMARY OF ACTIVITY COSTS – WIND FARMS
(2019 Dollars)

ITEM	DESCRIPTION	Blazing Star I AMOUNT	Blazing Star I (48 in.) AMOUNT	Border Winds Project AMOUNT	Border Winds Project (48 in.) AMOUNT	Courtenay AMOUNT	Courtenay (48 in.) AMOUNT	Foxtail AMOUNT	Foxtail (48 in.) AMOUNT	Grand Meadow AMOUNT	Grand Meadow (48 in.) AMOUNT	Lake Benton II AMOUNT	Lake Benton II (48 in.) AMOUNT	Nobles AMOUNT	Nobles (48 in.) AMOUNT	Pleasant Valley AMOUNT	Pleasant Valley (48 in.) AMOUNT	Complete Removal AMOUNT	Removal (to to 48" depth) ITEM
1	TURBINE SITE REMOVAL																		
1a	Dismantle Wind Turbine Generators - Model 1	$1,392,653	$1,437,495	$11,136,713	$11,604,079	$13,597,829	$13,970,467	$993,756	$1,025,000	$10,279,573	$10,906,283	$804,060	$837,777	$18,641,078	$19,146,628	$15,900,269	$16,381,957	$72,745,929	$75,309,687
	Dismantle Wind Turbine Generators - Model 2	$12,625,322	$13,028,894	$0	$0	$0	$0	$9,723,737	$10,027,257	$0	$0	$6,529,184	$6,792,178	$0	$0	$0	$0	$28,878,242	$29,848,328
1b	Haul Off of Materials (Trucking/Rail)	$3,053,850	$2,643,300	$1,769,707	$1,462,533	$2,568,667	$2,158,116	$2,353,658	$1,987,602	$2,336,369	$2,072,402	$1,608,528	$1,391,969	$4,017,223	$3,339,613	$2,713,931	$2,285,819	$20,421,933	$17,341,355
1c	Foundation Removal - Model 1	$609,370	$73,272	$5,263,779	$585,008	$6,704,742	$801,686	$465,755	$54,629	$3,416,996	$525,128	$302,318	$37,728	$7,736,964	$1,012,965	$6,787,708	$792,287	$31,287,631	$3,882,702
	Foundation Removal - Model 2	$5,484,331	$659,444	$0	$0	$0	$0	$4,524,475	$530,685	$0	$0	$2,358,079	$294,280	$0	$0	$0	$0	$12,366,885	$1,484,409
1d	Crane Mobilization & Demobilization	$1,998,541	$1,903,425	$2,417,050	$2,283,888	$1,954,154	$1,846,356	$1,522,963	$1,453,212	$2,201,454	$2,138,044	$1,015,680	$977,633	$1,947,813	$1,871,720	$2,150,726	$2,061,951	$15,208,380	$14,536,230
	SUBTOTAL	**$25,164,068**	**$19,745,830**	**$20,587,249**	**$15,935,508**	**$24,825,391**	**$18,776,625**	**$19,584,343**	**$15,078,385**	**$18,234,392**	**$15,641,858**	**$12,617,848**	**$10,331,565**	**$32,343,078**	**$25,370,926**	**$27,552,633**	**$21,522,014**	**$180,909,001**	**$142,402,711**
2	SITE CIVIL WORK REMOVAL																		
2a	Balance of Site Civil Work Removals	$10,397,806	$10,084,299	$8,909,810	$8,622,688	$11,048,476	$10,695,312	$8,406,384	$8,171,092	$7,490,034	$7,343,033	$4,848,790	$4,759,976	$13,434,084	$13,038,736	$10,584,412	$10,237,618	$75,119,796	$72,952,756
	SUBTOTAL	**$10,397,806**	**$10,084,299**	**$8,909,810**	**$8,622,688**	**$11,048,476**	**$10,695,312**	**$8,406,384**	**$8,171,092**	**$7,490,034**	**$7,343,033**	**$4,848,790**	**$4,759,976**	**$13,434,084**	**$13,038,736**	**$10,584,412**	**$10,237,618**	**$75,119,796**	**$72,952,756**
3	COLLECTION SYSTEM REMOVAL																		
3a	Remove MV Collection Cable	$2,023,676	$408,958	$1,933,366	$397,071	$2,050,705	$407,251	$1,609,155	$324,523	$1,697,809	$366,382	$1,054,685	$221,763	$2,399,425	$479,044	$2,165,432	$438,778	$14,934,254	$3,043,769
3b	Remove Junction Boxes & Turbine Switchgears	$313,937	$31,394	$248,574	$24,857	$331,432	$33,143	$248,574	$24,857	$210,338	$21,034	$138,132	$13,813	$420,675	$42,068	$313,937	$31,394	$2,225,597	$222,560
	SUBTOTAL	**$2,337,613**	**$440,352**	**$2,181,939**	**$421,928**	**$2,382,137**	**$440,394**	**$1,857,729**	**$349,380**	**$1,908,147**	**$387,416**	**$1,192,817**	**$235,576**	**$2,820,100**	**$521,112**	**$2,479,368**	**$470,172**	**$17,159,851**	**$3,266,329**
	SITE SUBTOTAL	**$37,899,487**	**$30,270,481**	**$31,678,997**	**$24,980,125**	**$38,256,004**	**$29,912,331**	**$29,848,456**	**$23,598,856**	**$27,632,572**	**$23,372,307**	**$18,659,455**	**$15,327,118**	**$48,597,262**	**$38,930,775**	**$40,616,414**	**$32,229,804**	**$273,188,648**	**$218,621,796**
	CONTINGENGY (15%)	$5,684,923	$4,540,572	$4,751,850	$3,747,019	$5,738,401	$4,486,850	$4,477,268	$3,539,828	$4,144,886	$3,505,846	$2,798,918	$2,299,068	$7,289,589	$5,839,616	$6,092,462	$4,834,471	$40,978,297	$32,793,269
	Project Total (before scrap credit)	$43,584,410	$34,811,053	$36,430,847	$28,727,143	$43,994,405	$34,399,181	$34,325,724	$27,138,685	$31,777,458	$26,878,153	$21,458,374	$17,626,185	$55,886,851	$44,770,391	$46,708,876	$37,064,275	$314,166,945	$251,415,066
	APPROXIMATE SCRAP VALUE OF COMPONENTS	($8,818,650)	($6,449,499)	($5,456,601)	($3,681,527)	($7,680,961)	($5,311,810)	($6,767,995)	($4,850,452)	($6,741,282)	($5,180,812)	($4,628,964)	($3,429,286)	($12,298,196)	($8,815,111)	($7,970,541)	($5,558,899)	($60,363,190)	($43,277,397)
	TOTAL PRICE	**$34,765,760**	**$28,361,555**	**$30,974,246**	**$25,045,616**	**$36,313,443**	**$29,087,370**	**$27,557,729**	**$22,288,232**	**$25,036,176**	**$21,697,340**	**$16,829,410**	**$14,196,899**	**$43,588,656**	**$35,955,280**	**$38,738,336**	**$31,505,376**	**$253,803,755**	**$208,137,669**

Note: Model 1 and Model 2 designate the two Models of WTG at Blazing Star I, Foxtail, and Lake Benton II.

TABLE 5.2a
Blazing Star I Wind Farm

SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

					Blazing Star I
ITEM	**DESCRIPTION**	**QUANTITY**	**UNIT**	**UNIT PRICE**	**AMOUNT**
1	TURBINE SITE REMOVAL				
1a	Dismantle Wind Turbine Generators - V110	10	EA	$139,265	$1,392,653
	Dismantle Wind Turbine Generators - V120	90	EA	$140,281	$12,625,322
1b	Haul Off of Materials (Trucking/Rail)	100	EA	30,539	$3,053,850
1c	Foundation Removal - V110	10	EA	$60,937	$609,370
	Foundation Removal - V120	90	EA	$60,937	$5,484,331
1d	Crane Mobilization & Demobilization	1	LS	$1,998,541	$1,998,541
		SUBTOTAL			**$25,164,068**
2	SITE CIVIL WORK REMOVAL				
2a	Balance of Site Civil Work Removals	1	LS	$10,397,806	$10,397,806
		SUBTOTAL			**$10,397,806**
3	COLLECTION SYSTEM REMOVAL				
3a	Remove MV Collection Cable	1	LS	$2,023,676	$2,023,676
3b	Remove Junction Boxes & Turbine Switchgears	1	LS	$313,937	$313,937
		SUBTOTAL			**$2,337,613**
		SITE SUBTOTAL			**$37,899,487**
	CONTINGENGY (15%)				$5,684,923
	Project Total (before scrap credit)				$43,584,410
	APPROXIMATE SCRAP VALUE OF COMPONENTS				($8,818,650)
TOTAL PRICE					**$34,765,760**

TABLE 5.2b
Blazing Star I Wind Farm
(Removal to 48 inches)
SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

Blazing Star I (48 in.)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1	TURBINE SITE REMOVAL				
1a	Dismantle Wind Turbine Generators - V110	10	EA	$143,749	$1,437,495
	Dismantle Wind Turbine Generators - V120	90	EA	$144,765	$13,028,894
1b	Haul Off of Materials (Trucking/Rail)	100	EA	26,433	$2,643,300
1c	Foundation Removal V110	10	EA	$7,327	$73,272
	Foundation Removal V120	90	EA	$7,327	$659,444
1d	Crane Mobilization & Demobilization	1	LS	$1,903,425	$1,903,425
		SUBTOTAL			**$19,745,830**
2	SITE CIVIL WORK REMOVAL				
2a	Balance of Site Civil Work Removals	1	LS	$10,084,299	$10,084,299
		SUBTOTAL			**$10,084,299**
3	COLLECTION SYSTEM REMOVAL				
3a	Remove MV Collection Cable	1	LS	$408,958	$408,958
3b	Remove Junction Boxes & Turbine Switchgears	1	LS	$31,394	$31,394
		SUBTOTAL			**$440,352**
		SITE SUBTOTAL			**$30,270,481**
	CONTINGENGY (15%)				$4,540,572
	Project Total (before scrap credit)				$34,811,053
	APPROXIMATE SCRAP VALUE OF COMPONENTS				($6,449,499)
TOTAL PRICE					**$28,361,555**

TABLE 5.2c
Border Winds Project

SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	Border Winds Project AMOUNT
1	TURBINE SITE REMOVAL				
1a	Dismantle Wind Turbine Generators V100.20	75	EA	$148,490	$11,136,713
1b	Haul Off of Materials (Trucking/Rail)	75	EA	23,596	$1,769,707
1c	Foundation Removal V100.20	75	EA	$70,184	$5,263,779
1d	Crane Mobilization & Demobilization	1	LS	$2,417,050	$2,417,050
		SUBTOTAL			**$20,587,249**
2	SITE CIVIL WORK REMOVAL				
2a	Balance of Site Civil Work Removals	1	LS	$8,909,810	$8,909,810
		SUBTOTAL			**$8,909,810**
3	COLLECTION SYSTEM REMOVAL				
3a	Remove MV Collection Cable	1	LS	$1,933,366	$1,933,366
3b	Remove Junction Boxes & Turbine Switchgears	1	LS	$248,574	$248,574
		SUBTOTAL			**$2,181,939**
		SITE SUBTOTAL			**$31,678,997**
	CONTINGENGY (15%)				$4,751,850
	Project Total (before scrap credit)				$36,430,847
	APPROXIMATE SCRAP VALUE OF COMPONENTS				($5,456,601)
TOTAL PRICE					**$30,974,246**

TABLE 5.2d
Border Winds Project
(Removal to 48 inches)
SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	Border Winds Project (48 in.) AMOUNT
1	TURBINE SITE REMOVAL				
1a	Dismantle Wind Turbine Generators - V100-2.0	75	EA	$154,721	$11,604,079
1b	Haul Off of Materials (Trucking/Rail)	75	EA	19,500	$1,462,533
1c	Foundation Removal - V100-2.0	75	EA	$7,800	$585,008
1d	Crane Mobilization & Demobilization	1	LS	$2,283,888	$2,283,888
		SUBTOTAL			**$15,935,508**
2	SITE CIVIL WORK REMOVAL				
2a	Balance of Site Civil Work Removals	1	LS	$8,622,688	$8,622,688
		SUBTOTAL			**$8,622,688**
3	COLLECTION SYSTEM REMOVAL				
3a	Remove MV Collection Cable	1	LS	$397,071	$397,071
3b	Remove Junction Boxes & Turbine Switchgears	1	LS	$24,857	$24,857
		SUBTOTAL			**$421,928**
		SITE SUBTOTAL			**$24,980,125**
	CONTINGENGY (15%)				$3,747,019
	Project Total (before scrap credit)				$28,727,143
	APPROXIMATE SCRAP VALUE OF COMPONENTS				($3,681,527)
TOTAL PRICE					**$25,045,616**

TABLE 5.2e
Courtenay Wind Farm

SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

					Courtenay
ITEM	**DESCRIPTION**	**QUANTITY**	**UNIT**	**UNIT PRICE**	**AMOUNT**
1	TURBINE SITE REMOVAL				
1a	Dismantle Wind Turbine Generators - V100-2.0	100	EA	$135,978	$13,597,829
1b	Haul Off of Materials (Trucking/Rail)	100	EA	25,687	$2,568,667
1c	Foundation Removal - V100-2.0	100	EA	$67,047	$6,704,742
1d	Crane Mobilization & Demobilization	1	LS	$1,954,154	$1,954,154
		SUBTOTAL			**$24,825,391**
2	SITE CIVIL WORK REMOVAL				
2a	Balance of Site Civil Work Removals	1	LS	$11,048,476	$11,048,476
		SUBTOTAL			**$11,048,476**
3	COLLECTION SYSTEM REMOVAL				
3a	Remove MV Collection Cable	1	LS	$2,050,705	$2,050,705
3b	Remove Junction Boxes & Turbine Switchgears	1	LS	$331,432	$331,432
		SUBTOTAL			**$2,382,137**
		SITE SUBTOTAL			**$38,256,004**
	CONTINGENGY (15%)				$5,738,401
	Project Total (before scrap credit)				$43,994,405
	APPROXIMATE SCRAP VALUE OF COMPONENTS				($7,680,961)
TOTAL PRICE					**$36,313,443**

TABLE 5.2f
Courtenay Wind Farm
(Removal to 48 inches)
SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

Courtenay (48 in.)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1	TURBINE SITE REMOVAL				
1a	Dismantle Wind Turbine Generators - V100-2.0	100	EA	$139,705	$13,970,467
1b	Haul Off of Materials (Trucking/Rail)	100	EA	21,581	$2,158,116
1c	Foundation Removal - V100-2.0	100	EA	$8,017	$801,686
1d	Crane Mobilization & Demobilization	1	LS	$1,846,356	$1,846,356
		SUBTOTAL			**$18,776,625**
2	SITE CIVIL WORK REMOVAL				
2a	Balance of Site Civil Work Removals	1	LS	$10,695,312	$10,695,312
		SUBTOTAL			**$10,695,312**
3	COLLECTION SYSTEM REMOVAL				
3a	Remove MV Collection Cable	1	LS	$407,251	$407,251
3b	Remove Junction Boxes & Turbine Switchgears	1	LS	$33,143	$33,143
		SUBTOTAL			**$440,394**
		SITE SUBTOTAL			**$29,912,331**
	CONTINGENGY (15%)				$4,486,850
	Project Total (before scrap credit)				$34,399,181
	APPROXIMATE SCRAP VALUE OF COMPONENTS				($5,311,810)
TOTAL PRICE					**$29,087,370**

TABLE 5.2g
Foxtail Wind Farm

SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

					Foxtail
ITEM	**DESCRIPTION**	**QUANTITY**	**UNIT**	**UNIT PRICE**	**AMOUNT**
1	TURBINE SITE REMOVAL				
1a	Dismantle Wind Turbine Generators - V110	7	EA	$141,965	$993,756
	Dismantle Wind Turbine Generators - V120	68	EA	$142,996	$9,723,737
1b	Haul Off of Materials (Trucking/Rail)	75	EA	31,382	$2,353,658
1c	Foundation Removal - V110	7	EA	$66,536	$465,755
	Foundation Removal - V120	68	EA	$66,536	$4,524,475
1d	Crane Mobilization & Demobilization	1	LS	$1,522,963	$1,522,963
		SUBTOTAL			**$19,584,343**
2	SITE CIVIL WORK REMOVAL				
2a	Balance of Site Civil Work Removals	1	LS	$8,406,384	$8,406,384
		SUBTOTAL			**$8,406,384**
3	COLLECTION SYSTEM REMOVAL				
3a	Remove MV Collection Cable	1	LS	$1,609,155	$1,609,155
3b	Remove Junction Boxes & Turbine Switchgears	1	LS	$248,574	$248,574
		SUBTOTAL			**$1,857,729**
		SITE SUBTOTAL			**$29,848,456**
	CONTINGENGY (15%)				$4,477,268
	Project Total (before scrap credit)				$34,325,724
	APPROXIMATE SCRAP VALUE OF COMPONENTS				($6,767,995)
TOTAL PRICE					**$27,557,729**

TABLE 5.2h
Foxtail Wind Farm
(Removal to 48 inches)
SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

Foxtail (48 in.)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1	TURBINE SITE REMOVAL				
1a	Dismantle Wind Turbine Generators - V110	7	EA	$146,429	$1,025,000
	Dismantle Wind Turbine Generators - V120	68	EA	$147,460	$10,027,257
1b	Haul Off of Materials (Trucking/Rail)	75	EA	26,501	$1,987,602
1c	Foundation Removal - V110	7	EA	$7,804	$54,629
	Foundation Removal - V120	68	EA	$7,804	$530,685
1d	Crane Mobilization & Demobilization	1	LS	$1,453,212	$1,453,212
		SUBTOTAL			**$15,078,385**
2	SITE CIVIL WORK REMOVAL				
2a	Balance of Site Civil Work Removals	1	LS	$8,171,092	$8,171,092
		SUBTOTAL			**$8,171,092**
3	COLLECTION SYSTEM REMOVAL				
3a	Remove MV Collection Cable	1	LS	$324,523	$324,523
3b	Remove Junction Boxes & Turbine Switchgears	1	LS	$24,857	$24,857
		SUBTOTAL			**$349,380**
		SITE SUBTOTAL			**$23,598,856**
	CONTINGENGY (15%)				$3,539,828
	Project Total (before scrap credit)				$27,138,685
	APPROXIMATE SCRAP VALUE OF COMPONENTS				($4,850,452)
TOTAL PRICE					**$22,288,232**

TABLE 5.2i
Grand Meadow Wind

SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

					Grand Meadow
ITEM	**DESCRIPTION**	**QUANTITY**	**UNIT**	**UNIT PRICE**	**AMOUNT**
1	TURBINE SITE REMOVAL				
1a	Dismantle Wind Turbine Generators - GE1.5-77	67	EA	$153,426	$10,279,573
1b	Haul Off of Materials (Trucking/Rail)	67	EA	34,871	$2,336,369
1c	Foundation Removal - GE1.5-77	67	EA	$51,000	$3,416,996
1d	Crane Mobilization & Demobilization	1	LS	$2,201,454	$2,201,454
		SUBTOTAL			**$18,234,392**
2	SITE CIVIL WORK REMOVAL				
2a	Balance of Site Civil Work Removals	1	LS	$7,490,034	$7,490,034
		SUBTOTAL			**$7,490,034**
3	COLLECTION SYSTEM REMOVAL				
3a	Remove MV Collection Cable	1	LS	$1,697,809	$1,697,809
3b	Remove Junction Boxes & Turbine Switchgears	1	LS	$210,338	$210,338
		SUBTOTAL			**$1,908,147**
		SITE SUBTOTAL			**$27,632,572**
	CONTINGENGY (15%)				$4,144,886
	Project Total (before scrap credit)				$31,777,458
	APPROXIMATE SCRAP VALUE OF COMPONENTS				($6,741,282)
TOTAL PRICE					**$25,036,176**

TABLE 5.2j
Grand Meadow Wind
(Removal to 48 inches)
SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	Grand Meadow (48 in.) AMOUNT
1	TURBINE SITE REMOVAL				
1a	Dismantle Wind Turbine Generators - GE1.5-77	67	EA	$162,780	$10,906,283
1b	Haul Off of Materials (Trucking/Rail)	67	EA	30,931	$2,072,402
1c	Foundation Removal - GE1.5-77	67	EA	$7,838	$525,128
1d	Crane Mobilization & Demobilization	1	LS	$2,138,044	$2,138,044
		SUBTOTAL			**$15,641,858**
2	SITE CIVIL WORK REMOVAL				
2a	Balance of Site Civil Work Removals	1	LS	$7,343,033	$7,343,033
		SUBTOTAL			**$7,343,033**
3	COLLECTION SYSTEM REMOVAL				
3a	Remove MV Collection Cable	1	LS	$366,382	$366,382
3b	Remove Junction Boxes & Turbine Switchgears	1	LS	$21,034	$21,034
		SUBTOTAL			**$387,416**
		SITE SUBTOTAL			**$23,372,307**
	CONTINGENGY (15%)				$3,505,846
	Project Total (before scrap credit)				$26,878,153
	APPROXIMATE SCRAP VALUE OF COMPONENTS				($5,180,812)
TOTAL PRICE					**$21,697,340**

TABLE 5.2k
Lake Benton II Wind

SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

Lake Benton II

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1	TURBINE SITE REMOVAL				
1a	Dismantle Wind Turbine Generators - GE2.1-116	5	EA	$160,812	$804,060
	Dismantle Wind Turbine Generators - GE2.3-116	39	EA	$167,415	$6,529,184
1b	Haul Off of Materials (Trucking/Rail)	44	EA	36,557	$1,608,528
1c	Foundation Removal - GE2.1-116	5	EA	$60,464	$302,318
	Foundation Removal - GE2.3-116	39	EA	$60,464	$2,358,079
1d	Crane Mobilization & Demobilization	1	LS	$1,015,680	$1,015,680
		SUBTOTAL			**$12,617,848**
2	SITE CIVIL WORK REMOVAL				
2a	Balance of Site Civil Work Removals	1	LS	$4,848,790	$4,848,790
		SUBTOTAL			**$4,848,790**
3	COLLECTION SYSTEM REMOVAL				
3a	Remove MV Collection Cable	1	LS	$1,054,685	$1,054,685
3b	Remove Junction Boxes & Turbine Switchgears	1	LS	$138,132	$138,132
		SUBTOTAL			**$1,192,817**
		SITE SUBTOTAL			**$18,659,455**
	CONTINGENGY (15%)				$2,798,918
	Project Total (before scrap credit)				$21,458,374
	APPROXIMATE SCRAP VALUE OF COMPONENTS				($4,628,964)
TOTAL PRICE					**$16,829,410**

TABLE 5.2l
Lake Benton II Wind
(Removal to 48 inches)
SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

Lake Benton II (48 in.)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1	TURBINE SITE REMOVAL				
1a	Dismantle Wind Turbine Generators - GE2.1-116	5	EA	$167,555	$837,777
	Dismantle Wind Turbine Generators - GE2.3-116	39	EA	$174,158	$6,792,178
1b	Haul Off of Materials (Trucking/Rail)	44	EA	31,636	$1,391,969
1c	Foundation Removal - GE2.1-116	5	EA	$7,546	$37,728
	Foundation Removal - GE2.3-116	39	EA	$7,546	$294,280
1d	Crane Mobilization & Demobilization	1	LS	$977,633	$977,633
		SUBTOTAL			**$10,331,565**
2	SITE CIVIL WORK REMOVAL				
2a	Balance of Site Civil Work Removals	1	LS	$4,759,976	$4,759,976
		SUBTOTAL			**$4,759,976**
3	COLLECTION SYSTEM REMOVAL				
3a	Remove MV Collection Cable	1	LS	$221,763	$221,763
3b	Remove Junction Boxes & Turbine Switchgears	1	LS	$13,813	$13,813
		SUBTOTAL			**$235,576**
		SITE SUBTOTAL			**$15,327,118**
	CONTINGENGY (15%)				$2,299,068
	Project Total (before scrap credit)				$17,626,185
	APPROXIMATE SCRAP VALUE OF COMPONENTS				($3,429,286)
TOTAL PRICE					**$14,196,899**

TABLE 5.2m
Nobles Wind Farm

SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	Nobles AMOUNT
1	TURBINE SITE REMOVAL				
1a	Dismantle Wind Turbine Generators - GE1.5-77	134	EA	$139,113	$18,641,078
1b	Haul Off of Materials (Trucking/Rail)	134	EA	29,979	$4,017,223
1c	Foundation Removal - GE1.5-77	134	EA	$57,739	$7,736,964
1d	Crane Mobilization & Demobilization	1	LS	$1,947,813	$1,947,813
		SUBTOTAL			**$32,343,078**
2	SITE CIVIL WORK REMOVAL				
2a	Balance of Site Civil Work Removals	1	LS	$13,434,084	$13,434,084
		SUBTOTAL			**$13,434,084**
3	COLLECTION SYSTEM REMOVAL				
3a	Remove MV Collection Cable	1	LS	$2,399,425	$2,399,425
3b	Remove Junction Boxes & Turbine Switchgears	1	LS	$420,675	$420,675
		SUBTOTAL			**$2,820,100**
		SITE SUBTOTAL			**$48,597,262**
	CONTINGENGY (15%)				$7,289,589
	Project Total (before scrap credit)				$55,886,851
	APPROXIMATE SCRAP VALUE OF COMPONENTS				($12,298,196)
TOTAL PRICE					**$43,588,656**

TABLE 5.2n
Nobles Wind Farm
(Removal to 48 inches)
SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

Nobles (48 in.)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1	TURBINE SITE REMOVAL				
1a	Dismantle Wind Turbine Generators - GE1.5-77	134	EA	$142,885	$19,146,628
1b	Haul Off of Materials (Trucking/Rail)	134	EA	24,922	$3,339,613
1c	Foundation Removal - GE1.5-77	134	EA	$7,559	$1,012,965
1d	Crane Mobilization & Demobilization	1	LS	$1,871,720	$1,871,720
		SUBTOTAL			**$25,370,926**
2	SITE CIVIL WORK REMOVAL				
2a	Balance of Site Civil Work Removals	1	LS	$13,038,736	$13,038,736
		SUBTOTAL			**$13,038,736**
3	COLLECTION SYSTEM REMOVAL				
3a	Remove MV Collection Cable	1	LS	$479,044	$479,044
3b	Remove Junction Boxes & Turbine Switchgears	1	LS	$42,068	$42,068
		SUBTOTAL			**$521,112**
		SITE SUBTOTAL			**$38,930,775**
	CONTINGENGY (15%)				$5,839,616
	Project Total (before scrap credit)				$44,770,391
	APPROXIMATE SCRAP VALUE OF COMPONENTS				($8,815,111)
TOTAL PRICE					**$35,955,280**

TABLE 5.2o
Pleasant Valley Wind Farm

SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

Pleasant Valley

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1	TURBINE SITE REMOVAL				
1a	Dismantle Wind Turbine Generators - V100-2.0	100	EA	$159,003	$15,900,269
1b	Haul Off of Materials (Trucking/Rail)	100	EA	27,139	$2,713,931
1c	Foundation Removal - V100-2.0	100	EA	$67,877	$6,787,708
1d	Crane Mobilization & Demobilization	1	LS	$2,150,726	$2,150,726
		SUBTOTAL			**$27,552,633**
2	SITE CIVIL WORK REMOVAL				
2a	Balance of Site Civil Work Removals	1	LS	$10,584,412	$10,584,412
		SUBTOTAL			**$10,584,412**
3	COLLECTION SYSTEM REMOVAL				
3a	Remove MV Collection Cable	1	LS	$2,165,432	$2,165,432
3b	Remove Junction Boxes & Turbine Switchgears	1	LS	$313,937	$313,937
		SUBTOTAL			**$2,479,368**
		SITE SUBTOTAL			**$40,616,414**
	CONTINGENGY (15%)				$6,092,462
	Project Total (before scrap credit)				$46,708,876
	APPROXIMATE SCRAP VALUE OF COMPONENTS				($7,970,541)
TOTAL PRICE					**$38,738,336**

TABLE 5.2p
Pleasant Valley Wind Farm
(Removal to 48 inches)
SUMMARY OF ACTIVITY COSTS
(2019 Dollars)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	Pleasant Valley (48 in.) AMOUNT
1	TURBINE SITE REMOVAL				
1a	Dismantle Wind Turbine Generators - V100-2.0	100	EA	$163,820	$16,381,957
1b	Haul Off of Materials (Trucking/Rail)	100	EA	22,858	$2,285,819
1c	Foundation Removal - V100-2.0	100	EA	$7,923	$792,287
1d	Crane Mobilization & Demobilization	1	LS	$2,061,951	$2,061,951
		SUBTOTAL			**$21,522,014**
2	SITE CIVIL WORK REMOVAL				
2a	Balance of Site Civil Work Removals	1	LS	$10,237,618	$10,237,618
		SUBTOTAL			**$10,237,618**
3	COLLECTION SYSTEM REMOVAL				
3a	Remove MV Collection Cable	1	LS	$438,778	$438,778
3b	Remove Junction Boxes & Turbine Switchgears	1	LS	$31,394	$31,394
		SUBTOTAL			**$470,172**
		SITE SUBTOTAL			**$32,229,804**
	CONTINGENGY (15%)				$4,834,471
	Project Total (before scrap credit)				$37,064,275
	APPROXIMATE SCRAP VALUE OF COMPONENTS				($5,558,899)
TOTAL PRICE					**$31,505,376**

6. REFERENCES

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APPENDIX A
SUMMARY OF STATION SYSTEM AND STRUCTURES INVENTORIES

TABLE A

SUMMARY OF STATION SYSTEMS AND STRUCTURES INVENTORIES

Index	System/Structure Inventory Data Point	Allen S . King	Angus Anson	Black Dog	Blue Lake	Granite City	Hennepin Island	High Bridge	Inver Hills	Key City	Maplewood	Minnesota Valley	Red Wing	Riverside	Sherburne County	Sibley	Wescott	Wilmarth
Station Rating (Mwe)		511	386	409	545	0	14	606	371	0	0	0	178	502	2238	0	0	18
2	Piping 0.25 to 2 inches diameter, linear foot	79,850	31,521	11,835	20,178	1,501	-	24,690	3,268	1,501	-	492	4,919	24,046	233,790	-	-	4,919
3	Piping >2 to 4 inches diameter, linear foot	53,123	31,014	36,003	13,452	1,001	-	16,460	2,579	1,001	2,195	12,745	3,279	16,031	157,111	2,110	-	3,279
4	Piping >4 to 8 inches diameter, linear foot	35,133	14,009	24,870	10,357	3,138	-	11,173	6,964	3,138	1,120	6,427	2,186	10,687	103,907	520	5,585	2,186
5	Piping >8 to 14 inches diameter, linear foot	30,662	8,006	16,782	6,229	445	-	8,015	1,348	445	330	4,778	1,457	7,125	89,271	385	2,265	1,457
6	Piping >14 to 20 inches diameter, linear foot	7,208	2,614	7,217	4,259	148	-	5,377	1,139	148	90	2,484	794	4,750	26,401	75	20	794
7	Piping >20 to 36 inches diameter, linear foot	9,734	1,886	4,260	2,419	-	-	3,971	-	-	70	1,803	289	3,716	37,053	16	-	289
8	Piping >36 inches diameter, linear foot	5,335	898	3,074	1,796	-	-	2,420	-	-	-	17	173	2,126	15,991	-	60	173
9	Valves <2 inches	1,373	1,308	20	144	108	-	-	216	108	-	54	540	1,418	4,118	-	-	540
10	Valves >2 to 4 inches	935	1,660	1,869	672	72	-	698	174	72	330	402	360	698	2,805	346	-	360
11	Valves >4 to 8 inches	610	592	886	464	80	-	381	264	80	78	207	240	369	1,830	47	104	240
12	Valves >8 to 14 inches	1,519	272	531	142	24	-	159	62	24	44	134	120	123	1,115	54	35	120
13	Valves >14 to 20 inches	158	84	102	48	-	-	78	-	-	2	29	50	66	587	-	4	50
14	Valves >20 to 36 inches	128	22	31	24	-	-	36	-	-	-	14	16	36	476	-	-	16
15	Valves >36 inches	56	6	22	12	-	-	26	-	-	-	1	14	18	104	-	-	14
24	Pipe hangers for small bore piping, each	5,018	3,641	3,225	1,449	81	-	1,742	246	81	88	847	909	1,742	14,975	84	-	909
25	Pipe hangers for large bore piping, each	3,351	1,243	1,672	1,089	121	-	1,249	391	121	64	393	543	1,237	9,618	40	317	543
26	Pump and motor set < 300 pounds	77	17	62	72	16	-	13	108	16	6	32	38	13	507	3	7	38
27	Pumps, 300-1000 pound pump	23	16	18	12	-	-	13	-	-	-	4	8	13	73	-	7	8
28	Pumps, >1000-10,000 pound pump	14	5	15	-	-	-	2	-	-	-	4	11	2	44	-	-	11
29	Pumps, >10,000 pound pump	13	5	14	4	-	-	8	-	-	-	5	8	4	9	-	-	8
32	Pump motors, 300-1000 pound pump	23	32	18	12	-	-	13	-	-	-	4	8	13	28	-	7	8
33	Pump motors, >1000-10,000 pound pump	13	5	12	-	-	-	3	-	-	-	4	11	3	68	2	-	11
34	Pump motors, >10,000 pound pump	13	5	14	4	-	-	8	-	-	-	5	4	4	18	-	-	4
37	Turbine-driven pumps > 10,000 pounds	1	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	-
38	Main turbine-generator (pounds per MW(e) input)	1	1	2	-	-	-	1	-	-	-	3	2	2	3	-	-	2
39	Heat exchanger <3000 pound	16	12	30	101	-	-	6	210	-	-	15	12	6	60	-	-	12
40	Heat exchanger >3000 pound	-	27	12	48	-	-	5	96	-	-	7	14	5	21	-	-	14
41	Feedwater heater/deaerator	9	6	25	2	-	-	2	-	-	-	7	12	2	31	-	-	12
49	Main condenser (pounds per MW(e) input)	1	1	2	-	-	-	1	-	-	-	3	2	1	3	-	-	2
51	Tanks, <300 gallons, filters, and ion exchangers	38	33	41	20	16	3	10	34	16	5	39	12	10	66	28	25	12
52	Tanks, 300-3000 gallons	12	32	29	4	12	-	11	8	12	6	7	2	6	132	9	4	2
53	Tanks, >3000 gallons, square foot surface	27,566	75,184	4,933	62,690	2,847	-	23,259	7,069	2,847	101,764	87,790	33,585	1,859	162,458	81,889	374,754	6,871
54	Electrical equipment, <300 pound	742	686	881	647	420	54	150	846	420	21	222	322	128	6,686	36	-	322
55	Electrical equipment, 300-1000 pound	144	296	500	350	40	16	289	184	40	17	51	18	280	936	13	15	18
56	Electrical equipment, 1000-10,000 pound	122	190	203	280	80	25	207	175	80	7	39	56	201	122	2	32	56
57	Electrical equipment, >10,000 pound	19	99	18	128	28	36	16	168	28	5	4	16	16	30	3	5	16
59	Electrical transformers < 30 tons	3	13	22	14	2	-	4	18	2	2	10	-	4	6	2	1	-
60	Electrical transformers > 30 tons	3	9	6	12	2	-	5	12	2	-	4	2	5	3	-	-	2
61	Standby diesel-generator, <100 kW	-	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
62	Standby diesel-generator, 100 kW to 1 MW	-	-	-	-	8	-	-	-	8	-	-	-	-	-	-	-	-
63	Standby diesel-generator, >1 MW	2	-	-	-	4	-	-	-	4	-	-	-	2	5	-	-	-
64	Fluorescent light fixture	200	250	450	180	80	10	200	100	80	30	163	38	150	498	30	24	38
65	Incandescent light fixture	1,564	288	1,000	180	120	16	200	170	120	30	327	258	150	4,060	30	24	258
66	Electrical cable tray, linear foot	27,803	5,512	13,091	5,651	1,730	250	10,276	-	1,730	-	2,107	1,364	9,206	166,291	-	820	1,364
67	Electrical conduit, linear foot	41,992	7,922	45,448	8,631	2,471	4,790	13,688	-	2,471	2,060	18,605	8,658	11,905	119,404	2,000	8,500	8,658
69	Mechanical equipment, <300 pound	788	288	670	52	44	5	31	78	44	8	258	360	21	2,388	6	48	360
70	Mechanical equipment, 300-1000 pound	198	312	290	812	64	8	274	30	64	-	77	14	274	457	21	9	14
71	Mechanical equipment, 1000-10,000 pound	204	60	38	127	-	38	59	1,000	-	3	23	60	44	516	17	28	60
72	Mechanical equipment, >10,000 pound	68	160	106	238	60	26	141	219	60	20	5	45	103	90	8	62	45

TABLE A

SUMMARY OF SYSTEMS AND STRUCTURES INVENTORIES
(Continued)

Index	System/Structure Inventory Data Point	Allen S . King	Angus Anson	Black Dog	Blue Lake	Granite City	Hennepin Island	High Bridge	Inver Hills	Key City	Maplewood	Minnesota Valley	Red Wing	Riverside	Sherburne County	Sibley	Wescott	Wilmarth
Station Rating (Mwe)		511	386	409	545	0	14	606	371	0	0	0	178	502	2238	0	0	18
76	HVAC equipment, <300 pound	108	14	-	16	-	-	-	24	-	-	4	10	-	328	-	-	10
77	HVAC equipment, 300-1000 pound	-	22	4	-	-	-	36	-	-	-	-	-	24	107	-	-	-
78	HVAC equipment, 1000-10,000 pound	-	5	-	-	-	-	14	-	-	-	2	4	10	6	-	-	4
79	HVAC equipment, >10,000 pound	-	-	-	-	-	-	-	-	-	-	-	-	-	15	-	-	-
82	HVAC ductwork, pound	119,977	10,000	273,680	-	-	8,175	142,100	-	-	-	96,406	18,295	38,202	439,440	-	-	18,295
201	Standard reinforced concrete, cubic yard	24,015	6,662	22,278	14,027	3,806	2,006	18,008	14,800	1,903	770	7,390	9,138	23,366	89,076	591	7,914	5,248
202	Grade slab concrete, cubic yard	10,800	1,329	8,959	1,176	906	-	372	1,384	906	-	676	474	3,551	-	-	-	474
206	Heavily rein concrete w/#9 rebar, cubic yard	7,824	1,110	7,007	-	-	-	-	-	-	-	3,788	1,793	3,035	22,775	-	-	1,793
222	Hollow masonry block wall, cubic yard	-	1,103	374	58	-	-	425	-	-	-	-	-	2,219	-	-	-	109
224	Solid masonry block wall, cubic yard	3,788	-	4,114	-	-	458	-	-	-	-	8,809	663	3,011	14,335	-	-	663
229	Backfill of below grade voids, cubic yard	29,218	11,074	14,043	12,493	2,170	20,000	19,394	6,898	1,308	-	32,816	17,556	12,325	-	-	-	20,531
230	Excavation of clean material, cubic yard	8,747	-	13,387	-	-	-	-	-	-	-	7,307	5,760	18,507	34,560	-	-	5,760
235	Building by volume, cubic foot	5,117,058	229,493	35,076	970,228	189,562	-	318,816	247,411	189,562	159,000	155,740	321,500	597,793	9,863,100	107,000	390,842	321,500
236	Building metal siding, square foot	217,256	42,789	56,780	19,901	37,278	-	108,748	15,564	37,278	-	73,964	32,498	93,913	669,467	-	-	32,498
242	Standard asphalt roofing, square foot	47,897	22,500	32,544	-	-	9,375	110,000	-	-	-	23,588	9,129	119,469	237,266	-	-	9,129
245	Placement of cofferdam, linear foot	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
248	Lead paint removal from concrete surfaces, square foo	373,064	54,000	-	-	-	54,150	-	-	-	-	135,495	54,337	-	-	-	-	54,337
253	Overhead cranes/monorails < 10 ton capacity, each	14	5	2	-	-	-	-	-	-	-	-	1	-	136	-	-	1
255	Overhead cranes/monorails >10 - 50 ton capacity, each	6	2	-	4	-	1	5	-	-	-	2	2	7	21	-	1	2
258	Gantry cranes > 50 ton capacity, each	1	-	-	1	-	-	1	-	-	-	-	-	5	6	-	-	-
260	Structural steel, pounds	24,541,699	2,731,615	13,947,804	1,748,139	310,648	299,854	6,981,323	662,931	310,648	12,000	6,612,141	2,429,526	17,879,987	83,653,565	10,000	77,000	2,429,526
262	Steel floor grating, square foot	161,222	16,242	43,412	7,410	2,673	900	18,797	-	2,673	-	12,083	30,386	56,169	578,353	-	-	30,386
268	Placement of scaffolding in clean areas, square foot	66,680	-	83,881	-	-	-	-	-	-	-	19,777	13,043	-	210,181	-	-	13,043
270	Landscaping with topsoil, acre	3	4	4	1	0	2	1.9	2	0	3	1	4	3	33	2	4	2
271	Landscaping w/o topsoil, acre	29	4	5	8	2	-	4	9	2	3	7	3	8	239	2	4	4
272	Chain link fencing, linear foot	3,372	6,800	3,000	2,880	995	550	3,144	2,800	995	2,460	3,859	8,372	5,016	20,000	3,680	3,450	995
273	Railroad track, linear foot	3,000	-	3,600	-	-	-	-	-	-	-	-	-	-	24,000	-	-	-
274	Asphalt pavement, square foot	220,880	91,000	122,500	78,300	12,000	17,650	75,171	51,000	12,000	17,750	38,225	-	128,241	801,500	45,625	62,700	52,000
293	Carbon steel plate 3/8 inch thick, square foot	-	8,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
294	Carbon steel plate 1/2 inch thick, square foot	66,630	7,388	36,515	14,776	75,398	12,441	14,550	-	75,398	-	6,959	17,695	78,517	219,533	-	-	17,695
359	Steam drum removal (fossil)	1	3	5	6	-	-	6	-	-	-	3	2	9	6	-	-	2
360	Water drum removal (fossil)	-	-	-	-	-	-	-	-	-	-	4	4	-	12	-	-	4
361	Upper/lower waterwall headers (fossil)	26	-	22	-	-	-	-	-	-	-	14	6	27	72	-	-	6
362	Top sup boiler waterwall (8'x8' section), inches cut	138,902	-	75,985	-	-	-	-	-	-	-	45,627	13,392	128,711	470,566	-	-	13,392
369	Boiler convective superheaater platens	307	-	356	-	-	-	-	-	-	-	256	116	459	1,344	-	-	116
370	Boiler radiant superheater platens	-	-	-	-	-	-	-	-	-	-	-	-	-	156	-	-	-
371	Boiler reheat platens	140	-	180	-	-	-	-	-	-	-	-	-	90	666	-	-	-
372	Boiler economizer platens	420	-	169	-	-	-	-	-	-	-	39	-	163	1,344	-	-	-
374	Stationary soot blowers	98	-	64	-	-	-	-	-	-	-	21	-	32	315	-	-	-
375	Retractable soot blowers	70	-	36	-	-	-	-	-	-	-	7	16	18	144	-	-	16
376	Process ductwork (8'x8' section), inches cut	757,268	321,019	1,009,405	625,433	54,416	-	446,315	307,617	54,416	-	470,306	61,481	1,009,280	3,392,767	-	-	61,481
378	Non-asbestos insulated regenerative air preheaters	4	-	9	-	-	-	-	-	-	-	8	8	4	13	-	-	8
380	Non-asbestos insulated recuperative air preheaters	-	-	-	-	-	-	-	-	-	-	4	-	8	-	-	-	-
382	Induced, forced, primary draft fans	9	-	11	-	-	-	-	-	-	-	4	4	-	42	-	-	4
383	Coal car dumpers	1	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-
384	Conveyors	5,528	-	-	-	-	-	-	-	-	-	-	625	-	5,000	-	-	625
385	Transfer Towers	100,500	-	-	-	-	-	-	-	-	-	-	-	-	201,000	-	-	-
386	Stacker-reclaimers	1	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-
389	Ball mills	12	-	8	-	-	-	-	-	-	-	4	-	-	43	-	-	-
390	Coal feeders	120	-	122	-	-	-	-	-	-	-	40	86	-	1,019	-	-	86

TABLE A
SUMMARY OF STATION SYSTEMS AND STRUCTURES INVENTORIES

WIND FARMS ONLY

Index	System/Structure Inventory Data Point	Blazing Star I	Blazing Star I (48 in.)	Border Winds Project	Border Winds Project (48 in.)	Courtenay	Courtenay (48 in.)	Foxtail	Foxtail (48 in.)	Grand Meadow	Grand Meadow (48 in.)	Lake Benton II	Lake Benton II (48 in.)	Nobles	Nobles (48 in.)	Pleasant Valley	Pleasant Valley (48 in.)
Station Rating (Mwe)		200	200	148	148	190	190	150	150	99	99	99	99	197	197	196	196
56	Electrical equipment, 1000-10,000 pound	100	100	75	75	100	100	75	75	67	67	44	44	134	134	100	100
57	Electrical equipment, >10,000 pound	300	300	225	225	300	300	225	225	134	134	132	132	268	268	300	300
67	Electrical conduit, linear foot	1,731,165	-	1,298,374	-	1,731,165	-	1,298,374	-	1,159,881	-	513184	0	2,319,761	-	1,731,165	-
72	Mechanical equipment, >10,000 pound	1,550	1,550	1,163	1,163	1,550	1,550	1,163	1,163	1,039	1,039	770	770	2211	2,211	1650	1650
201	Standard reinforced concrete, cubic yard	36,220	4,067	28,822	3,125	36,182	4,029	28,397	3,086	18,865	2,765	15854	1908	43,432	5,336	38,082	3,997
229	Backfill of below grade voids, cubic yard	207,034	174,881	156,858	131,161	207,034	174,881	156,471	131,161	133,270	117,170	90893	76948	272,437	234,341	208,965	174,881
230	Excavation of clean material, cubic yard	333,101	187,310	249,826	140,483	333,101	187,310	249,826	140,483	223,178	125,498	146565	82416	446,356	250,996	333,101	187,310
235	Building by volume, cubic foot	132,000	132,000	132,000	132,000	108,000	108,000	108,000	108,000	95,625	95,625	102,000	102,000	123,930	123,930.00	88,560	88,560
270	Landscaping with topsoil, acre	71	71	53	53	71	71	53	53	47	47	31	31	95	95	71	71
271	Landscaping w/o topsoil, acre	4	4	3	3	4	4	3	3	3	3	3	3	3	3	3	3
294	Carbon steel plate 1/2 inch thick, square foo	892,716	892,716	588,123	588,123	784,164	784,164	669,644	669,644	658,346	658,346	524316	524316	1,316,693	1,316,692.58	1,156,983	1,156,983

APPENDIX B

UNIT COST FACTOR DEVELOPMENT

APPENDIX B

UNIT COST FACTOR DEVELOPMENT
(Using Minnesota-based labor rates)

Example: Unit Factor for Removal of Heat Exchanger < 3,000 pounds

1. SCOPE

Heat exchangers weighing < 3,000 lb. will be removed in one piece using a crane or small hoist. They will be disconnected from the inlet and outlet piping. The heat exchanger will be sent to the laydown area.

2. CALCULATIONS

Act ID	Activity Description	Activity Duration	Critical Duration
a	Remove insulation	20	(b)
b	Mount pipe cutters	60	60
c	Disconnect inlet and outlet lines	60	60
d	Rig for removal	30	30
e	Unbolt from mounts	30	30
f	Remove, send to packing area	60	60
	Totals (Activity/Critical)	260	240

Duration adjustment(s):	
+ Work break adjustment (8.33 % of productive duration)	20
Total work duration (minutes)	260

***** Total duration = 4.333 hours *****

3. LABOR REQUIRED

Crew	Number	Duration (hr)	Rate ($/hr)	Cost ($)
Laborers	3.0	4.333	60.80	790.34
Craftsmen	2.0	4.333	71.33	618.15
Foreman	1.0	4.333	73.44	318.22
General Foreman	0.25	4.333	74.44	80.64
Fire Watch	0.05	4.333	60.80	13.17
Total labor cost				1,820.52

4. EQUIPMENT & CONSUMABLES COSTS

Equipment Costs	none
Consumables/Materials Costs	
Gas torch consumables 1 @ $19.93/hr x 1 hr {1}	19.93
Subtotal cost of equipment and materials	19.93
Overhead & profit on equipment and materials @ 16.88%	3.36
Total costs, equipment & material	23.29
TOTAL COST Removal of heat exchanger <3000 pound:	**1,843.81**
Total labor cost:	1,820.52
Total equipment/material costs:	23.29
Total craft labor man-hours required per unit:	27.298

5. NOTES AND REFERENCES

- Durations are shown in minutes. The integrated duration accounts for those activities that can be performed in conjunction with other activities, indicated by the alpha designator of the concurrent activity. This results in an overall decrease in the sequenced duration.

- Work difficulty factors were developed in conjunction with the AIF program to standardize decommissioning cost studies and are delineated in the "Guidelines" study (Reference 2, Vol. 1, Chapter 5).

- References for equipment and consumables costs:

    1. R.S. Means (2019) Division 01 54 33, Section 40-6360 Page 736

APPENDIX C

UNIT COST FACTOR LISTING

Table C-1, Minnesota Stations Unit Cost Factors..... C-2
Table C-2, North Dakota Station Unit Cost Factors..... C-5
Table C-3, South Dakota Station Unit Cost Factors..... C-6

TABLE C-1

UNIT COST FACTOR LISTING
Minnesota Stations
(Costs are in 2019 dollars/Scrap Weights in pounds)

Unit Cost Factors					Scrap Weight							
UCF #	Description	Total Cost	Labor Cost	Labor Hours	Cast Iron	Carbon Steel No. 1	Mixed Scrap	SS-1	Galv. Steel.	Insul Cable	No. 2 Copper	Large Motor
2	Piping 0.25 to 2 inches diameter, linear foot	6.97	6.89	0.1	-	4	-	0.5	-	-	-	-
3	Piping >2 to 4 inches diameter, linear foot	9.79	9.68	0.2	-	7	-	0.9	-	-	0.4	-
4	Piping >4 to 8 inches diameter, linear foot	18.72	18.56	0.3	-	22	-	-	-	-	-	-
5	Piping >8 to 14 inches diameter, linear foot	36.53	36.34	0.6	-	57	-	-	-	-	-	-
6	Piping >14 to 20 inches diameter, linear foot	47.51	46.93	0.7	-	-	120	-	-	-	-	-
7	Piping >20 to 36 inches diameter, linear foot	69.90	69.13	1.1	-	-	221	-	-	-	-	-
8	Piping >36 inches diameter, linear foot	83.05	82.27	1.3	-	-	417	-	-	-	-	-
9	Valves <2 inches	133.87	133.10	2.0	-	-	-	-	-	-	-	-
10	Valves >2 to 4 inches	124.03	122.86	1.9	75	-	-	8.8	-	-	4.4	-
11	Valves >4 to 8 inches	187.18	185.61	2.8	510	-	-	-	-	-	-	-
12	Valves >8 to 14 inches	365.29	363.36	5.6	1,066	-	-	-	-	-	-	-
13	Valves >14 to 20 inches	475.15	469.33	7.3	-	-	2,040	-	-	-	-	-
14	Valves >20 to 36 inches	699.04	691.28	10.7	-	-	3,334	-	-	-	-	-
15	Valves >36 inches	830.45	822.69	12.7	-	-	11,535	-	-	-	-	-
24	Pipe hangers for small bore piping, each	43.43	37.61	0.6	-	10	-	-	-	-	-	-
25	Pipe hangers for large bore piping, each	156.79	145.14	2.3	-	50	-	-	-	-	-	-
26	Pump and motor set < 300 pounds	316.32	306.61	4.7	-	-	50	12.5	-	-	-	62.3
27	Pumps, 300-1000 pound pump	866.84	851.31	12.7	293	-	49	48.9	-	-	-	-
28	Pumps, >1000-10,000 pound pump	3,438.05	3,414.76	51.3	2,834	-	472	472.3	-	-	-	-
29	Pumps, >10,000 pound pump	6,651.40	6,581.52	98.9	43,693	-	7,282	7,282.1	-	-	-	-
32	Pump motors, 300-1000 pound pump	362.10	362.10	5.4	-	-	-	-	-	-	-	307.8
33	Pump motors, >1000-10,000 pound pump	1,428.02	1,428.02	21.5	-	-	-	-	-	-	-	3,531.6
34	Pump motors, >10,000 pound pump	3,213.05	3,213.05	48.3	-	-	-	-	-	-	-	42,324.5
37	Turbine-driven pumps > 10,000 pounds	8,904.73	8,827.09	132.7	20,000	-	20,000	-	-	-	-	-
38	Main turbine-generator (pounds per MW(e) input)	208,434.81	206,943.98	3,042.0	-	-	851,500	-	-	-	-	851,500.0
39	Heat exchanger <3000 pound	1,843.81	1,820.52	27.3	-	-	416	623.4	-	-	-	-
40	Heat exchanger >3000 pound	4,644.67	4,551.49	68.3	-	-	5,599	8,397.9	-	-	-	-
41	Feedwater heater/deaerator	13,109.71	12,923.36	194.2	-	-	12,000	18,000.0	-	-	-	-
49	Main condenser (pounds per MW(e) input)	573,864.75	553,556.38	8,243.6	149,400	-	149,400	199,200.0	-	-	-	-
51	Tanks, <300 gallons, filters, and ion exchangers	406.82	395.17	6.0	-	-	401	401.2	-	-	-	-
52	Tanks, 300-3000 gallons	1,281.67	1,258.38	19.1	-	-	2,700	300.0	-	-	-	-
53	Tanks, >3000 gallons, square foot surface	10.64	10.35	0.2	-	21	-	-	-	-	-	-
54	Electrical equipment, <300 pound	171.33	171.33	2.6	-	-	56	-	-	-	2.9	-
55	Electrical equipment, 300-1000 pound	589.54	589.54	8.8	-	-	624	-	-	-	32.8	-

TABLE C-1 (continued)

UNIT COST FACTOR LISTING
Minnesota Stations
(Costs are in 2019 dollars/Scrap Weights in pounds)

		Unit Cost Factors			Scrap Weight							
UCF #	Description	Total Cost	Labor Cost	Labor Hours	Cast Iron	Carbon Steel No. 1	Mixed Scrap	SS-1	Galv. Steel.	Insul Cable	No. 2 Copper	Large Motor
56	Electrical equipment, 1000-10,000 pound	1,179.09	1,179.09	17.6	-	-	2,212	-	-	-	116.4	-
57	Electrical equipment, >10,000 pound	2,779.22	2,779.22	41.0	-	-	19,950	-	-	-	1,050.0	-
59	Electrical transformers < 30 tons	1,930.13	1,930.13	28.4	-	-	11,250	-	-	-	3,750.0	-
60	Electrical transformers > 30 tons	5,558.44	5,558.44	81.9	-	-	375,000	-	-	-	125,000.0	-
61	Standby diesel-generator, <100 kW	1,971.46	1,971.46	29.1	2,340	-	-	-	-	-	-	260.0
62	Standby diesel-generator, 100 kW to 1 MW	4,400.42	4,400.42	64.8	9,450	-	-	-	-	-	-	1,050.0
63	Standby diesel-generator, >1 MW	9,109.78	9,109.78	134.2	47,250	-	-	-	-	-	-	5,250.0
64	Fluorescent light fixture	71.90	71.90	1.1	-	-	-	-	-	-	-	-
65	Incandescent light fixture	36.05	36.05	0.6	-	-	-	-	-	-	-	-
66	Electrical cable tray, linear foot	16.12	15.73	0.2	-	-	-	-	6.6	6.6	-	-
67	Electrical conduit, linear foot	7.04	6.85	0.1	-	-	-	-	3.4	3.4	-	-
69	Mechanical equipment, <300 pound	171.33	171.33	2.6	-	-	127	-	-	-	-	-
70	Mechanical equipment, 300-1000 pound	589.54	589.54	8.8	-	-	641	-	-	-	-	-
71	Mechanical equipment, 1000-10,000 pound	1,179.09	1,179.09	17.6	-	-	4,184	-	-	-	-	-
72	Mechanical equipment, >10,000 pound	2,779.22	2,779.22	41.0	-	-	11,938	-	-	-	-	-
76	HVAC equipment, <300 pound	207.18	207.18	3.1	-	-	184	-	-	-	-	-
77	HVAC equipment, 300-1000 pound	708.37	708.37	10.6	-	-	643	-	-	-	-	-
78	HVAC equipment, 1000-10,000 pound	1,411.80	1,411.80	21.0	-	-	3,813	-	-	-	-	-
79	HVAC equipment, >10,000 pound	2,779.22	2,779.22	41.0	-	-	19,391	-	-	-	-	-
82	HVAC ductwork, pound	0.68	0.68	0.0	-	-	-	-	1.0	-	-	-
201	Standard reinforced concrete, cubic yard	77.12	26.84	0.4	-	183	-	-	-	-	-	-
202	Grade slab concrete, cubic yard	87.72	30.65	0.5	-	183	-	-	-	-	-	-
206	Heavily rein concrete w/#9 rebar, cubic yard	111.41	39.28	0.6	-	730	-	-	-	-	-	-
222	Hollow masonry block wall, cubic yard	26.45	10.27	0.1	-	66	-	-	-	-	-	-
224	Solid masonry block wall, cubic yard	26.45	10.27	0.1	-	66	-	-	-	-	-	-
229	Backfill of below grade voids, cubic yard	31.11	4.21	0.1	-	-	-	-	-	-	-	-
230	Excavation of clean material, cubic yard	3.23	1.49	0.0	-	-	-	-	-	-	-	-
235	Building by volume, cubic foot	0.34	0.21	-	-	-	1	-	-	-	-	-
236	Building metal siding, square foot	1.74	1.28	0.0	-	-	-	-	2.4	-	-	-
242	Standard asphalt roofing, square foot	3.01	3.01	0.1	-	-	-	-	-	-	-	-
243	Galbestos panels, square foot	2.58	2.06	0.0	-	-	-	-	-	-	-	-
245	Placement of cofferdam, linear foot	-	-	-	-	-	-	-	-	-	-	-

TABLE C-1 (continued)

UNIT COST FACTOR LISTING
Minnesota Stations
(Costs are in 2019 dollars/Scrap Weights in pounds)

Unit Cost Factors					Scrap Weight							
UCF #	Description	Total Cost	Labor Cost	Labor Hours	Cast Iron	Carbon Steel No. 1	Mixed Scrap	SS-1	Galv. Steel.	Insul Cable	No. 2 Copper	Large Motor
248	Lead paint removal from concrete surfaces, square foot	10.07	8.11	0.1	-	-	-	-	-	-	-	-
253	Overhead cranes/monorails < 10 ton capacity, each	810.83	810.83	11.8	-	3,700	-	-	-	-	-	-
255	Overhead cranes/monorails >10 - 50 ton capacity, each	1,945.99	1,945.99	28.3	-	-	298,832	-	-	-	3,018.5	-
258	Gantry cranes > 50 ton capacity, each	31,034.60	31,034.60	457.3	-	-	712,800	-	-	-	7,200.0	-
260	Structural steel, pounds	0.24	0.20	-	-	1	-	-	-	-	-	-
262	Steel floor grating, square foot	5.73	5.32	0.1	-	-	6	-	1.1	-	-	-
268	Placement of scaffolding in clean areas, square foot	18.58	6.42	0.1	-	-	-	-	-	-	-	-
270	Landscaping with topsoil, acre	24,287.33	3,567.37	52.6	-	-	-	-	-	-	-	-
271	Landscaping w/o topsoil, acre	1,151.70	380.40	5.3	-	-	-	-	-	-	-	-
272	Chain link fencing, linear foot	4.13	3.47	0.1	-	-	-	-	10.0	-	-	-
273	Railroad track, linear foot	28.23	14.43	0.2	-	91	-	-	-	-	-	-
274	Asphalt pavement, square foot	1.02	0.75	0.0	-	-	-	-	-	-	-	-
291	Carbon steel plate 1/4 inch thick, square foot	4.48	3.80	0.1	-	-	10	-	-	-	-	-
294	Carbon steel plate 1/2 inch thick, square foot	4.73	4.00	0.1	-	-	20	-	-	-	-	-
359	Steam drum removal (fossil)	26,089.30	25,934.00	411.6	-	-	480,000	-	-	-	-	-
360	Water drum removal (fossil)	9,683.73	9,654.62	153.2	-	-	320,000	-	-	-	-	-
361	Upper/lower waterwall headers (fossil)	7,308.10	7,278.99	115.5	-	-	120,000	-	-	-	-	-
362	Top sup boiler waterwall (8'x8' section), inches cut	0.87	0.83	0.0	-	-	11	-	-	-	-	-
369	Boiler convective superheaater platens	2,090.33	1,888.47	29.6	-	-	19,501	-	-	-	-	-
370	Boiler radiant superheater platens	884.30	798.91	12.5	-	-	51,652	-	-	-	-	-
371	Boiler reheat platens	884.30	798.91	12.5	-	-	19,501	-	-	-	-	-
372	Boiler economizer platens	1,125.50	1,016.81	15.9	-	-	11,703	-	-	-	-	-
374	Stationary soot blowers	46.10	46.10	0.7	-	-	500	-	-	-	-	50.0
375	Retractable soot blowers	435.82	435.82	6.8	-	-	11,150	-	-	-	-	100.0
376	Process ductwork (8'x8' section), inches cut	0.43	0.40	0.0	-	-	0	-	-	-	-	-
378	Non-asbestos insulated regenerative air preheaters	13,695.05	11,878.10	188.5	-	-	1,376,000	-	-	-	-	-
380	Non-asbestos insulated recuperative air preheaters	7,571.40	6,435.81	101.6	-	-	1,376,000	-	-	-	-	-
382	Induced, forced, primary draft fans	2,080.55	2,033.96	31.9	-	-	30,000	-	-	-	-	3,531.6
383	Coal car dumpers	18,719.68	15,924.38	249.4	-	-	125,000	-	-	-	-	500.0
384	Conveyors	17.64	16.48	0.3	-	-	820	-	-	-	-	-
385	Transfer Towers	0.31	0.17	-	-	-	5	-	-	-	-	-
386	Stacker-reclaimers	190,631.94	190,631.94	3,008.3	-	-	300,000	-	-	-	-	2,000.0
387	Coal crushers	1,260.40	1,248.75	19.3	-	-	36,000	-	-	-	-	250.0
389	Ball mills	1,816.03	1,816.03	28.1	-	-	360,000	-	-	-	-	7,063.1
390	Coal feeders	457.07	445.42	7.1	-	-	1,194	-	-	-	-	-

TABLE C-2

UNIT COST FACTOR LISTING
North Dakota Stations
(Costs are in 2019 dollars/Scrap Weights in pounds)

		Unit Cost Factors			Scrap Weight				
UCF #	Description	Total Cost	Labor Cost	Labor Hours	Carbon Steel No. 1	Mixed Scrap	No. 2 Copper	Large Motor	Aluminum
56	Electrical equipment, 1000-10,000 pound	1,179.09	1,179.09	17.6	-	2,212	116.4	-	-
57	Electrical equipment, >10,000 pound	2,779.22	2,779.22	41.0	-	19,950	-	75,610	-
67	Electrical conduit, linear foot	7.06	6.85	0.1	-	-	0.3	-	1.2
72	Mechanical equipment, >10,000 pound	2,779.22	2,779.22	41.0	-	11,938	-	-	-
201	Standard reinforced concrete, cubic yard	82.15	26.84	0.4	183	-	-	-	-
229	Backfill of below grade voids, cubic yard	33.80	4.21	0.1	-	-	-	-	-
230	Excavation of clean material, cubic yard	3.41	1.49	0.02	-	-	-	-	-
235	Building by volume, cubic foot	0.35	0.21	0.003	-	1	-	-	-

TABLE C-3

UNIT COST FACTOR LISTING
South Dakota Station
(Costs are in 2019 dollars/Scrap Weights in pounds)

		Unit Cost Factors			Scrap Weight							
UCF #	Description	Total Cost	Labor Cost	Labor Hours	Cast Iron	Carbon Steel No. 1	Mixed Scrap	SS-1	Galv. Steel.	Insul Cable	No. 2 Copper	Large Motor
2	Piping 0.25 to 2 inches diameter, linear foot	6.97	6.89	0.1	-	4	-	0.5	-	-	-	-
3	Piping >2 to 4 inches diameter, linear foot	9.79	9.68	0.2	-	7	-	0.9	-	-	0.4	-
4	Piping >4 to 8 inches diameter, linear foot	18.71	18.56	0.3	-	22	-	-	-	-	-	-
5	Piping >8 to 14 inches diameter, linear foot	36.52	36.34	0.6	-	57	-	-	-	-	-	-
6	Piping >14 to 20 inches diameter, linear foot	47.48	46.93	0.7	-	-	120	-	-	-	-	-
7	Piping >20 to 36 inches diameter, linear foot	69.86	69.13	1.1	-	-	221	-	-	-	-	-
8	Piping >36 inches diameter, linear foot	83.00	82.27	1.3	-	-	417	-	-	-	-	-
9	Valves <2 inches	133.82	133.10	2.0	-	-	-	-	-	-	-	-
10	Valves >2 to 4 inches	123.95	122.86	1.9	75	-	-	8.8	-	-	4.4	-
11	Valves >4 to 8 inches	187.08	185.61	2.8	510	-	-	-	-	-	-	-
12	Valves >8 to 14 inches	365.17	363.36	5.6	1,066	-	-	-	-	-	-	-
13	Valves >14 to 20 inches	474.79	469.33	7.3	-	-	2,040	-	-	-	-	-
14	Valves >20 to 36 inches	698.56	691.28	10.7	-	-	3,334	-	-	-	-	-
15	Valves >36 inches	829.97	822.69	12.7	-	-	11,535	-	-	-	-	-
24	Pipe hangers for small bore piping, each	43.07	37.61	0.6	-	10	-	-	-	-	-	-
25	Pipe hangers for large bore piping, each	156.07	145.14	2.3	-	50	-	-	-	-	-	-
26	Pump and motor set < 300 pounds	315.72	306.61	4.7	-	-	50	12.5	-	-	-	62.3
27	Pumps, 300-1000 pound pump	865.89	851.31	12.7	293	-	49	48.9	-	-	-	-
28	Pumps, >1000-10,000 pound pump	3,436.62	3,414.76	51.3	2,834	-	472	472.3	-	-	-	-
29	Pumps, >10,000 pound pump	6,647.09	6,581.52	98.9	43,693	-	7,282	7,282.1	-	-	-	-
32	Pump motors, 300-1000 pound pump	362.10	362.10	5.4	-	-	-	-	-	-	-	307.8
33	Pump motors, >1000-10,000 pound pump	1,428.02	1,428.02	21.5	-	-	-	-	-	-	-	3,531.6
34	Pump motors, >10,000 pound pump	3,213.05	3,213.05	48.3	-	-	-	-	-	-	-	42,324.5
38	Main turbine-generator (pounds per MW(e) input)	208,342.91	206,943.98	3,042.0	-	-	851,500	-	-	-	-	851,500.0
39	Heat exchanger <3000 pound	1,842.38	1,820.52	27.3	-	-	416	623.4	-	-	-	-
40	Heat exchanger >3000 pound	4,638.92	4,551.49	68.3	-	-	5,599	8,397.9	-	-	-	-
41	Feedwater heater/deaerator	13,098.22	12,923.36	194.2	-	-	12,000	18,000.0	-	-	-	-
49	Main condenser (pounds per MW(e) input)	572,617.94	553,556.38	8,243.6	149,400	-	149,400	199,200.0	-	-	-	-
51	Tanks, <300 gallons, filters, and ion exchangers	406.10	395.17	6.0	-	-	401	401.2	-	-	-	-
52	Tanks, 300-3000 gallons	1,280.24	1,258.38	19.1	-	-	2,700	300.0	-	-	-	-
53	Tanks, >3000 gallons, square foot surface	10.63	10.35	0.2	-	21	-	-	-	-	-	-
54	Electrical equipment, <300 pound	171.33	171.33	2.6	-	-	56	-	-	-	2.9	-
55	Electrical equipment, 300-1000 pound	589.54	589.54	8.8	-	-	624	-	-	-	32.8	-
56	Electrical equipment, 1000-10,000 pound	1,179.09	1,179.09	17.6	-	-	2,212	-	-	-	116.4	-
57	Electrical equipment, >10,000 pound	2,779.22	2,779.22	41.0	-	-	19,950	-	-	-	1,050.0	-
59	Electrical transformers < 30 tons	1,930.13	1,930.13	28.4	-	-	11,250	-	-	-	3,750.0	-
60	Electrical transformers > 30 tons	5,558.44	5,558.44	81.9	-	-	375,000	-	-	-	125,000.0	-

TABLE C-3 (continued)

UNIT COST FACTOR LISTING
South Dakota Station
(Costs are in 2019 dollars/Scrap Weights in pounds)

Unit Cost Factors					Scrap Weight							
UCF #	Description	Total Cost	Labor Cost	Labor Hours	Cast Iron	Carbon Steel No. 1	Mixed Scrap	SS-1	Galv. Steel.	Insul Cable	No. 2 Copper	Large Motor
61	Standby diesel-generator, <100 kW	1,971.46	1,971.46	29.1	2,340	-	-	-	-	-	-	260.0
64	Fluorescent light fixture	71.90	71.90	1.1	-	-	-	-	-	-	-	-
65	Incandescent light fixture	36.05	36.05	0.6	-	-	-	-	-	-	-	-
66	Electrical cable tray, linear foot	16.09	15.73	0.2	-	-	-	-	6.6	6.6	-	-
67	Electrical conduit, linear foot	7.03	6.85	0.1	-	-	-	-	3.4	3.4	-	-
69	Mechanical equipment, <300 pound	171.33	171.33	2.6	-	-	127	-	-	-	-	-
70	Mechanical equipment, 300-1000 pound	589.54	589.54	8.8	-	-	641	-	-	-	-	-
71	Mechanical equipment, 1000-10,000 pound	1,179.09	1,179.09	17.6	-	-	4,184	-	-	-	-	-
72	Mechanical equipment, >10,000 pound	2,779.22	2,779.22	41.0	-	-	11,938	-	-	-	-	-
76	HVAC equipment, <300 pound	207.18	207.18	3.1	-	-	184	-	-	-	-	-
77	HVAC equipment, 300-1000 pound	708.37	708.37	10.6	-	-	643	-	-	-	-	-
78	HVAC equipment, 1000-10,000 pound	1,411.80	1,411.80	21.0	-	-	3,813	-	-	-	-	-
82	HVAC ductwork, pound	0.68	0.68	0.0	-	-	-	-	1.0	-	-	-
201	Standard reinforced concrete, cubic yard	74.02	26.84	0.4	-	183	-	-	-	-	-	-
202	Grade slab concrete, cubic yard	84.20	30.65	0.5	-	183	-	-	-	-	-	-
206	Heavily rein concrete w/#9 rebar, cubic yard	106.96	39.28	0.6	-	730	-	-	-	-	-	-
222	Hollow masonry block wall, cubic yard	25.45	10.27	0.1	-	66	-	-	-	-	-	-
229	Backfill of below grade voids, cubic yard	29.45	4.21	0.1	-	-	-	-	-	-	-	-
235	Building by volume, cubic foot	0.33	0.21	-	-	-	1	-	-	-	-	-
236	Building metal siding, square foot	1.71	1.28	0.0	-	-	-	-	2.4	-	-	-
242	Standard asphalt roofing, square foot	3.01	3.01	0.1	-	-	-	-	-	-	-	-
248	Lead paint removal from concrete surfaces, square foot	9.80	7.96	0.1	-	-	-	-	-	-	-	-
253	Overhead cranes/monorails < 10 ton capacity, each	810.83	810.83	11.8	-	3,700	-	-	-	-	-	-
255	Overhead cranes/monorails >10 - 50 ton capacity, each	1,945.99	1,945.99	28.3	-	-	298,832	-	-	-	3,018.5	-
260	Structural steel, pounds	0.23	0.20	-	-	1	-	-	-	-	-	-
262	Steel floor grating, square foot	5.70	5.32	0.1	-	-	6	-	1.1	-	-	-
270	Landscaping with topsoil, acre	23,009.82	3,567.37	52.6	-	-	-	-	-	-	-	-
271	Landscaping w/o topsoil, acre	1,104.15	380.40	5.3	-	-	-	-	-	-	-	-
272	Chain link fencing, linear foot	4.09	3.47	0.1	-	-	-	-	10.0	-	-	-
274	Asphalt pavement, square foot	1.01	0.75	0.0	-	-	-	-	-	-	-	-
293	Carbon steel plate 3/8 inch thick, square foot	4.56	3.90	0.1	-	-	15	-	-	-	-	-
294	Carbon steel plate 1/2 inch thick, square foot	4.68	4.00	0.1	-	-	20	-	-	-	-	-
359	Steam drum removal (fossil)	26,079.72	25,934.00	411.6	-	-	480,000	-	-	-	-	-
376	Process ductwork (8'x8' section), inches cut	0.43	0.40	0.01	-	-	0.03	-	-	-	-	-

Electric Utility
Steam Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/2021		Retirement date
Allen S. King					
E311	Structures & Improvements	-9.2	16.5	years	Jun-37
E312	Boiler Plant Equipment	-9.2	16.5	years	Jun-37
E314	Turbogenerator Units	-9.2	16.5	years	Jun-37
E315	Accessory Electric Equipment	-9.2	16.5	years	Jun-37
E316	Miscellaneous Power Plant Equipment	-9.2	16.5	years	Jun-37
Red Wing					
E311	Structures & Improvements	-23.5	7.0	years	Dec-27
E312	Boiler Plant Equipment	-23.5	7.0	years	Dec-27
E314	Turbogenerator Units	-23.5	7.0	years	Dec-27
E315	Accessory Electric Equipment	-23.5	7.0	years	Dec-27
E316	Miscellaneous Power Plant Equipment	-23.5	7.0	years	Dec-27
Sherco Unit 1					
E311	Structures & Improvements	-15.1	6.0	years	Dec-26
E312	Boiler Plant Equipment	-15.1	6.0	years	Dec-26
E314	Turbogenerator Units	-15.1	6.0	years	Dec-26
E315	Accessory Electric Equipment	-15.1	6.0	years	Dec-26
E316	Miscellaneous Power Plant Equipment	-15.1	6.0	years	Dec-26
Sherco Unit 2					
E311	Structures & Improvements	-15.1	6.0	years	Dec-26
E312	Boiler Plant Equipment	-15.1	3.0	years	Dec-23
E314	Turbogenerator Units	-15.1	3.0	years	Dec-23
E315	Accessory Electric Equipment	-15.1	3.0	years	Dec-23
E316	Miscellaneous Power Plant Equipment	-15.1	3.0	years	Dec-23
Sherco Unit 3					
E311	Structures & Improvements	-7.9	14.0	years	Dec-34
E312	Boiler Plant Equipment	-7.9	14.0	years	Dec-34
E314	Turbogenerator Units	-7.9	14.0	years	Dec-34
E315	Accessory Electric Equipment	-7.9	14.0	years	Dec-34
E316	Miscellaneous Power Plant Equipment	-7.9	14.0	years	Dec-34
Wilmarth					
E311	Structures & Improvements	-25.8	7.0	years	Dec-27
E312	Boiler Plant Equipment	-25.8	7.0	years	Dec-27
E314	Turbogenerator Units	-25.8	7.0	years	Dec-27
E315	Accessory Electric Equipment	-25.8	7.0	years	Dec-27
E316	Miscellaneous Power Plant Equipment	-25.8	7.0	years	Dec-27

Electric Utility
Nuclear Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/2021		Retirement date
Monticello					
E302	Franchises & Consents	*	9.8	years	Sep-30
E321	Structures & Improvements	*	9.8	years	Sep-30
E322	Reactor Plant Equipment	*	9.8	years	Sep-30
E323	Turbogenerator Units	*	9.8	years	Sep-30
E324	Accessory Electric Equipment	*	9.8	years	Sep-30
E325	Miscellaneous Power Plant Equipment	*	9.8	years	Sep-30
Monticello - Interim Storage Facility					
E321	Structures & Improvements	*	9.8	years	Sep-30
E322	Reactor Plant Equipment	*	9.8	years	Sep-30
Prairie Island Unit 1 & 2					
E302	Franchises & Consents	*	13.3	years	Apr-34
E321	Structures & Improvements	*	13.3	years	Apr-34
E322	Reactor Plant Equipment	*	13.3	years	Apr-34
E323	Turbogenerator Units	*	13.3	years	Apr-34
E324	Accessory Electric Equipment	*	13.3	years	Apr-34
E325	Miscellaneous Power Plant Equipment	*	13.3	years	Apr-34
Prairie Island - Interim Storage Facility					
E321	Structures & Improvements	*	13.3	years	Apr-34
E322	Reactor Plant Equipment	*	13.3	years	Apr-34

* Note: The Nuclear Decommissioning Accrual is set as an amount rather than a net salvage rate. Please see Schedule 10 for further information.

Electric Utility
Hydro Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/2021		Retirement date
Hennepin Island					
E302	Franchises & Consents	0.0	13.2	years	Feb-34
E331	Structures & Improvements	-26.7	13.2	years	Feb-34
E332	Reservoirs, Dams & Waterways	-26.7	13.2	years	Feb-34
E333	Water Wheels, Turbines & Generators	-26.7	13.2	years	Feb-34
E334	Accessory Electric Equipment	-26.7	13.2	years	Feb-34
E335	Miscellaneous Power Plant Equipment	-26.7	13.2	years	Feb-34
St. Croix Falls					
E331	Structures & Improvements	-15.0	7.0	years	Dec-27
E332	Reservoirs, Dams & Waterways	-15.0	7.0	years	Dec-27
Upper Dam					
E332	Reservoirs, Dams & Waterways	-26.7	13.2	years	Feb-34
E335	Miscellaneous Power Plant Equipment	-26.7	13.2	years	Feb-34

Electric Utility
Other Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/2021		Retirement date
Angus C. Anson Unit 2 & 3					
E341	Structures & Improvements	-6.5	24.4	years	May-45
E342	Fuel Holders, Producers & Accessories	-11.2	20.0	years	Dec-40
E343	Prime Movers	-11.2	20.0	years	Dec-40
E344	Generators	-11.2	20.0	years	Dec-40
E345	Accessory Electric Equipment	-11.2	20.0	years	Dec-40
E346	Miscellaneous Power Plant Equipment	-11.2	20.0	years	Dec-40
Angus C. Anson Unit 4					
E341	Structures & Improvements	-6.5	24.4	years	May-45
E342	Fuel Holders, Producers & Accessories	-6.5	24.4	years	May-45
E343	Prime Movers	-6.5	24.4	years	May-45
E344	Generators	-6.5	24.4	years	May-45
E345	Accessory Electric Equipment	-6.5	24.4	years	May-45
E346	Miscellaneous Power Plant Equipment	-6.5	24.4	years	May-45
Black Dog Unit 5					
E341	Structures & Improvements	-10.3	37.3	years	Mar-58
E342	Fuel Holders, Producers & Accessories	-7.2	11.0	years	Dec-31
E343	Prime Movers	-7.2	11.0	years	Dec-31
E344	Generators	-7.2	11.0	years	Dec-31
E345	Accessory Electric Equipment	-7.2	11.0	years	Dec-31
E346	Miscellaneous Power Plant Equipment	-7.2	11.0	years	Dec-31
Black Dog Unit 6					
E341	Structures & Improvements	-10.3	37.3	years	Mar-58
E342	Fuel Holders, Producers & Accessories	-10.3	37.3	years	Mar-58
E343	Prime Movers	-10.3	37.3	years	Mar-58
E344	Generators	-10.3	37.3	years	Mar-58
E345	Accessory Electric Equipment	-10.3	37.3	years	Mar-58
E346	Miscellaneous Power Plant Equipment	-10.3	37.3	years	Mar-58
Blazing Star I Wind					
E340.1	Wind Rights	0.0	25.0	years**	Apr-45
E341	Structures & Improvements	-11.6	25.0	years**	Apr-45
E342	Fuel Holders, Producers & Accessories	-11.6	25.0	years**	Apr-45
E343	Prime Movers	-11.6	25.0	years**	Apr-45
E344	Generators	-11.6	25.0	years**	Apr-45
E345	Accessory Electric Equipment	-11.6	25.0	years**	Apr-45
E346	Miscellaneous Power Plant Equipment	-11.6	25.0	years**	Apr-45
Blazing Star II Wind					
E340.1	Wind Rights	0.0	25.0	years**	**
E341	Structures & Improvements	-10.5	25.0	years**	**
E342	Fuel Holders, Producers & Accessories	-10.5	25.0	years**	**
E343	Prime Movers	-10.5	25.0	years**	**
E344	Generators	-10.5	25.0	years**	**
E345	Accessory Electric Equipment	-10.5	25.0	years**	**
E346	Miscellaneous Power Plant Equipment	-10.5	25.0	years**	**

Electric Utility
Other Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/2021		Retirement date
Blue Lake Units 1 thru 4					
E341	Structures & Improvements	-12.7	24.4	years	May-45
E342	Fuel Holders, Producers & Accessories	-30.6	2.5	years	Jun-23
E343	Prime Movers	-30.6	2.5	years	Jun-23
E344	Generators	-30.6	2.5	years	Jun-23
E345	Accessory Electric Equipment	-30.6	2.5	years	Jun-23
E346	Miscellaneous Power Plant Equipment	-30.6	2.5	years	Jun-23
Blue Lake Units 7 & 8					
E341	Structures & Improvements	-12.7	24.4	years	May-45
E342	Fuel Holders, Producers & Accessories	-12.7	24.4	years	May-45
E343	Prime Movers	-12.7	24.4	years	May-45
E344	Generators	-12.7	24.4	years	May-45
E345	Accessory Electric Equipment	-12.7	24.4	years	May-45
E346	Miscellaneous Power Plant Equipment	-12.7	24.4	years	May-45
Border Winds					
E340.1	Wind Rights	0.0	20.0	years	Dec-40
E341	Structures & Improvements	-9.5	20.0	years	Dec-40
E342	Fuel Holders, Producers & Accessories	-9.5	20.0	years	Dec-40
E343	Prime Movers	-9.5	20.0	years	Dec-40
E344	Generators	-9.5	20.0	years	Dec-40
E345	Accessory Electric Equipment	-9.5	20.0	years	Dec-40
E346	Miscellaneous Power Plant Equipment	-9.5	20.0	years	Dec-40
Courtenay Wind					
E340.1	Wind Rights	0.0	20.9	years	Nov-41
E341	Structures & Improvements	-10.4	20.9	years	Nov-41
E342	Fuel Holders, Producers & Accessories	-10.4	20.9	years	Nov-41
E343	Prime Movers	-10.4	20.9	years	Nov-41
E344	Generators	-10.4	20.9	years	Nov-41
E345	Accessory Electric Equipment	-10.4	20.9	years	Nov-41
E346	Miscellaneous Power Plant Equipment	-10.4	20.9	years	Nov-41
Crowned Ridge Wind					
E340.1	Wind Rights	0.0	25.0	years**	**
E341	Structures & Improvements	-10.5	25.0	years**	**
E342	Fuel Holders, Producers & Accessories	-10.5	25.0	years**	**
E343	Prime Movers	-10.5	25.0	years**	**
E344	Generators	-10.5	25.0	years**	**
E345	Accessory Electric Equipment	-10.5	25.0	years**	**
E346	Miscellaneous Power Plant Equipment	-10.5	25.0	years**	**

Electric Utility
Other Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/2021		Retirement date
Dakota Range Wind					
E340.1	Wind Rights	0.0	25.0	years**	**
E341	Structures & Improvements	-10.5	25.0	years**	**
E342	Fuel Holders, Producers & Accessories	-10.5	25.0	years**	**
E343	Prime Movers	-10.5	25.0	years**	**
E344	Generators	-10.5	25.0	years**	**
E345	Accessory Electric Equipment	-10.5	25.0	years**	**
E346	Miscellaneous Power Plant Equipment	-10.5	25.0	years**	**
Foxtail Wind					
E340.1	Wind Rights	0.0	24.0	years	Dec-44
E341	Structures & Improvements	-9.1	24.0	years	Dec-44
E342	Fuel Holders, Producers & Accessories	-9.1	24.0	years	Dec-44
E343	Prime Movers	-9.1	24.0	years	Dec-44
E344	Generators	-9.1	24.0	years	Dec-44
E345	Accessory Electric Equipment	-9.1	24.0	years	Dec-44
E346	Miscellaneous Power Plant Equipment	-9.1	24.0	years	Dec-44
Freeborn Wind					
E340.1	Wind Rights	0.0	25.0	years**	**
E341	Structures & Improvements	-10.5	25.0	years**	**
E342	Fuel Holders, Producers & Accessories	-10.5	25.0	years**	**
E343	Prime Movers	-10.5	25.0	years**	**
E344	Generators	-10.5	25.0	years**	**
E345	Accessory Electric Equipment	-10.5	25.0	years**	**
E346	Miscellaneous Power Plant Equipment	-10.5	25.0	years**	**
Grand Meadow Wind					
E340.1	Wind Rights	0.0	12.9	years	Nov-33
E341	Structures & Improvements	-12.5	12.9	years	Nov-33
E342	Fuel Holders, Producers & Accessories	-12.5	12.9	years	Nov-33
E343	Prime Movers	-12.5	12.9	years	Nov-33
E344	Generators	-12.5	12.9	years	Nov-33
E345	Accessory Electric Equipment	-12.5	12.9	years	Nov-33
E346	Miscellaneous Power Plant Equipment	-12.5	12.9	years	Nov-33
High Bridge					
E341	Structures & Improvements	-4.3	27.4	years	May-48
E342	Fuel Holders, Producers & Accessories	-4.3	27.4	years	May-48
E343	Prime Movers	-4.3	27.4	years	May-48
E344	Generators	-4.3	27.4	years	May-48
E345	Accessory Electric Equipment	-4.3	27.4	years	May-48
E346	Miscellaneous Power Plant Equipment	-4.3	27.4	years	May-48

Electric Utility
Other Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/2021		Retirement date
Inver Hills					
E341	Structures & Improvements	-19.4	6.0	years	Dec-26
E342	Fuel Holders, Producers & Accessories	-19.4	6.0	years	Dec-26
E343	Prime Movers	-19.4	6.0	years	Dec-26
E344	Generators	-19.4	6.0	years	Dec-26
E345	Accessory Electric Equipment	-19.4	6.0	years	Dec-26
E346	Miscellaneous Power Plant Equipment	-19.4	6.0	years	Dec-26
Lake Benton II Wind					
E340.1	Wind Rights	0.0	23.9	years	Nov-44
E341	Structures & Improvements	-10.8	23.9	years	Nov-44
E342	Fuel Holders, Producers & Accessories	-10.8	23.9	years	Nov-44
E343	Prime Movers	-10.8	23.9	years	Nov-44
E344	Generators	-10.8	23.9	years	Nov-44
E345	Accessory Electric Equipment	-10.8	23.9	years	Nov-44
E346	Miscellaneous Power Plant Equipment	-10.8	23.9	years	Nov-44
Nobles Wind					
E340.1	Wind Rights	0.0	14.9	years	Nov-35
E341	Structures & Improvements	-8.5	14.9	years	Nov-35
E342	Fuel Holders, Producers & Accessories	-8.5	14.9	years	Nov-35
E343	Prime Movers	-8.5	14.9	years	Nov-35
E344	Generators	-8.5	14.9	years	Nov-35
E345	Accessory Electric Equipment	-8.5	14.9	years	Nov-35
E346	Miscellaneous Power Plant Equipment	-8.5	14.9	years	Nov-35
Pleasant Valley Wind					
E340.1	Wind Rights	0.0	20.0	years	Dec-40
E341	Structures & Improvements	-11.7	20.0	years	Dec-40
E342	Fuel Holders, Producers & Accessories	-11.7	20.0	years	Dec-40
E343	Prime Movers	-11.7	20.0	years	Dec-40
E344	Generators	-11.7	20.0	years	Dec-40
E345	Accessory Electric Equipment	-11.7	20.0	years	Dec-40
E346	Miscellaneous Power Plant Equipment	-11.7	20.0	years	Dec-40
Riverside					
E341	Structures & Improvements	-13.2	28.2	years	Feb-49
E342	Fuel Holders, Producers & Accessories	-13.2	28.2	years	Feb-49
E343	Prime Movers	-13.2	28.2	years	Feb-49
E344	Generators	-13.2	28.2	years	Feb-49
E345	Accessory Electric Equipment	-13.2	28.2	years	Feb-49
E346	Miscellaneous Power Plant Equipment	-13.2	28.2	years	Feb-49
Wind-to-Battery System					
E348.1	Energy Storage Equipment	-135.6	0.0	years	Jan-21

**Note: Remaining Lives shown for Blazing Star I and II, Crowned Ridge, Freeborn, and Dakota Range are as of the facilities' in-service dates, expected in 2020 and 2021.

Electric Utility
Other Production (on acquisition dockets as approved by the Commission)

Account	Description	Proposed Net Salvage (%)	Proposed Remaining Life as of Estimated Acquisition Date		Retirement date
Community Wind North					
E340.1	Wind Rights	0.0	25.0	years***	***
E341	Structures & Improvements	-10.5	25.0	years***	***
E342	Fuel Holders, Producers & Accessories	-10.5	25.0	years***	***
E343	Prime Movers	-10.5	25.0	years***	***
E344	Generators	-10.5	25.0	years***	***
E345	Accessory Electric Equipment	-10.5	25.0	years***	***
E346	Miscellaneous Power Plant Equipment	-10.5	25.0	years***	***
Jeffers Wind					
E340.1	Wind Rights	0.0	25.0	years***	***
E341	Structures & Improvements	-10.5	25.0	years***	***
E342	Fuel Holders, Producers & Accessories	-10.5	25.0	years***	***
E343	Prime Movers	-10.5	25.0	years***	***
E344	Generators	-10.5	25.0	years***	***
E345	Accessory Electric Equipment	-10.5	25.0	years***	***
E346	Miscellaneous Power Plant Equipment	-10.5	25.0	years***	***
Mower Wind					
E340.1	Wind Rights	0.0	25.0	years***	***
E341	Structures & Improvements	-10.5	25.0	years***	***
E342	Fuel Holders, Producers & Accessories	-10.5	25.0	years***	***
E343	Prime Movers	-10.5	25.0	years***	***
E344	Generators	-10.5	25.0	years***	***
E345	Accessory Electric Equipment	-10.5	25.0	years***	***
E346	Miscellaneous Power Plant Equipment	-10.5	25.0	years***	***

***Estimated acquisition dates are October 2020 for Community Wind North and Jeffers Wind, and December 2020 for Mower Wind.

Electric Steam Production

	FERC Account	Plant Balance 1/1/2020	Present Net Salv %	Present Estimated Net Salvage in Reserve at End of Life	Proposed Net Salv %	Proposed Estimated Net Salvage in Reserve at End of Life	Proposed Less Present
		(1)	(2)	(3)	(4)	(5)	(6)
Allen S. King							
	E311	$ 39,623,999	-5.5	$ 2,179,320	-9.2	$ 3,654,407	$ 1,475,087
	E312	$ 524,338,681	-5.5	$ 28,838,627	-9.2	$ 48,358,238	$ 19,519,611
	E314	$ 94,114,439	-5.5	$ 5,176,294	-9.2	$ 8,679,902	$ 3,503,608
	E315	$ 46,992,609	-5.5	$ 2,584,593	-9.2	$ 4,333,992	$ 1,749,399
	E316	$ 7,894,024	-5.5	$ 434,171	-9.2	$ 728,043	$ 293,872
		$ 712,963,751		$ 39,213,006		$ 65,754,582	$ 26,541,576
			From 2020 Dismantling Study for King		-9.2%	$ 65,754,582	
Red Wing							
	E311	$ 12,459,336	-23.3	$ 2,903,025	-23.5	$ 2,926,804	$ 23,778
	E312	$ 47,058,942	-23.3	$ 10,964,734	-23.5	$ 11,054,545	$ 89,811
	E314	$ 3,298,153	-23.3	$ 768,470	-23.5	$ 774,764	$ 6,294
	E315	$ 1,905,550	-23.3	$ 443,993	-23.5	$ 447,630	$ 3,637
	E316	$ 1,470,455	-23.3	$ 342,616	-23.5	$ 345,422	$ 2,806
		$ 66,192,436		$ 15,422,838		$ 15,549,165	$ 126,327
			From 2020 Dismantling Study for Red Wing		-23.5%	$ 15,549,165	
Sherco Units 1 & 2							
	E311	$ 95,870,631	-5.1	$ 4,889,402	-15.1	$ 14,486,134	$ 9,596,732
	E312	$ 432,257,219	-5.1	$ 22,045,118	-15.1	$ 65,314,435	$ 43,269,317
	E314	$ 126,723,103	-5.1	$ 6,462,878	-15.1	$ 19,147,969	$ 12,685,091
	E315	$ 53,734,094	-5.1	$ 2,740,439	-15.1	$ 8,119,267	$ 5,378,829
	E316	$ 12,237,819	-5.1	$ 624,129	-15.1	$ 1,849,145	$ 1,225,016
		$ 720,822,866		$ 36,761,966		$ 108,916,950	$ 72,154,984
			From 2020 Dismantling Study for Sherco 1 & 2		-15.1%	$ 108,916,950	
Sherco Unit 3 (*)							
	E311	$ 132,758,983	-4.3	$ 5,708,636	-7.9	$ 10,438,271	$ 4,729,634
	E312	$ 419,348,026	-4.3	$ 18,031,965	-7.9	$ 32,971,540	$ 14,939,575
	E314	$ 88,618,830	-4.3	$ 3,810,610	-7.9	$ 6,967,719	$ 3,157,110
	E315	$ 83,566,721	-4.3	$ 3,593,369	-7.9	$ 6,570,494	$ 2,977,125
	E316	$ 31,675,940	-4.3	$ 1,362,065	-7.9	$ 2,490,544	$ 1,128,478
		$ 755,968,499		$ 32,506,645		$ 59,438,567	$ 26,931,921
			From 2020 Dismantling Study for Sherco 3		-7.9%	$ 59,438,567	
Wilmarth							
	E311	$ 11,196,195	-23.0	$ 2,575,125	-25.8	$ 2,888,315	$ 313,190
	E312	$ 41,907,289	-23.0	$ 9,638,677	-25.8	$ 10,810,944	$ 1,172,267
	E314	$ 6,214,894	-23.0	$ 1,429,426	-25.8	$ 1,603,274	$ 173,848
	E315	$ 1,541,817	-23.0	$ 354,618	-25.8	$ 397,747	$ 43,129
	E316	$ 787,526	-23.0	$ 181,131	-25.8	$ 203,160	$ 22,029
		$ 61,647,720		$ 14,178,976		$ 15,903,439	$ 1,724,464
			From 2020 Dismantling Study for Wilmarth		-25.8%	$ 15,903,439	
Total Steam Production		$ 2,317,595,273		$ 138,083,431		$ 265,562,703	$ 127,479,272

* Amounts reported in this section are for the entire unit, not just Xcel Energy's share.

Electric Hydro Production

	FERC Account	Plant Balance 1/1/2020	Present Net Salv %	Present Estimated Net Salvage in Reserve at End of Life	Proposed Net Salv %	Proposed Estimated Net Salvage in Reserve at End of Life	Proposed Less Present
		(1)	(2)	(3)	(4)	(5)	(6)
Hennepin Island							
	E302	$ 2,857,039	0.0	$ -	0.0	$ -	$ -
	E331	$ 1,407,680	-30.0	$ 422,304	-26.7	$ 375,837	$ (46,467)
	E332	$ 4,398,484	-30.0	$ 1,319,545	-26.7	$ 1,174,354	$ (145,191)
	E333	$ 10,177,067	-30.0	$ 3,053,120	-26.7	$ 2,717,182	$ (335,938)
	E334	$ 3,256,972	-30.0	$ 977,092	-26.7	$ 869,581	$ (107,510)
	E335	$ 37,779	-30.0	$ 11,334	-26.7	$ 10,087	$ (1,247)
		$ 22,135,020		$ 5,783,394		$ 5,147,041	$ (636,353)
		From 2020 Dismantling Study for Hennepin Island			-26.7% Note 1	$ 5,147,041 Note 2	
St. Croix Falls							
	E331	$ 37,924	-7.5	$ 2,844	-15.0	$ 5,689	$ 2,844
	E332	$ 2,176,614	-7.5	$ 163,246	-15.0	$ 326,492	$ 163,246
		$ 2,214,538		$ 166,090		$ 332,181	$ 166,090
				St. Croix Falls Note 3	-15.0%	$ 332,181	
Upper Dam							
	E332	$ 4,491,476	-30.0	$ 1,347,443	-26.7	$ 1,199,182	$ (148,261)
	E335	$ 23,046	-30.0	$ 6,914	-26.7	$ 6,153	$ (761)
		$ 4,514,522		$ 1,354,357		$ 1,205,335	$ (149,021)
		From 2020 Dismantling Study for Upper Dam			-26.7%	$ 1,205,335 Note 2	
Total Hydro Production		$ 28,864,079		$ 7,303,841		$ 6,684,557	$ (619,284)

Note 1: To calculate the proposed net salvage percent, FERC 302 Licenses was excluded from the plant balance as removal costs do not apply to this account.
Note 2: The dismantling costs for the Upper Dam are not separately stated in the TLG Dismantling Report. Therefore, the $6.4M TLG estimate is allocated based on plant balance to each portion in order to calculate the net salvage percent.

Note 3: St. Croix Falls is mainly located in Wisconsin but a portion of the facility is in Minnesota. The balances above represent the assets included on NSP-Minnesota's records. This facility was not included in the TLG Dismantling Study. Therefore, we are using the net salvage rate for FERC 332 approved by the Public Service Commission of Wisconsin.

Electric Other Production

	FERC Account	Plant Balance 1/1/2020	Present Net Salv %	Present Estimated Net Salvage in Reserve at End of Life	Proposed Net Salv %	Proposed Estimated Net Salvage in Reserve at End of Life	Proposed Less Present
		(1)	(2)	(3)	(4)	(5)	(6)
Angus C. Anson Units 2 & 3							
	E341	$ -	-4.5	$ -	-11.2	$ -	$ -
	E342	$ 1,105,599	-4.4	$ 48,646	-11.2	$ 123,498	$ 74,852
	E344	$ 79,691,780	-4.4	$ 3,506,438	-11.2	$ 8,901,759	$ 5,395,321
	E345	$ 3,571,653	-4.4	$ 157,153	-11.2	$ 398,962	$ 241,809
	E346	$ 2,629,376	-4.4	$ 115,693	-11.2	$ 293,708	$ 178,015
		$ 86,998,409		$ 3,827,930		$ 9,717,926	$ 5,889,996
	From 2020 Dismantling Study for Angus Anson Units 2 & 3				-11.2%	$ 9,717,926	
Angus C. Anson Unit 4							
	E341	$ 7,721,804	-4.5	$ 347,481	-6.5	$ 502,271	$ 154,790
	E342	$ 13,506	-4.5	$ 608	-6.5	$ 879	$ 271
	E344	$ 33,545,732	-4.5	$ 1,509,558	-6.5	$ 2,182,011	$ 672,453
	E345	$ 4,955,471	-4.5	$ 222,996	-6.5	$ 322,333	$ 99,337
	E346	$ 20,727	-4.5	$ 933	-6.5	$ 1,348	$ 415
		$ 46,257,240		$ 2,081,576		$ 3,008,842	$ 927,266
	From 2020 Dismantling Study for Angus Anson 4				-6.5%	$ 3,008,842	
Black Dog Unit 5							
	E342	$ 12,546,877	-2.5	$ 313,672	-7.2	$ 901,458	$ 587,786
	E343	$ 23,430,244	-2.5	$ 585,756	-7.2	$ 1,683,397	$ 1,097,641
	E344	$ 127,512,984	-2.5	$ 3,187,825	-7.2	$ 9,161,451	$ 5,973,626
	E345	$ 27,865,573	-2.5	$ 696,639	-7.2	$ 2,002,063	$ 1,305,424
	E346	$ 5,536,330	-2.5	$ 138,408	-7.2	$ 397,770	$ 259,362
		$ 196,892,009		$ 4,922,300		$ 14,146,139	$ 9,223,839
	From 2020 Dismantling Study for Black Dog Unit 5				-7.2%	$ 14,146,139 Note 1	
Black Dog Unit 6							
	E341	$ 42,792,538	-2.5	$ 1,069,813	-10.3	$ 4,417,922	$ 3,348,109
	E341	$ 13,806,954	-5.0	$ 690,348	-10.3	$ 1,425,437	$ 735,089
	E342	$ 9,512,175	-5.0	$ 475,609	-10.3	$ 982,042	$ 506,433
	E344	$ 62,269,695	-5.0	$ 3,113,485	-10.3	$ 6,428,753	$ 3,315,269
	E345	$ 10,978,424	-5.0	$ 548,921	-10.3	$ 1,133,418	$ 584,497
	E346	$ 5,662,089	-5.0	$ 283,104	-10.3	$ 584,557	$ 301,452
		$ 145,021,874		$ 6,181,280		$ 14,972,128	$ 8,790,848
	From 2020 Dismantling Study for Black Dog Unit 6				-10.3%	$ 14,972,128 Note 1	
Blazing Star I							
	E340	$ -	0.0	$ -	0.0	$ -	$ -
	E341	$ 22,224,648	-8.5	$ 1,889,095	-11.6	$ 2,568,828	$ 679,733
	E342	$ -	-8.5	$ -	-11.6	$ -	$ -
	E344	$ 268,420,378	-8.5	$ 22,815,732	-11.6	$ 31,025,271	$ 8,209,539
	E345	$ 10,136,822	-8.5	$ 861,630	-11.6	$ 1,171,661	$ 310,031
	E346	$ -	-8.5	$ -	-11.6	$ -	$ -
		$ 300,781,847		$ 25,566,457		$ 34,765,760	$ 9,199,303
	From 2020 Dismantling Study for Blazing Star I				-11.6% Notes 2 & 3	$ 34,765,760	
Blue Lake Units 1 thru 4							
	E341	$ -	-5.2	$ -	-30.6	$ -	$ -
	E342	$ 1,343,354	-11.9	$ 159,859	-30.6	$ 410,974	$ 251,115
	E344	$ 21,207,661	-11.9	$ 2,523,712	-30.6	$ 6,488,094	$ 3,964,383
	E345	$ 1,508,868	-11.9	$ 179,555	-30.6	$ 461,610	$ 282,055
	E346	$ 498,898	-11.9	$ 59,369	-30.6	$ 152,629	$ 93,260
		$ 24,558,781		$ 2,922,495		$ 7,513,308	$ 4,590,813
	From 2020 Dismantling Study for Blue Lake Units 1 thru 4				-30.6%	$ 7,513,308	

Electric Other Production

			Present		Proposed		
	FERC Account	Plant Balance 1/1/2020	Net Salv %	Estimated Net Salvage in Reserve at End of Life	Net Salv %	Estimated Net Salvage in Reserve at End of Life	Proposed Less Present
		(1)	(2)	(3)	(4)	(5)	(6)
Blue Lake Units 7 & 8							
	E341	$ 1,703,454	-5.2	$ 88,580	-12.7	$ 216,500	$ 127,920
	E342	$ 47,986	-5.2	$ 2,495	-12.7	$ 6,099	$ 3,603
	E344	$ 62,361,317	-5.2	$ 3,242,788	-12.7	$ 7,925,783	$ 4,682,995
	E345	$ 7,907,322	-5.2	$ 411,181	-12.7	$ 1,004,978	$ 593,797
	E346	$ 32,958	-5.2	$ 1,714	-12.7	$ 4,189	$ 2,475
		$ 72,053,037		$ 3,746,758		$ 9,157,548	$ 5,410,790
		From 2020 Dismantling Study for Blue Lake 7 & 8			-12.7%	$ 9,157,548	
Border Winds							
	E340	$ -	0.0	$ -	0.0	$ -	$ -
	E341	$ 22,226,432	-6.6	$ 1,466,944	-9.5	$ 2,103,424	$ 636,479
	E342	$ -	-6.6	$ -	-9.5	$ -	$ -
	E344	$ 207,402,451	-6.6	$ 13,688,562	-9.5	$ 19,627,769	$ 5,939,208
	E345	$ 34,794,649	-6.6	$ 2,296,447	-9.5	$ 3,292,832	$ 996,385
	E346	$ 228,153	-6.6	$ 15,058	-9.5	$ 21,592	$ 6,533
		$ 264,651,685		$ 17,467,011		$ 25,045,616	$ 7,578,605
		From 2020 Dismantling Study for Border Winds			-9.5%	$ 25,045,616	
					Notes 2 & 4		
Courtenay Wind							
	E340	$ 2,085,661	0.0	$ -	0.0	$ -	$ -
	E341	$ 7,621,664	-6.9	$ 525,895	-10.4	$ 793,101	$ 267,206
	E342	$ -	-6.9	$ -	-10.4	$ -	$ -
	E344	$ 262,278,975	-6.9	$ 18,097,249	-10.4	$ 27,292,436	$ 9,195,186
	E345	$ 9,591,089	-6.9	$ 661,785	-10.4	$ 998,037	$ 336,252
	E346	$ 36,482	-6.9	$ 2,517	-10.4	$ 3,796	$ 1,279
		$ 281,613,870		$ 19,287,446		$ 29,087,370	$ 9,799,924
		From 2020 Dismantling Study for Courtenay			-10.4%	$ 29,087,370	
					Notes 2 & 4		
Foxtail Wind							
	E341	$ 33,969,734	-6.4	$ 2,174,063	-9.1	$ 3,080,110	$ 906,047
	E344	$ 211,841,413	-6.4	$ 13,557,850	-9.1	$ 19,208,123	$ 5,650,272
		$ 245,811,147		$ 15,731,913		$ 22,288,232	$ 6,556,319
		From 2020 Dismantling Study for Foxtail			-9.1%	$ 22,288,232	
					Note 4		
Grand Meadow Wind							
	E340	$ 10,672,452	0.0	$ -	0.0	$ -	$ -
	E341	$ 5,589,546	-8.7	$ 486,291	-12.5	$ 698,173	$ 211,882
	E342	$ -	-8.7	$ -	-12.5	$ -	$ -
	E344	$ 182,577,054	-8.7	$ 15,884,204	-12.5	$ 22,805,137	$ 6,920,933
	E345	$ 12,064,305	-8.7	$ 1,049,595	-12.5	$ 1,506,915	$ 457,321
	E346	$ 207,761	-8.7	$ 18,075	-12.5	$ 25,951	$ 7,876
		$ 211,111,119		$ 17,438,164		$ 25,036,176	$ 7,598,012
		From 2020 Dismantling Study for Grand Meadow			-12.5%	$ 25,036,176	
					Note 2		
High Bridge							
	E341	$ 71,113,002	-3.1	$ 2,204,503	-4.3	$ 3,039,386	$ 834,883
	E342	$ 232,410	-3.1	$ 7,205	-4.3	$ 9,933	$ 2,729
	E343	$ 66,361,540	-3.1	$ 2,057,208	-4.3	$ 2,836,308	$ 779,100
	E344	$ 200,486,360	-3.1	$ 6,215,077	-4.3	$ 8,568,833	$ 2,353,756
	E345	$ 52,024,030	-3.1	$ 1,612,745	-4.3	$ 2,223,519	$ 610,774
	E346	$ 7,144,763	-3.1	$ 221,488	-4.3	$ 305,369	$ 83,881
		$ 397,362,104		$ 12,318,225		$ 16,983,348	$ 4,665,123
		From 2020 Dismantling Study for High Bridge			-4.3%	$ 16,983,348	

Electric Other Production

			Present		Proposed		
	FERC Account	Plant Balance 1/1/2020	Net Salv %	Estimated Net Salvage in Reserve at End of Life	Net Salv %	Estimated Net Salvage in Reserve at End of Life	Proposed Less Present
		(1)	(2)	(3)	(4)	(5)	(6)
Inver Hills							
	E341	$ 1,618,514	-11.0	$ 178,037	-19.4	$ 314,518	$ 136,481
	E342	$ 614,949	-11.0	$ 67,644	-19.4	$ 119,500	$ 51,855
	E344	$ 53,436,050	-11.0	$ 5,877,965	-19.4	$ 10,383,953	$ 4,505,988
	E345	$ 4,314,473	-11.0	$ 474,592	-19.4	$ 838,409	$ 363,817
	E346	$ 618,880	-11.0	$ 68,077	-19.4	$ 120,264	$ 52,187
		$ 60,602,865		$ 6,666,315		$ 11,776,644	$ 5,110,329
		From 2020 Dismantling Study for Inver Hills			-19.4%	$ 11,776,644	
Lake Benton II Wind							
	E340	$ 146,853	0.0	$ -	0.0	$ -	$ -
	E341	$ 32,138,690	-8.5	$ 2,731,789	-10.8	$ 3,460,198	$ 728,410
	E344	$ 113,291,566	-8.5	$ 9,629,783	-10.8	$ 12,197,488	$ 2,567,705
	E345	$ 10,883,094	-8.5	$ 925,063	-10.8	$ 1,171,724	$ 246,661
		$ 156,460,203		$ 13,286,635		$ 16,829,410	$ 3,542,775
		From 2020 Dismantling Study for Lake Benton II			-10.8% Note 2	$ 16,829,410	
Nobles Wind							
	E340	$ 3,884,834	0.0	$ -	0.0	$ -	$ -
	E341	$ 13,536,911	-8.7	$ 1,177,711	-8.5	$ 1,145,197	$ (32,514)
	E344	$ 471,140,614	-8.7	$ 40,989,233	-8.5	$ 39,857,601	$ (1,131,633)
	E345	$ 29,938,414	-8.7	$ 2,604,642	-8.5	$ 2,532,733	$ (71,909)
	E346	$ 627,971	-8.7	$ 54,633	-8.5	$ 53,125	$ (1,508)
		$ 519,128,745		$ 44,826,220		$ 43,588,656	$ (1,237,564)
		From 2020 Dismantling Study for Nobles			-8.5% Note 2	$ 43,588,656	
Pleasant Valley Wind							
	E341	$ 25,806,960	-8.5	$ 2,193,592	-11.7	$ 3,008,920	$ 815,329
	E344	$ 263,644,922	-8.5	$ 22,409,818	-11.7	$ 30,739,246	$ 8,329,428
	E345	$ 42,507,679	-8.5	$ 3,613,153	-11.7	$ 4,956,113	$ 1,342,960
	E346	$ 292,092	-8.5	$ 24,828	-11.7	$ 34,056	$ 9,228
		$ 332,251,652		$ 28,241,390		$ 38,738,336	$ 10,496,945
		From 2020 Dismantling Study for Pleasant Valley			-11.7%	$ 38,738,336	
Riverside							
	E341	$ 52,441,362	-5.0	$ 2,622,068	-13.2	$ 6,923,149	$ 4,301,081
	E342	$ 1,033,460	-5.0	$ 51,673	-13.2	$ 136,434	$ 84,761
	E343	$ 50,662,922	-5.0	$ 2,533,146	-13.2	$ 6,688,365	$ 4,155,219
	E344	$ 154,911,011	-5.0	$ 7,745,551	-13.2	$ 20,450,881	$ 12,705,330
	E345	$ 40,361,888	-5.0	$ 2,018,094	-13.2	$ 5,328,454	$ 3,310,359
	E346	$ 9,075,926	-5.0	$ 453,796	-13.2	$ 1,198,176	$ 744,380
		$ 308,486,568		$ 15,424,328		$ 40,725,459	$ 25,301,130
		From 2020 Dismantling Study for Riverside			-13.2%	$ 40,725,459	
Total Other Production		$ 3,650,043,156		$ 239,936,445		$ 363,380,897	$ 123,444,452

Note 1: As TLG's estimate was for the entire Black Dog site including the former steam units, the Company performed analysis and calculations to determine the portions attributable to the steam demolition versus the future removal for the other production units and common/shared facilities.

Note 2: To calculate the proposed net salvage percent, FERC 340 Wind Rights was excluded from the plant balance as removal costs do not apply to this account.

Note 3: Blazing Star I's plant balance is as of the in-service date in April 2020.

Note 4: Border, Courtenay, and Foxtail wind farms are located in North Dakota which only requires removal to a depth of 48". Thus, the 48" removal scenario was used to calculate the net salvage rate.

NORTHERN STATES POWER COMPANY

A MINNESOTA CORPORATION

TRANSMISSION, DISTRIBUTION AND GENERAL

ELECTRIC, GAS AND COMMON

DEPRECIATION RATE STUDY

July 2017

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NORTHERN STATES POWER COMPANY
A MINNESOTA CORPORATION
TRANSMISSION, DISTRIBUTION AND GENERAL
ELECTRIC, GAS AND COMMON
DEPRECIATION RATE STUDY
EXECUTIVE SUMMARY

Northern States Power Company, a Minnesota corporation ("NSP" or "Company"), engaged Alliance Consulting Group to conduct a depreciation study of the Company's Electric, Gas, and Common transmission, distribution, and general utility plant depreciable assets as of January 1, 2017. This analysis recommends a number of changes in the lives of various types of assets, by account number under the FERC Uniform System of Accounts. The changes in lives discussed in this Executive Summary are discussed in more detail in the study.

For Electric Transmission, Distribution and General Plant depreciable accounts, the lives for many of the accounts increased. There are 18 accounts, nine that have increasing lives, three that have decreasing lives, and the lives of the other six accounts were unchanged. The account with the greatest change in life is account 354 Transmission Towers and Fixtures which moved 5 years longer in life. There is also a trend toward higher negative net salvage with 12 accounts increasing (i.e. more negative) their negative net salvage and the remaining six accounts remaining unchanged. The account with the largest increase in negative net salvage is Account 364 Distribution Poles, where the net salvage moved from negative 100 percent to a negative 120 percent, which equates to a change of 20 percent.

For Electric Amortized Plant, there are 20 accounts including one intangible account, 15 general plant accounts, and four distribution accounts. Most amortization periods are remaining the same, with amortization lives increasing for Account 391 Network Equipment, Account 397 General Communication Equipment, and Account 397 General Two Way and decreasing lives for Accounts 392

Transportation Equipment for Light Trucks, Trailers, and Heavy Trucks. Net salvage increased (became more negative) for three accounts: Account 368 Distribution Line Capacitors, Account 370.1 Distribution Meters-Old and Account 370 Distribution Meters. Net salvage became positive in Accounts 392 (all subaccounts) and 396. The largest change was in Account 392 General Trailers changing from zero percent to positive 20 percent for net salvage.

For Gas Transmission, Distribution and General Plant depreciable accounts, there are 11 accounts including six that have increasing lives and five accounts that were unchanged. The accounts with the greatest change in life were Account 366 Transmission Structures and Improvements and Account 376 Distribution Mains-Metallic which moved 13 and 12 years longer in life respectively. There are changes in net salvage with four accounts increasing (i.e. more negative) their negative net salvage, two accounts decreasing (i.e. less negative) their negative net salvage, and the remaining five accounts remaining unchanged. The accounts with the greatest change in net salvage were Account 375 Distribution Structures and Improvements, Account 376 Distribution Mains-Metallic, and Account 376 Distribution Mains-Plastic that all increased by five percent.

For Gas Amortized Plant, there are 19 accounts including two intangible accounts, 14 general plant accounts, and three distribution accounts. Most amortization periods remain the same, and amortization periods increase for Account 391 General Network Equipment, Account 397 General Communication Equipment, and Account 397 General Two Way and decreasing lives for Accounts 392 Transportation Equipment for Light Trucks, Trailers, and Heavy Trucks. Net salvage increased (more negative) for two accounts: Account 381 Distribution Meters and Account 383 Distribution House Regulators. Net salvage became positive in Accounts 392 (all subaccounts) and 396. The largest change was in Account 392 General Trailers changing from zero percent to positive 20 percent for net salvage.

For Common Plant, there are 20 accounts including two depreciable accounts and 18 amortized accounts of which there are five intangible accounts and 13

general plant accounts. The life for Account 390 Structures and Improvements became shorter, and many amortization periods remain the same. Amortization periods increased for Account 391 General Network Equipment, Account 397 General Communication Equipment, and Account 397 General Two Way and decreased for Accounts 392 Transportation Equipment for Light Trucks, Trailers, and Heavy Trucks. Net salvage became positive in Accounts 392 (all subaccounts) and Account 396 Power Operated Equipment. The largest change was in Account 392 Transportation Equipment for Trailers changing from zero percent to positive 20 percent for net salvage. Amortization rates were updated to reflect any imbalance between book and theoretical reserves.

For life and net salvage analysis, the study used total Company results. After selecting life and net salvage parameters, those depreciation parameters were applied to the total Company plant using the Minnesota approved depreciation rates to provide the reserve balances for transmission and general plant. Plant balances for Minnesota state-specific assets and their reserve balances using the Minnesota approved depreciation rates were used for Electric and Gas Distribution plant.

All annual accrual rates were determined using the straight line, broad group, remaining life depreciation system. Depreciation and amortization rates reflect any imbalance between actual and theoretical reserves. Use of the remaining life depreciation system adds a self-correcting mechanism, which accounts for any differences between theoretical and book depreciation reserve over the remaining life of each depreciable group.

Given the many changes in life and net salvage in this study, this study recommends a reallocation of book reserve by plant account within each function. This reallocation does not change the total reserve within each function. Rather, reallocating the reserve within a function realigns the depreciation reserve balances within each function using the proposed life and net salvage parameters.

This study recommends an overall decrease of approximately $7.4 million in annual depreciation expense compared to the depreciation rates currently in effect after implementing the Minnesota Public Utilities Commission order in Docket No.

E,G002/D-12-858. This consists of an increase of $3.7 million in annual depreciation expense for Electric facilities, a decrease of $7.1 million in annual depreciation expense for Gas facilities compared to the depreciation rates currently in effect, and a decrease of approximately $4.0 million for Common plant in annual depreciation expense. The overall decrease in depreciation expense is driven by changes in life and net salvage as well as treatment of any book and theoretical reserve imbalance. Appendix B demonstrates the change in depreciation expense for the various accounts. If approved by the Commission, the changes recommended in the study would be used by the Company effective January 1, 2018.

NORTHERN STATES POWER COMPANY

A MINNESOTA CORPORATION

TRANSMISSION, DISTRIBUTION, AND GENERAL PLANT

ELECTRIC, GAS AND COMMON

DEPRECIATION RATE STUDY

July 2017

Table of Contents

Purpose 7
Study Results 8
General Discussion 10
Definition 10
Basis of Depreciation Estimates 10
Survivor Curves 11
Actuarial Analysis 13
Judgment 16
Theoretical Depreciation Reserve 19
Depreciation Study Process 21
Depreciation Rate Calculation 24
Remaining Life Calculation 24
Life Analysis 26
Salvage Analysis 68
APPENDIX A Depreciation Rate Calculations 89
APPENDIX B Depreciation Expense Comparison 98
APPENDIX C Depreciation Parameter Comparison 105
APPENDIX D Comparison of Book and Theoretical Depreciation Reserve 112
APPENDIX E Net Salvage Analysis 119

PURPOSE

The purpose of this study is to develop depreciation rates for the period beginning January 1, 2018 for the depreciable property as recorded on the books of Northern States Power Company, a Minnesota corporation ("NSP" or "Company"), at January 1, 2017. The account based depreciation rates were designed to recover the total remaining undepreciated investment, adjusted for net salvage, over the remaining life of NSP's property on a straight-line basis. Non-depreciable property and production plant were excluded from this study.

STUDY RESULTS

Overall depreciation rates for all NSP depreciable property are shown in Appendix A. These rates translate into an annual depreciation accrual of $303.7 million based on NSP depreciable investment at January 1, 2017. The annual equivalent depreciation expense calculated by the same method using the approved rates was $310.6 million. These proposed rates translate into an annual depreciation accrual for Electric of $220.5 million, Gas of $27.4 million, and Common of $55.8 million. Appendix A demonstrates the development of the annual depreciation rates and accruals by account. Appendix B presents a comparison of approved rates versus proposed rates by account. Appendix C presents a summary of mortality and net salvage estimates by account. Appendix D presents a comparison between theoretical and book accumulated depreciation reserves for each account. Appendix E presents the net salvage analysis for all accounts. The overall decrease in depreciation expense is driven by changes in life and net salvage as well as treatment of any book and theoretical reserve imbalance. Shown below is a summary of the results for each group and function:

Type of Plant (in millions)	Accrual at Existing Rates	Accrual at Proposed Rates	Difference
Electric Transmission Depreciable	$67.9	$72.4	$4.5
Electric Distribution Depreciable	$77.9	$80.2	$2.3
Electric General Depreciable	$1.4	$1.5	$0.1
Electric Distribution Amortized	$16.5	$16.4	($0.1)
Electric General & Intangible Amortized	$53.1	$50.0	($3.1)
Gas Transmission	$1.6	$1.2	($0.4)
Gas Distribution Depreciated	$23.3	$19.1	($4.2)
Gas Distribution Amortized	$4.8	$4.0	($0.8)
Gas General Depreciated	$0.03	$0.04	($0.0)
Gas General & Intangible Amortized	$4.3	$3.1	($1.2)
Common Depreciated	$5.2	$5.8	$0.6
Common Amortized	$54.6	$50.0	($4.6)
Total	$310.6	$303.7	($6.9)

GENERAL DISCUSSION

Definition

The term "depreciation" as used in this study is considered in the accounting sense, that is, a system of accounting that distributes the cost of assets, less net salvage (if any), over the estimated useful life of the assets in a systematic and rational manner. It is a process of allocation, not valuation. This expense is systematically allocated to accounting periods over the life of the properties. The amount allocated to any one accounting period does not necessarily represent the loss or decrease in value that will occur during that particular period. The Company accrues depreciation on the basis of the original cost of all depreciable property included in each functional property group. On retirement, the full cost of depreciable property, less the net salvage value (which may be negative), is charged to the depreciation reserve.

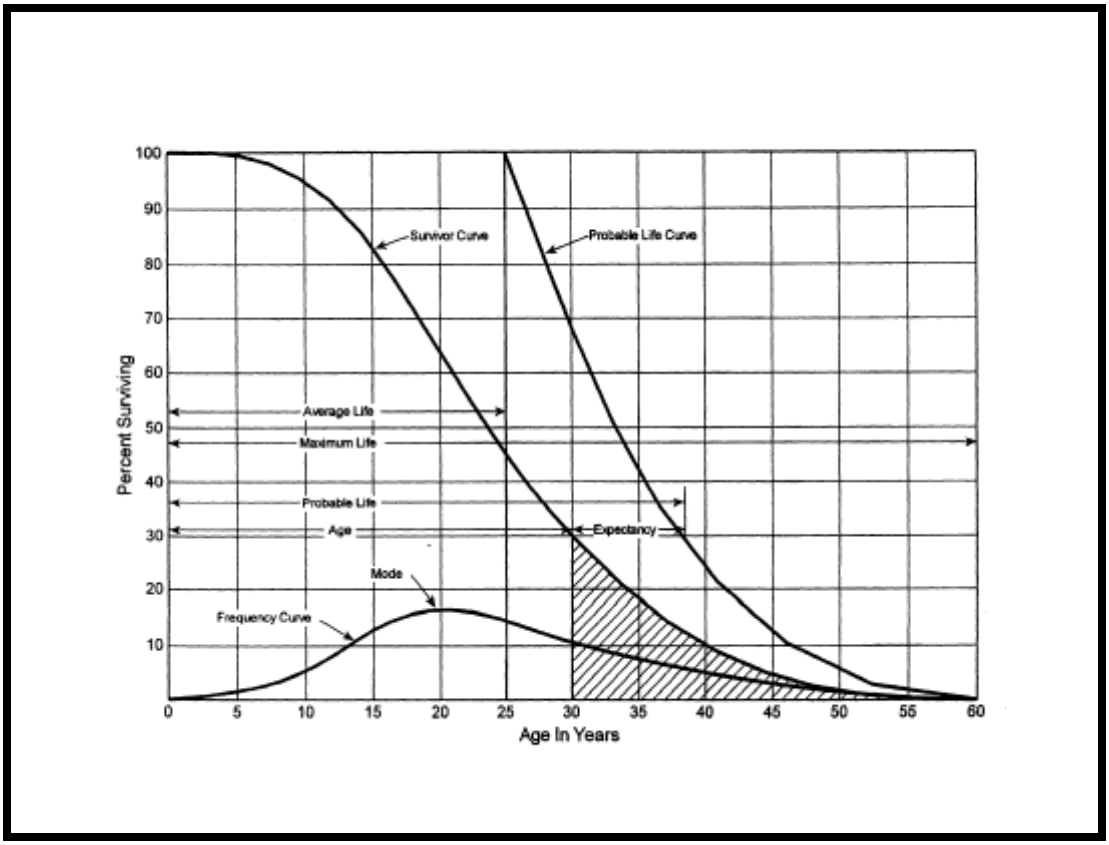
Basis of Depreciation Estimates

The straight-line, broad (average) life group, remaining-life depreciation system was employed to calculate annual and accrued depreciation in this study. In this system, the annual depreciation expense for each group is computed by dividing the original cost of the asset less allocated depreciation reserve less estimated net salvage by its respective average life group remaining life. The resulting annual accrual amounts of all depreciable property within a function were accumulated, and the total was divided by the original cost of all functional depreciable property to determine the depreciation rate. The calculated remaining lives and annual depreciation accrual rates were based on attained ages of plant in service and the estimated service life and salvage characteristics of each depreciable group. The computations of the annual functional depreciation rates are shown in Appendix A.

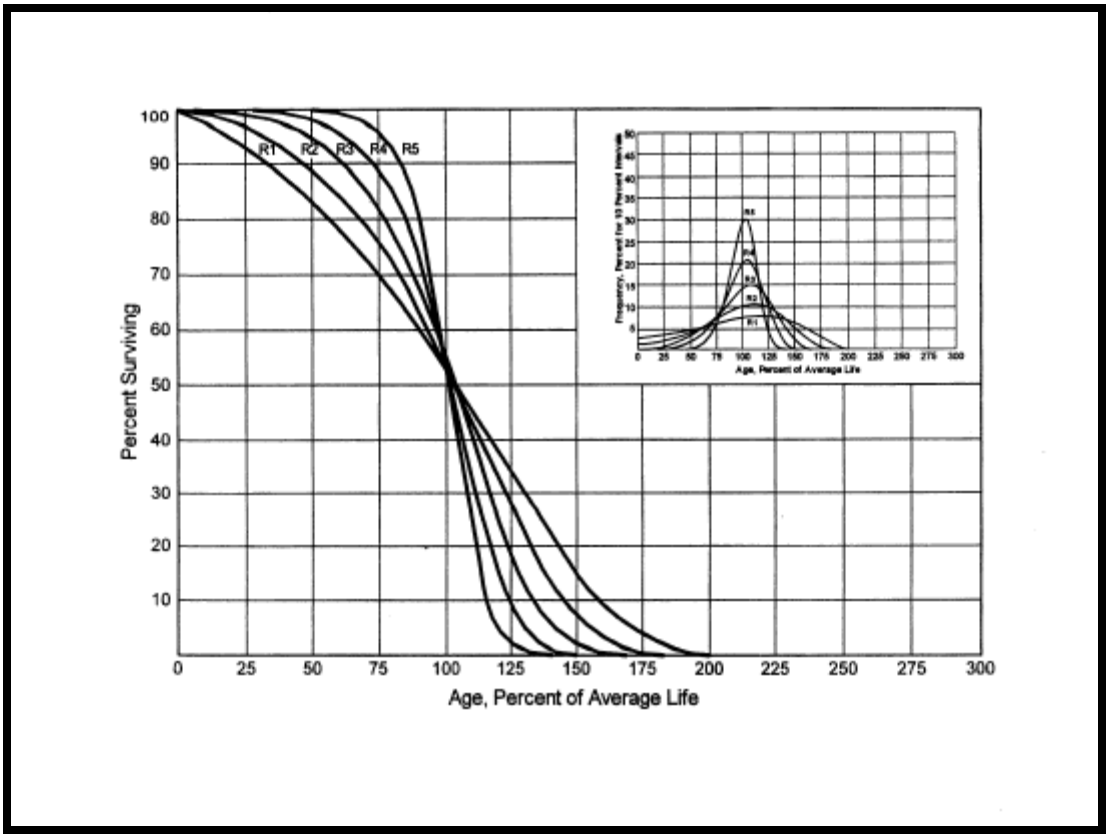
Actuarial analysis was used with each account within a function where sufficient data was available, and judgment was used to some degree on all accounts.

Survivor Curves

To fully understand depreciation projections in a regulated utility setting, there must be a basic understanding of survivor curves. Individual property units within a group (for example, wood distribution poles) do not normally have identical lives or investment amounts. The average life of a group can be determined by first constructing a survivor curve which is plotted as a percentage of the units surviving at each age. A survivor curve represents the percentage of property remaining in service at various age intervals. The Iowa Survivor Curves ("Iowa Curves") are the result of an extensive investigation of life characteristics of physical property made at Iowa State College Engineering Experiment Station in the first half of the prior century. Through common usage, revalidation and regulatory acceptance, these curves have become a descriptive standard for the life characteristics of industrial property. An example of an Iowa Curve is shown below.



There are four families in the Iowa Curves that are distinguished by the relation of the age at the retirement mode (largest annual retirement frequency) and the average life. For distributions with the mode age greater than the average life, an "R" designation (i.e., Right modal) is used. The family of “R” moded curves is shown below.



Similarly, an "S" designation (i.e., Symmetric modal) is used for the family whose mode age is symmetric about the average life. An "L" designation (i.e., Left modal) is used for the curve family whose mode age is less than the average life. A special case of left modal dispersion is the "O" or origin modal curve family. Within each curve family, numerical designations are used to describe the relative magnitude of the retirement frequencies at the mode. A "6" indicates that the retirements are not greatly dispersed from the mode (i.e., high mode frequency) while a "1" indicates a large dispersion about the mode (i.e., low mode frequency). For example, a curve with an

average life of 30 years and an "L3" dispersion is a moderately dispersed, left modal curve that can be designated as a 30 L3 Curve. A SQ, or square, survivor curve occurs where no dispersion is present (i.e., units of common age retire simultaneously).

Most property groups can be closely fitted to one Iowa Curve with a unique average service life. The blending of judgment concerning current conditions and future trends along with the matching of historical data permits the depreciation analyst to make an informed selection of an account's average life and retirement dispersion pattern.

Actuarial Analysis

Actuarial analysis (retirement rate method) was used in evaluating historical asset retirement experience where vintage data were available and sufficient retirement activity was present. In actuarial analysis, interval exposures (total property subject to retirement at the beginning of the age interval, regardless of vintage) and age interval retirements are calculated. The complement of the ratio of interval retirements to interval exposures establishes a survivor ratio. The survivor ratio is the fraction of property surviving to the end of the selected age interval, given that it has survived to the beginning of that age interval. Survivor ratios for all of the available age intervals were chained by successive multiplications to establish a series of survivor factors, collectively known as an observed life table. The observed life table shows the experienced mortality characteristic of the account and may be compared to standard mortality curves such as the Iowa Curves. Where data was available, accounts were analyzed using this method. Placement bands were used to illustrate the composite history over a specific era, and experience bands were used to focus on retirement history for all vintages during a set period. The results from these analyses for those accounts which had data sufficient to be analyzed using this method are shown in the Life Analysis section of this report.

Simulated Plant Record Procedure

The Simulated Plant Record Procedure - Balances approach ("SPR") is one of the commonly accepted approaches to analyze mortality characteristics of utility property. SPR was applied to some of the Electric and Gas Distribution accounts due to the unavailability of vintaged transactional data. In this method, an Iowa Curve and average service life are selected as a starting point of the analysis and its survivor factors are applied to the actual annual additions to give a sequence of annual balance totals. These simulated balances are compared with the actual balances by using both graphical and statistical analysis. Through multiple comparisons, the mortality characteristics (as defined by an average life and Iowa Curve) that are the best match to the property in the account can be found.

The Conformance Index ("CI") is one measure used to evaluate various SPR analyses. CIs are also used to evaluate the "goodness of fit" between the actual data and the Iowa Curve being referenced. The sum of squares difference ("SSD") is a summation of the difference between the calculated balances and the actual balances for the band or test year being analyzed. This difference is squared and then summed to arrive at the SSD, where n is the number of years in the test band as follows:

$$SSD = \sum_{1}^{n} (Calculated\ Balance_i - Observed\ Balance_i)^2$$

This calculation can then be used to develop other calculations, which the analyst feels might give a better indication for the "goodness of fit" for the representative curve under consideration. The residual measure ("RM") is the square root of the average squared differences as developed above. The residual measure is calculated as follows:

$$RM = \sqrt{(\frac{SSD}{n})}$$

The CI is developed from the residual measure and the average observed plant balances for the band or test year being analyzed. The calculation of conformance index is shown below:

$$CI = \frac{\sum_1^n Balances_i / n}{RM}$$

The Retirement Experience Index ("REI") gives an indication of the maturity of the account and is the percent of the property retired from the oldest vintage in the band at the end of the test year. Retirement indices range from 0 percent to 100 percent and a REI of 100 percent indicates that a complete curve was used. A REI less than 100 percent indicates that the survivor curve was truncated at that point. The originator of the SPR method, Alex Bauhan, suggests ranges of value for the CI and REI. The relationship for CI proposed by Bauhan is shown below[1]:

CI	Value
Over 75	Excellent
50 to 75	Good
25 to 50	Fair
Under 25	Poor

1 Public Utility Depreciation Practices, p. 96.

The relationship for REI proposed by Bauhan[2] is shown below:

REI	Value
Over 75	Excellent
50 to 75	Good
33 to 50	Fair
17 to 33	Poor
17 and below	Valueless

Depreciation analysts have used these measures in analyzing SPR results for nearly 60 years, since the SPR method was developed. Both the CI and REI statistics provide the analyst with important information with which to make a comparison between a band of simulated or calculated balances and the observed or actual balances in the account being studied.

Statistics are useful in analyzing mortality characteristics of accounts, as well as determining a range of service lives to be analyzed using the detailed graphical method. However, these statistics boil all the information down to one, or at most, a few numbers for comparison. Visual matching through comparison between actual and calculated balances expands the analysis by permitting the analyst to view many points of data at a time. The goodness of fit should be visually compared to plots of other Iowa Curve dispersions and average lives for the selection of the appropriate curve and life. Detailed information for each account is shown later in this study and in workpapers.

Judgment

Any depreciation study requires informed judgment by the analyst conducting the study. A knowledge of the property being studied, company policies and procedures, general trends in technology and industry practice, and a sound basis of understanding depreciation theory are needed to apply this informed judgment. Judgment was used in areas such as survivor curve modeling and selection, depreciation method selection, simulated plant record method analysis, and actuarial analysis.

2 Public Utility Depreciation Practices, p. 97.

Judgment is not defined as being used in cases where there are specific, significant pieces of information that influence the choice of a life or curve. Those cases would simply be a reflection of specific facts into the analysis. Where there are multiple factors, activities, actions, property characteristics, statistical inconsistencies, implications of applying certain curves, property mix in accounts or a multitude of other considerations that impact the analysis (potentially in various directions), judgment is used to take all of these factors and synthesize them into a general direction or understanding of the characteristics of the property. Individually, no one factor in these cases may have a substantial impact on the analysis, but overall, may shed light on the utilization and characteristics of assets. Judgment may also be defined as deduction, inference, wisdom, common sense, or the ability to make sensible decisions. There is no single correct result from statistical analysis; hence, there is no answer absent judgment. At the very least for example, any analysis requires choosing the bands on which to place more emphasis.

The establishment of appropriate average service lives and retirement dispersions for the Transmission, Distribution, and General Plant accounts for the Electric, Gas, and Common utilities requires judgment to incorporate the understanding of the operation of the system with the available accounting information analyzed using the Retirement Rate actuarial methods. The appropriateness of lives and curves depends not only on statistical analyses, but also on how well future retirement patterns will match past retirements.

Current applications and trends in use of the equipment also need to be factored into life and survivor curve choices in order for appropriate mortality characteristics to be chosen.

Average Life Group Depreciation

The Commission has approved NSP's use the average life group ("ALG") depreciation procedure in various proceedings. At the request of the Company, this study continues to use the ALG depreciation procedure to group the assets within each account. After average service life and a dispersion curve were selected for each account, those parameters were used to estimate what portion of the surviving

investment of each vintage was expected to retire. The depreciation of the group continues until all investment in the vintage group is retired. ALG is defined by their respective account dispersion curve, life, and salvage estimates. A straight-line rate for each ALG is calculated by computing a composite remaining life for each group across all vintages within the group, dividing the remaining investment to be recovered by the remaining life to find the annual depreciation expense and dividing the annual depreciation expense by the surviving investment. The resultant rate for each ALG group is designed to recover all retirements less net salvage when the last unit retires. The ALG procedure recovers net book cost over the life of each account by averaging many components.

Theoretical Depreciation Reserve

The book depreciation reserve was derived from Company records and was reallocated from a functional level to individual accounts. This study used a reserve model that relied on a prospective concept relating future retirement and accrual patterns for property, given current life and salvage estimates. The theoretical reserve of a group is developed from the estimated remaining life, total life of the property group, and estimated net salvage. The theoretical reserve represents the portion of the group cost that would have been accrued if current forecasts were used throughout the life of the group for future depreciation accruals. The computation involves multiplying the vintage balances within the group by the theoretical reserve ratio for each vintage. The average life group method requires an estimate of dispersion and service life to establish how much of each vintage is expected to be retired in each year until all property within the group is retired. Estimated average service lives and dispersion determine the amount within each average life group. The straight-line remaining-life theoretical reserve ratio ("RR") at any given age is calculated as:

$$RR = 1 - \frac{(\text{Average Remaining Life})}{(\text{Average Service Life})} * (1 - \text{Net Salvage Ratio})$$

The use of the remaining life method effectively spreads any actual to theoretical reserve variance over the expected remaining life of the account.

Change to Average Life Group Remaining life Depreciation System

In the Company's 2013 and 2014 electric rate cases (Docket Nos. E002/GR-12-961 and E002/GR-13-868 respectively) there was significant attention given to the difference in the theoretical and actual reserves. To address that concern, the Company recommended in the 2013 electric rate case that the net book value be recovered over the remaining life of each Electric and Common account. The issue was resolved by spreading the theoretical surplus over periods much shorter than

the remaining lives. In the Company's last depreciation study, Docket No. E,G002/D-12-858 (5-year depreciation study), the remaining life depreciation system was proposed to address those concerns but was not adopted because of the treatment afforded to the theoretical surplus in the 2012 and 2013 electric rate cases. This 2017 study again recommends use of the remaining life depreciation system. Use of the remaining life depreciation system adds a self-correcting mechanism, which accounts for any differences between theoretical and book depreciation reserve over the remaining life of each depreciable group. Use of remaining life ensures that the difference between book and theoretical reserve will be amortized ratably over the remaining life of the group.

DETAILED DISCUSSION

Depreciation Study Process

This depreciation study encompassed four distinct phases. The first phase involved data collection and field interviews. The second phase was where the initial data analysis occurred. The third phase was where the information and analysis was evaluated. Once the first three stages were complete, the fourth phase began. This phase involved the calculation of deprecation rates and documenting the corresponding recommendations.

During the Phase I data collection process, historical data was compiled from continuing property records and general ledger systems. Data was validated for accuracy by extracting and comparing to multiple financial system sources. Audit of this data was validated against historical data from prior periods, historical general ledger sources, and field personnel discussions. This data was reviewed extensively to put in the proper format for a depreciation study. Further discussion on data review and adjustment is found in the Salvage Considerations Section of this study. Also as part of the Phase I data collection process, numerous discussions were conducted with engineers and field operations personnel to obtain information that would assist in formulating life and salvage recommendations in this study. One of the most important elements of performing a proper depreciation study is to understand how the Company utilizes assets and the environment of those assets. Interviews with engineering and operations personnel are important ways to allow the analyst to obtain information that is beneficial when evaluating the output from the life and net salvage programs in relation to the Company's actual asset utilization and environment. Information that was gleaned in these discussions is found both in the Detailed Discussion of this study in the life analysis and salvage analysis sections and also in workpapers.

Phase 2 is where the actuarial analysis is performed. Phase 2 and 3 overlap to a significant degree. The detailed property records information is used in phase 2 to develop observed life tables for life analysis. These tables are visually compared to industry standard tables to determine historical life characteristics. It is possible

that the analyst would cycle back to this phase based on the evaluation process performed in Phase 3. Net salvage analysis consists of compiling historical salvage and removal data by functional group to determine values and trends in gross salvage and removal cost. This information was then carried forward into Phase 3 for the evaluation process.

Phase 3 is the evaluation process which synthesizes analysis, interviews, and operational characteristics into a final selection of asset lives and net salvage parameters. The historical analysis from Phase 2 is further enhanced by the incorporation of recent or future changes in the characteristics or operations of assets that were revealed in Phase 1. Phases 2 and 3 allow the depreciation analyst to validate the asset characteristics as seen in the accounting transactions with actual Company operational experience.

Finally, Phase 4 involved the calculation of accrual rates, making recommendations and documenting the conclusions in a final report. The calculation of accrual rates is found in Appendix A. Recommendations for the various accounts are contained within the Detailed Discussion of this report. The depreciation study flow diagram shown as Figure 1[3] documents the steps used in conducting this study. Depreciation Systems, page 289 documents the same basic processes in performing a depreciation study which are: Statistical analysis, evaluation of statistical analysis, discussions with management, forecast assumptions, write logic supporting forecasts and estimation, and write final report.

[3] Introduction to Depreciation for Public Utilities and Other Industries, AGA EEI, 2013.

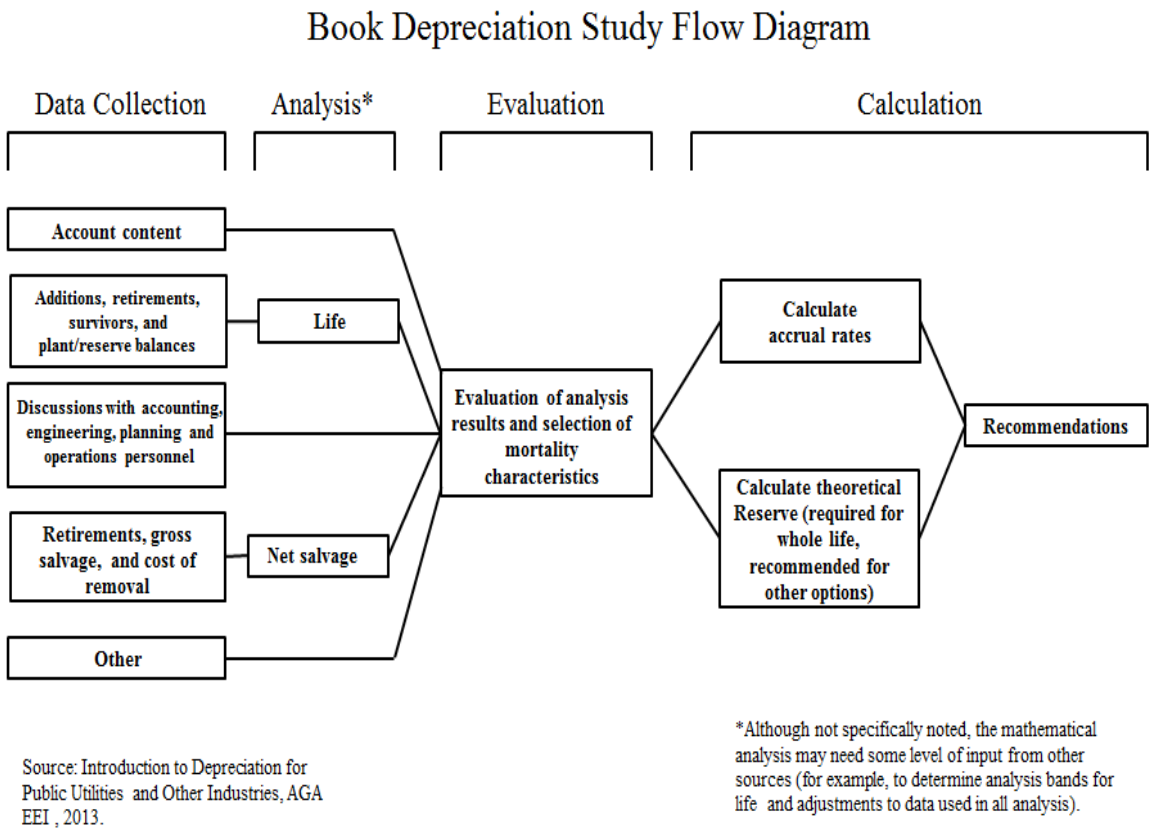


Figure 1

NORTHERN STATES POWER COMPANY - MINNESOTA

DEPRECIATION STUDY PROCESS

Depreciation Rate Calculation

Annual depreciation expense amounts for the depreciable accounts of NSP were calculated by the straight-line method, average life group procedure, and remaining-life technique. With this approach, remaining lives were calculated according to standard ALG expectancy techniques, using the Iowa Curves noted in the calculation. For each plant account under the FERC Uniform System of Accounts, the difference between the surviving investment, adjusted for estimated net salvage, and the allocated book depreciation reserve, was divided by the average remaining life to yield the annual depreciation expense. These calculations are shown in Appendix A.

Remaining Life Calculation

The establishment of appropriate average service lives and retirement dispersions for each account within a functional group was based on engineering judgment that incorporated available accounting information analyzed using the Retirement Rate actuarial methods. After establishing the appropriate average service lives and retirement dispersion, the remaining life was computed for each account. The theoretical depreciation reserve with zero net salvage was calculated using theoretical reserve ratios as defined in the theoretical reserve portion of the General Discussion section. The difference between book depreciation reserve and theoretical reserve was then spread over the remaining life by ALG. Remaining life computations are found for each account in workpapers.

Calculation Process

Annual depreciation expense amounts for all accounts were calculated by the straight line, remaining life procedure.

In a whole life representation, the annual accrual rate is computed by the following equation,

$$\text{Annual Accrual Rate} = \frac{(100\% - \text{Net Salvage Percent})}{\text{Average Service Life}}$$

Use of the remaining life depreciation system adds a self-correcting mechanism, which accounts for any differences between theoretical and book depreciation reserve over the remaining life of the group. With the straight line, remaining life, average life group system using Iowa Curves, composite remaining lives were calculated according to standard broad group expectancy techniques, noted in the formula below:

$$\text{Composite Remaining Life} = \frac{\sum \text{Original Cost} - \text{Theoretical Reserve}}{\sum \text{Whole Life Annual Accrual}}$$

For each plant account, the difference between the surviving investment, adjusted for estimated net salvage, and the allocated book depreciation reserve, was divided by the composite remaining life to yield the annual depreciation expense as noted in this equation where the Net Salvage% represents future net salvage.

$$\text{Annual Depreciation Expense} = \frac{\text{Original Cost} - \text{Book Reserve} - (\text{Original Cost}) * (1 - \text{Net Salvage \%})}{\text{Composite Remaining Life}}$$

Within a group, the sum of the group annual depreciation expense amounts, as a percentage of the depreciable original cost investment summed, gives the annual depreciation rate as shown below:

$$\text{Annual Depreciation Rate} = \frac{\sum \text{ Annual Depreciation Expense}}{\sum \text{Original Cost}}$$

These calculations are shown in Appendix A. The calculations of the theoretical depreciation reserve values and the corresponding remaining life calculations are shown in workpapers. Book depreciation reserves were allocated from a functional level to individual accounts and the theoretical reserve computation was used to compute a composite remaining life for each account. A comparison between theoretical reserve and the reallocated book reserve is shown in Appendix D for all accounts.

Life Analysis

The retirement rate actuarial analysis method was applied to accounts which had sufficient aged data for Northern States Power Company - Minnesota. Some of the mass distribution accounts only had aged retirement data from transaction year 2001 forward. Those accounts were analyzed with the SPR balances method. The distribution accounts analyzed with SPR were: Electric 364 Poles, Towers & Fixtures, 365 Overhead Conductor & Devices, 366 – Underground Conduit, 367 Underground Conductor and Devices, 369 Services - Overhead, 369 Services - Underground, 373 Street Lighting & Signal Systems, and Gas: 376 Mains - Metallic, 376 Mains - Plastic, 380 Services - Metallic, and 380 Services - Plastic. For each account with sufficient data, an actuarial retirement rate analysis was made with placement and experience bands of varying width. The historical observed life table was plotted and compared with various Iowa Curves to obtain the most appropriate match. A selected curve for each account is shown in the Life Analysis Section of this report. The observed life tables for all analyzed placement and experience bands are provided in workpapers.

For each account on the overall band (i.e. placement from earliest vintage year which varied for each account through 2016), approved survivor curves from MPUC Docket No. E,G002/D-12-858, modified by subsequent orders if applicable, were used as a starting point. Then using the same average life, various dispersion curves were plotted. Frequently, visual matching would confirm one specific dispersion pattern (i.e. L, S. or R) as an obviously better match than others. The next step would be to determine the most appropriate life using that dispersion

pattern. Then, after looking at the overall experience band, different experience bands were plotted and analyzed: in increments of approximately 20 years, for instance 1967-2016, 1987-2016, etc. Next, placement bands of varying width were plotted with each experience band discussed above. Repeated matching usually pointed to a focus on one dispersion family and small range of service lives. The goal of visual matching was to minimize the differential between the observed life table and Iowa curve in top and mid range of the plots. These results are used in conjunction with all other factors that may influence asset lives.

For account(s) which had insufficient data for actuarial analysis, a simulated plant record method analysis was performed at intervals for the overall band and at 10 year intervals within the overall balance period. In addition to reviewing the SPR analysis for each band and account, a graphical comparison between actual and simulated balances was performed.

These results are used in conjunction with all other factors that may influence asset lives.

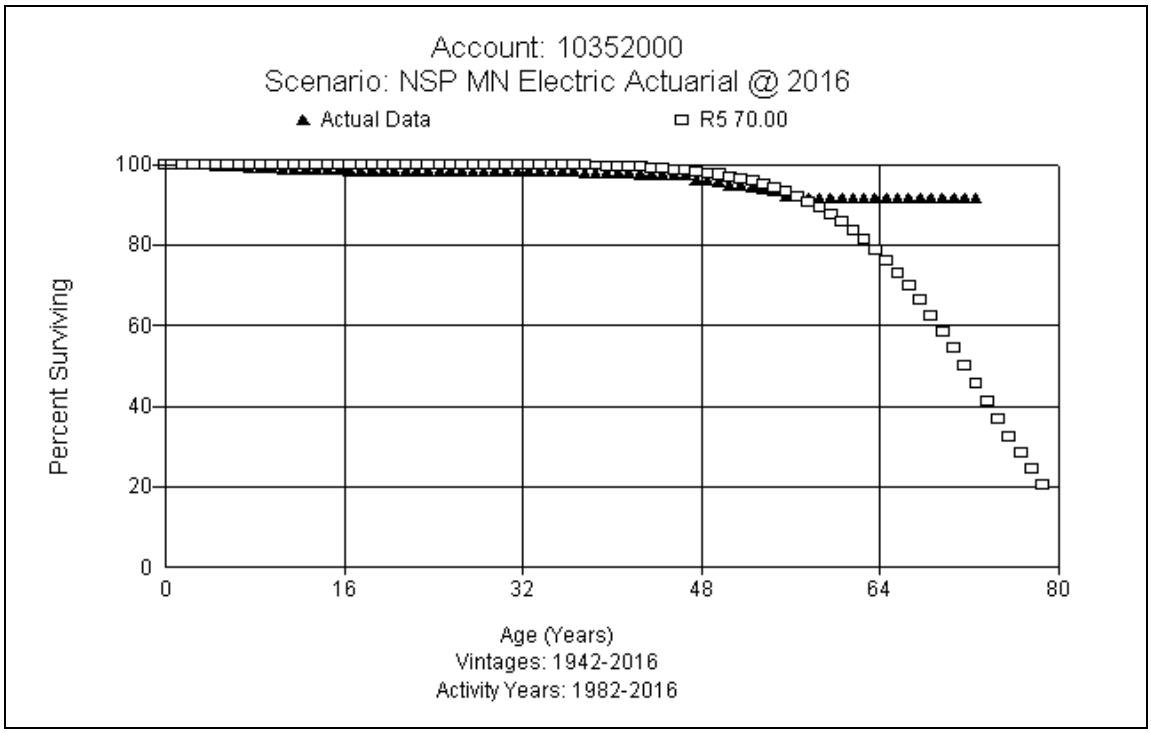
ELECTRIC PLANT

TRANSMISSION

Transmission Accounts, FERC Accounts 352-358

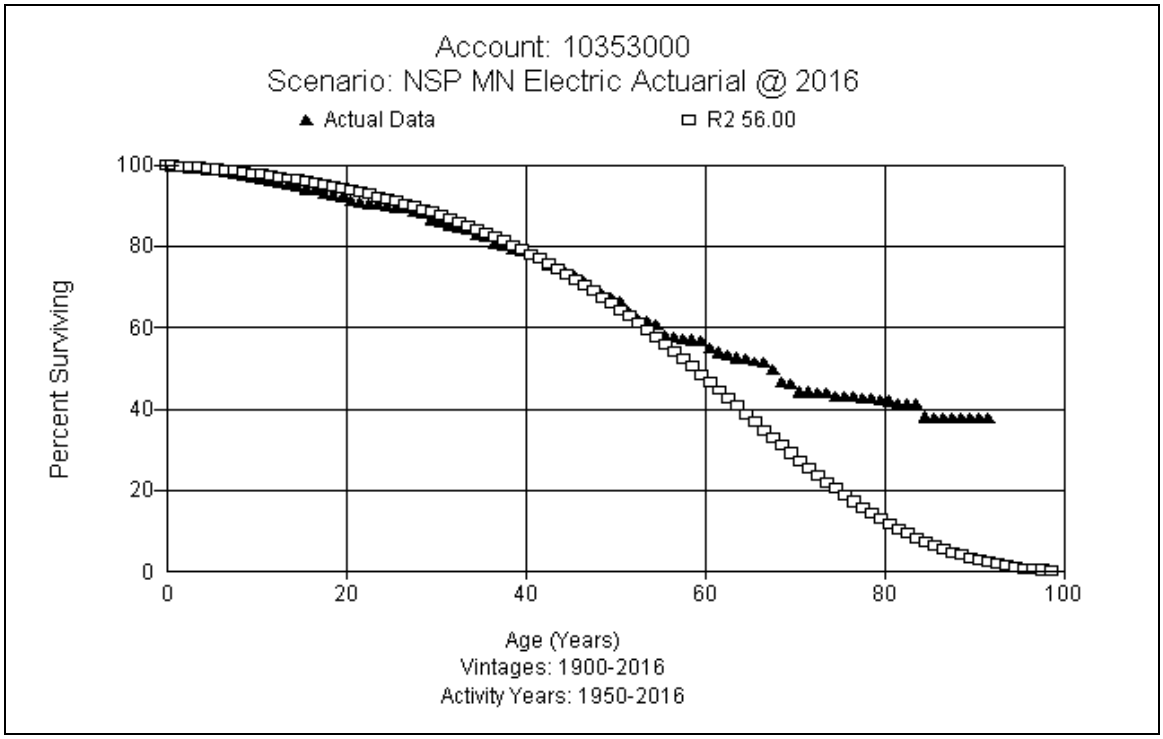
FERC Account 352 Transmission Structures & Improvements (proposed 70 year life with a R5 dispersion curve)

This account includes buildings, fencing and other structures found in a transmission substation. The current investment balance is $103.1 million. The approved life and curve is 68 years with a R5 dispersion curve. There is a limited amount of data for actuarial analysis. Narrow bands do not have sufficient data with curves that stop at 97 percent are higher. For the overall band, a longer life greatly in excess of the current 45 year life is indicated. Company personnel anticipate a longer life than approved, in the range of 65 to 70 years. Frost and severe winter conditions are factors that can contribute to retirements in Minnesota. Based on judgment and Company experience, a 70 year life is proposed for this account while retaining the R5 dispersion curve.



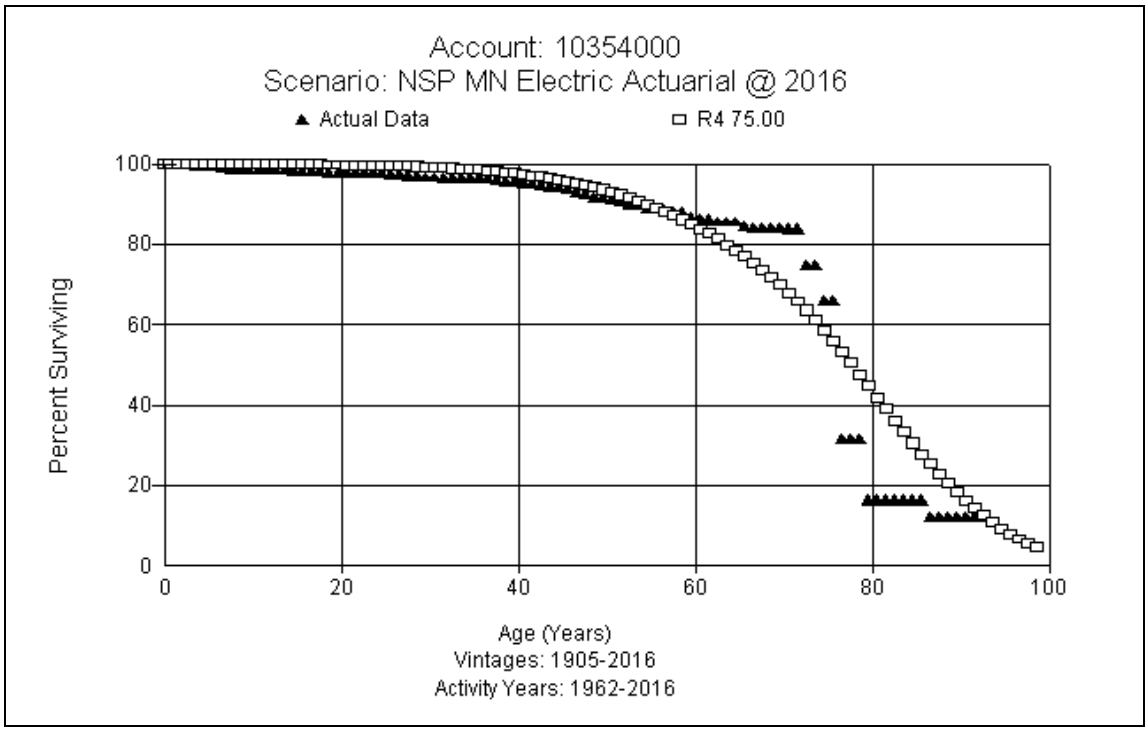
FERC Account 353 Transmission Station Equipment (proposed 56 year life with a R2 dispersion curve)

This account contains a wide variety of transmission substation equipment, from circuit breakers to switchgear. The current investment balance is $1.2 billion. The current approved life is 56 years with a R2 dispersion curve. The Company maintains a table of low, normal, and long expectations for the various assets types in this account. Company personnel believe the middle or normal estimate is the most reflective of the Company assets. Relays are transitioning from electromechanical and solid state to microprocessor relays with an estimated life of 30 years. Company personnel expect to replace all older relays in the next 8-10 years. Life analysis across a variety of bands shows a longer life, in the 50 year and over range. Based on actuarial experience and judgment regarding the asset groups in this account, this study recommends retaining a 56-year life with an R2 dispersion curve for this account.



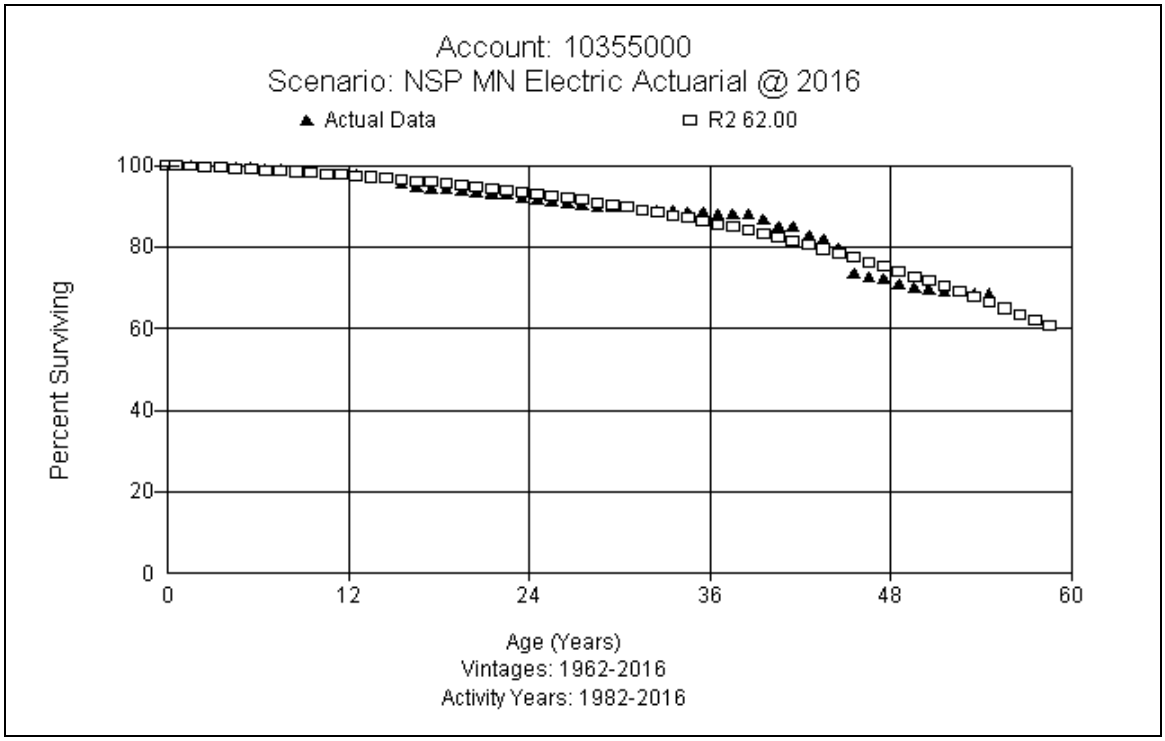
FERC Account 354 Transmission Towers & Fixtures (proposed 75 year life with a R4 dispersion curve)

This account consists of Transmission towers and fixtures, which are used to transmit electricity at a voltage of 69 kV and above. The current investment balance is $118.6 million. The current approved life is the 70 years with a R4 dispersion curve. There has been a smaller amount of retirements occurring for towers versus other transmission accounts. Some towers are beginning to exhibit corrosion. Based on Company experience and judgment, this study recommends moving to a 75 year life with a R4 dispersion curve for this account.



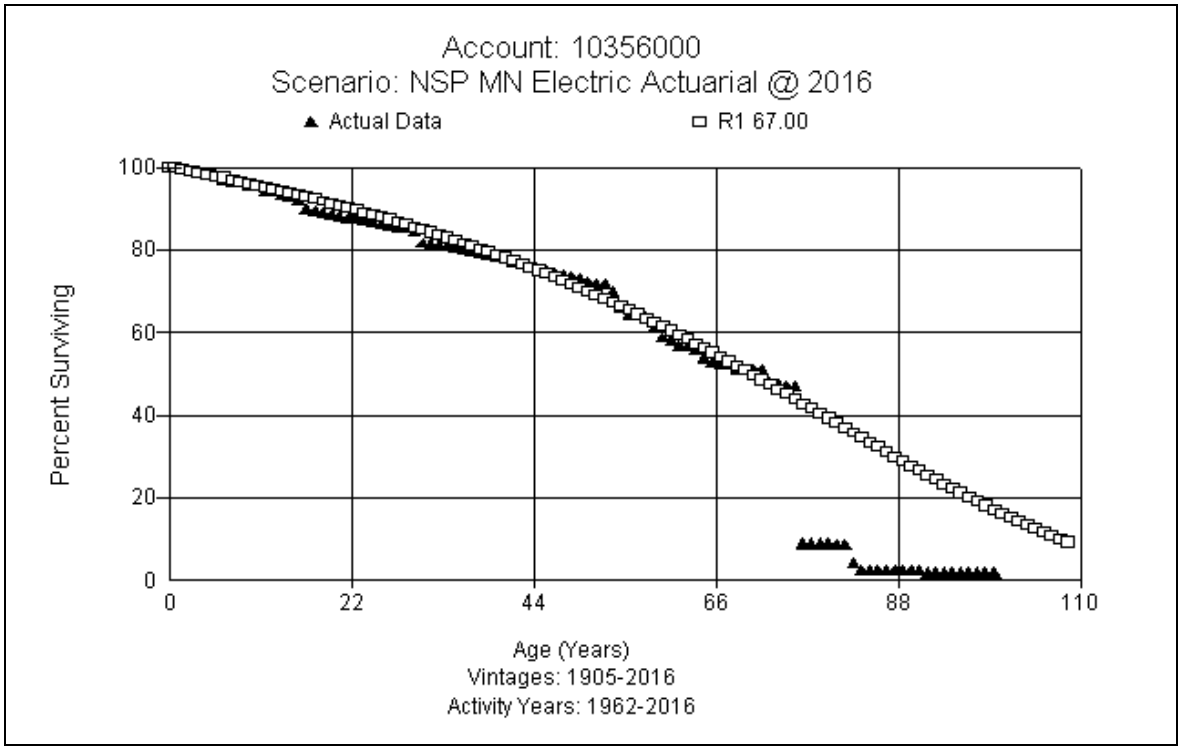
FERC Account 355 Transmission Poles & Fixtures (proposed 62 year life with a R2 dispersion curve)

This account consists of Transmission poles and fixtures, which are used to transmit electricity at a voltage of 69 kV and above. The current investment balance is $1.3 billion. The current approved life is 62 years with a R2 dispersion curve. Company personnel expect that 100 percent of all structures will have been retired by the age of 75 years, and perhaps 80 percent will last past 50 years. A small percentage will retire in the first 25 years. By 75 years, structures will have degraded to the point that they will all have to be replaced. Rot, obsolescence, change in energy flow, and new capacity are all potential causes of retirement. Based on the best fitting curves for the majority of the placement and experience band combinations, retaining a life of 62 years with a R2 dispersion curve is recommended for this account.



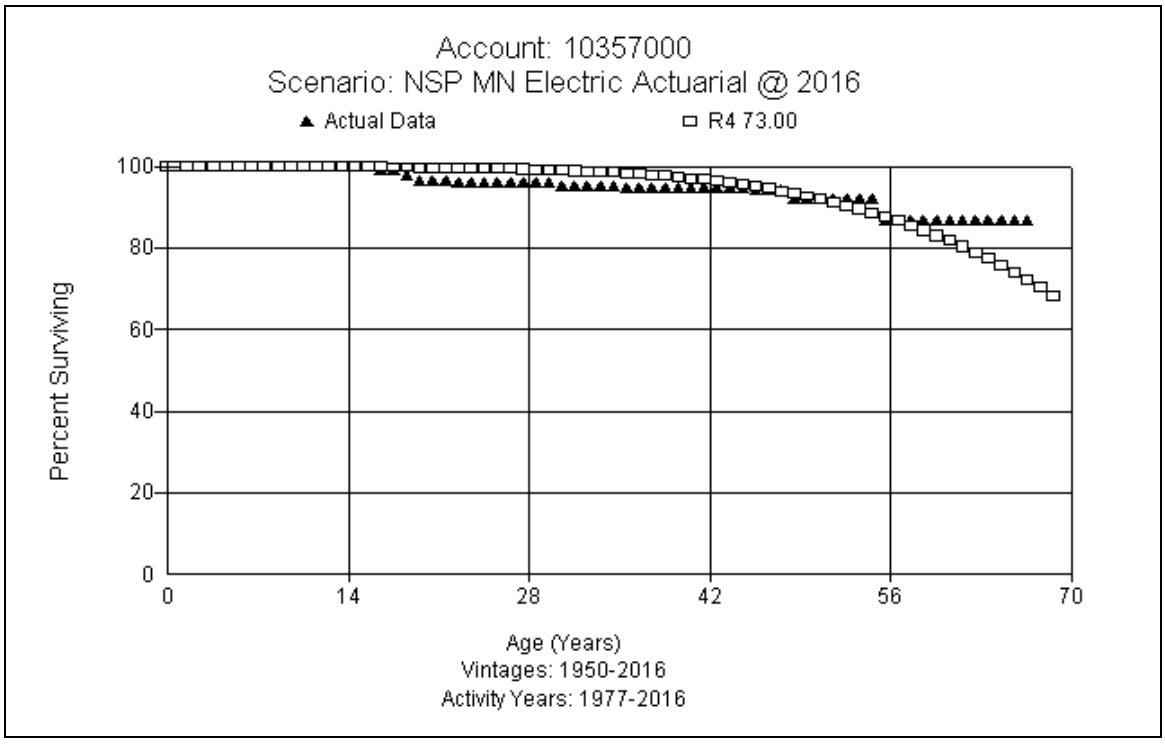
FERC Account 356 Transmission Overhead Conductor & Devices (proposed 67 year life with a R1 dispersion curve)

This account consists of Transmission overhead conductors, which are used to transmit electricity at voltages of 69 kV and above. The current investment balance is $532.7 million. The current approved life is 63 years with a R1 dispersion curve. Company personnel anticipate that conductor will have a life similar to poles in Account 355. Conductor may be replaced when it is too small or exhibits problems such as corrosion, falling splices, storms, or sag issues. Glass insulators are being replaced on dead ends and polymer on tangents. Polymer insulators are expected to last 30 years and be replaced once over the life of the line. Based on the actuarial analysis, life indications are moving to a longer life, as noted by Company personnel. This study recommends a life of 67 years with a R1 dispersion curve for this account.



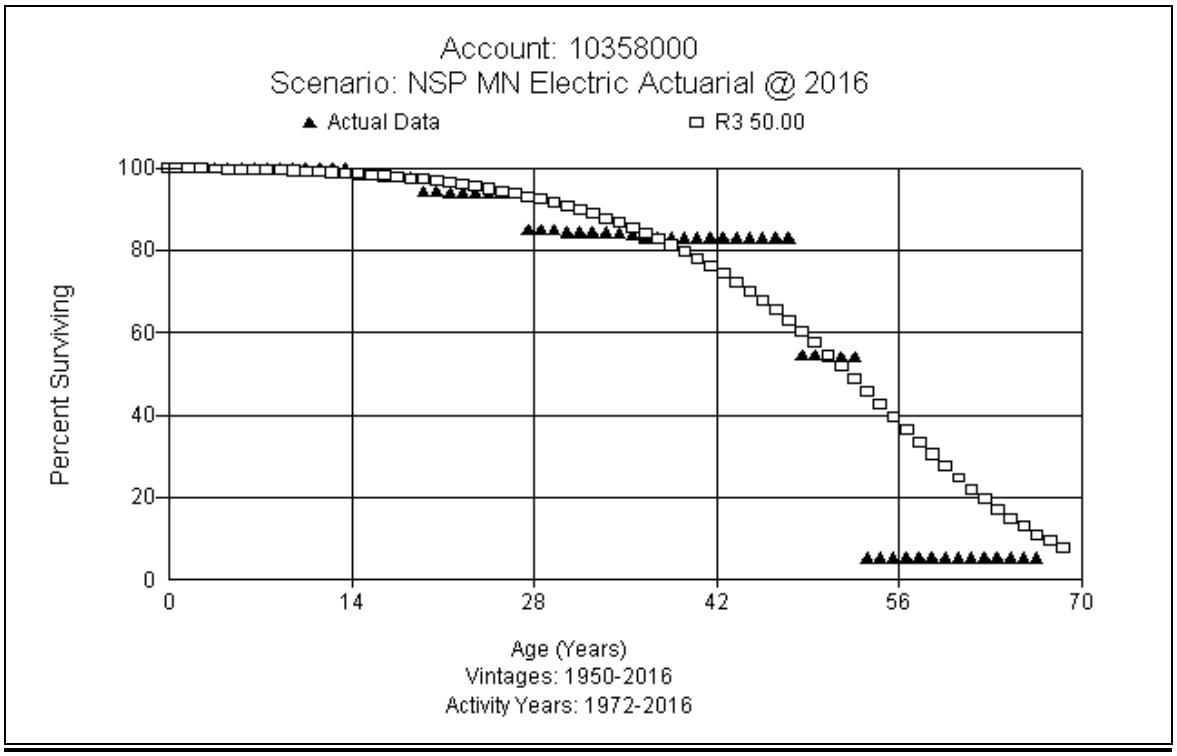
FERC Account 357 Transmission Underground Conduit (proposed 73 year life with a R4 dispersion curve)

This account consists of underground conduit. The current investment balance is $25.9 million. The current approved life is 73 years with a R4 dispersion curve. Retirement data is limited for this account. Company personnel believe the current life for conduit is reasonable and recommend a life around 70 years. Based on actuarial analysis and input from Company personnel, this study recommends retaining a life of 73 years with a R4 dispersion curve for this account.



FERC Account 358 Transmission Underground Conductor & Devices (proposed 50 year with a R3 dispersion curve)

This account consists of underground conductor. The lines are low pressure oil filled; paper wrapped 500 MCM (thousands of circular mills, wire gauge measurement) copper cable. The current investment balance is $30.7 million. The current approved life is 55 years with a R2 dispersion curve. Company personnel indicate overall a life of 50 years for underground conductor is a reasonable expectation. Most conductor is HPFF (high pressure fluid filled) which the manufacturer will not make in the future and will have to be replaced with XPLE (solid dielectric cable) within a few years. Based on input from Company personnel and actuarial analysis, this study recommends moving to a life of 50 years with a R3 dispersion curve for this account

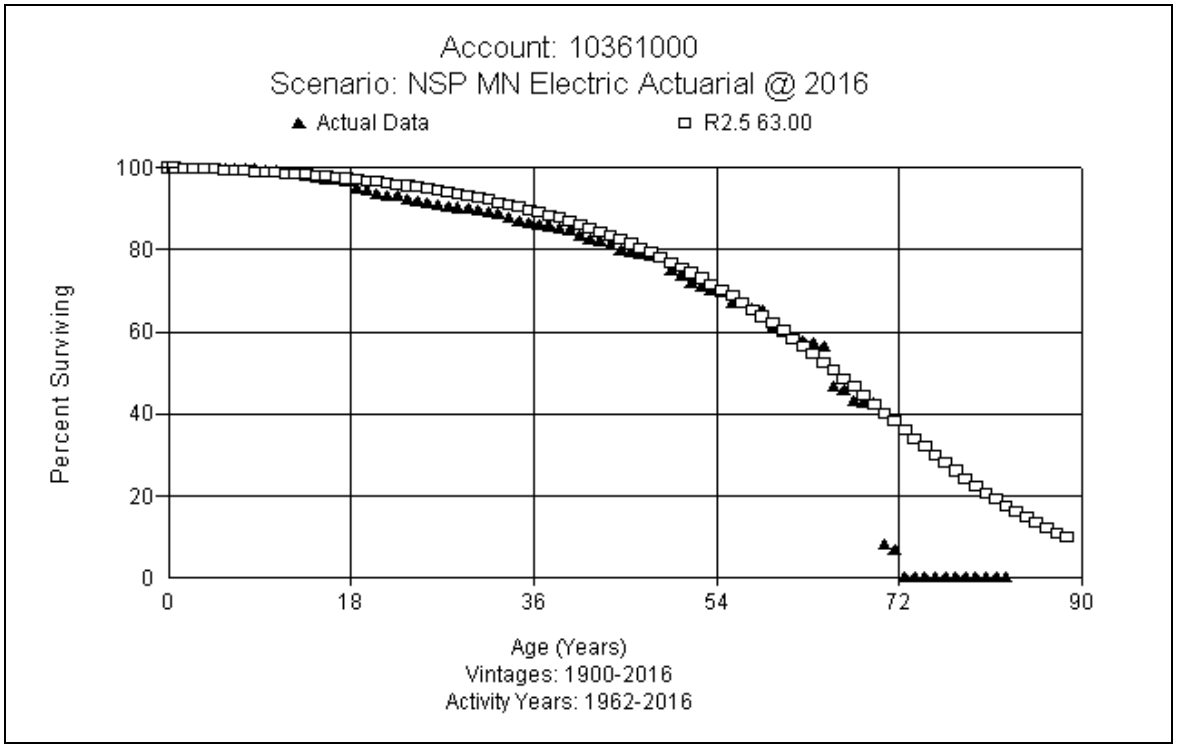


DISTRIBUTION

Distribution Accounts, FERC Accounts 361 - 373

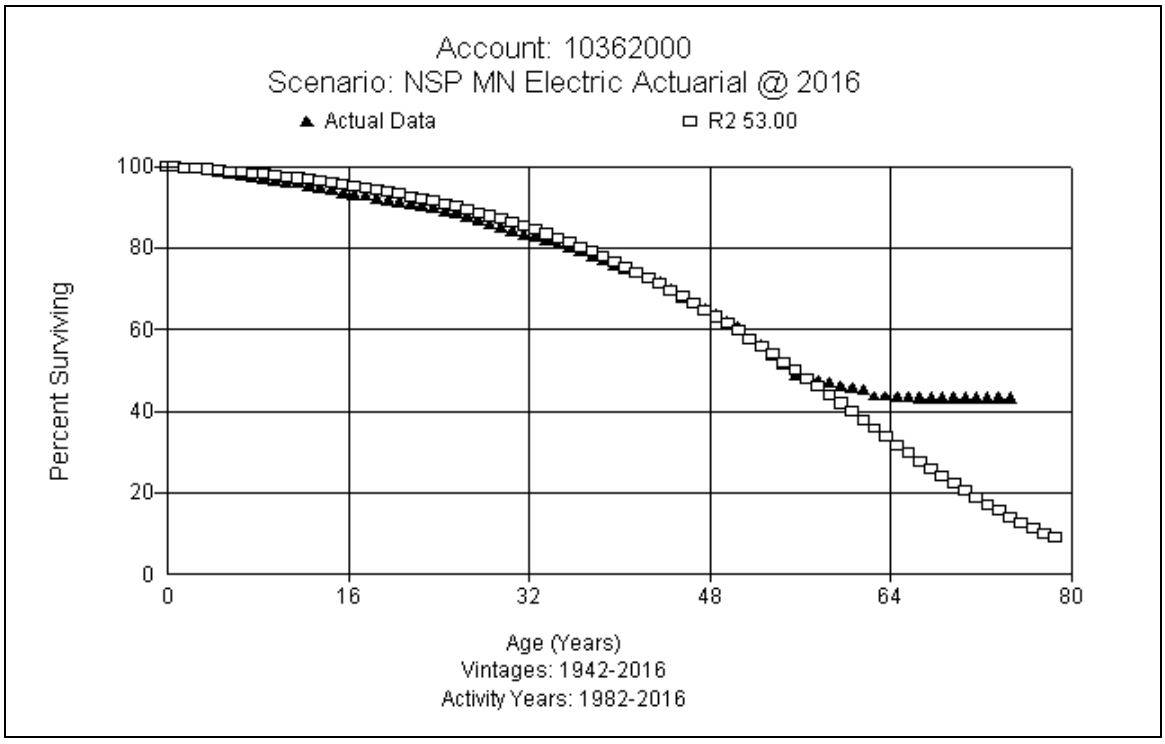
FERC Account 361 Distribution Structures & Improvements (proposed 63 year life with a R2.5 dispersion curve)

This grouping contains facilities ranging from fencing to other structures found in distribution substations. The current investment balance for Minnesota is $43.7 million for this account. The current approved life is a 60 years with a R3 dispersion curve. Life analysis results are based on a total Company data. Company personnel anticipate a longer life than currently approved with the expectation that it will be less than Account 352, Transmission Structures and Improvements. After analyzing actuarial analysis results, a life of 63 years with a R2.5 dispersion curve is recommended for this account.



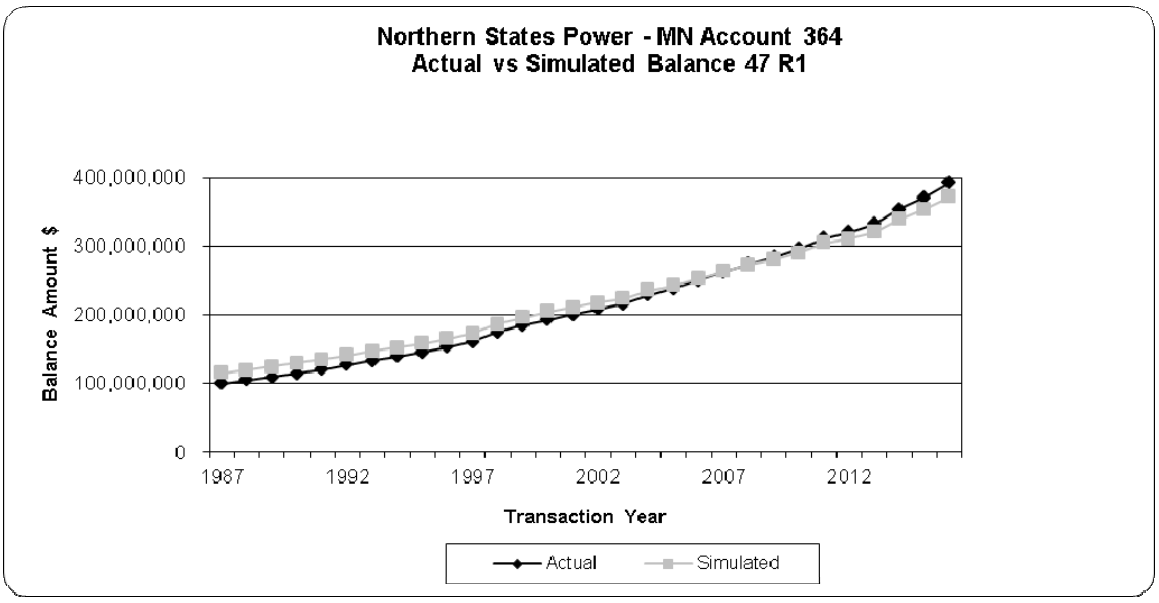
FERC Account 362 Distribution Station Equipment (proposed 53 year life with a R2 dispersion curve)

This grouping contains a wide variety of distribution substation equipment, from circuit breakers to switchgear. The current investment balance for Minnesota is $553.0 million. The current approved life is a 55 years with a R1.5 dispersion curve. Life analysis results are based on total Company data. Company personnel expect the life of this account will be slightly less than Account 353, Transmission Substation Equipment. Multiple placement and experience bands show that a 53 year life with a R2 dispersion curve is a good fit for many bands. Based on Company history and judgment, this study recommends a life of 53 years with a R2 dispersion curve for this account.



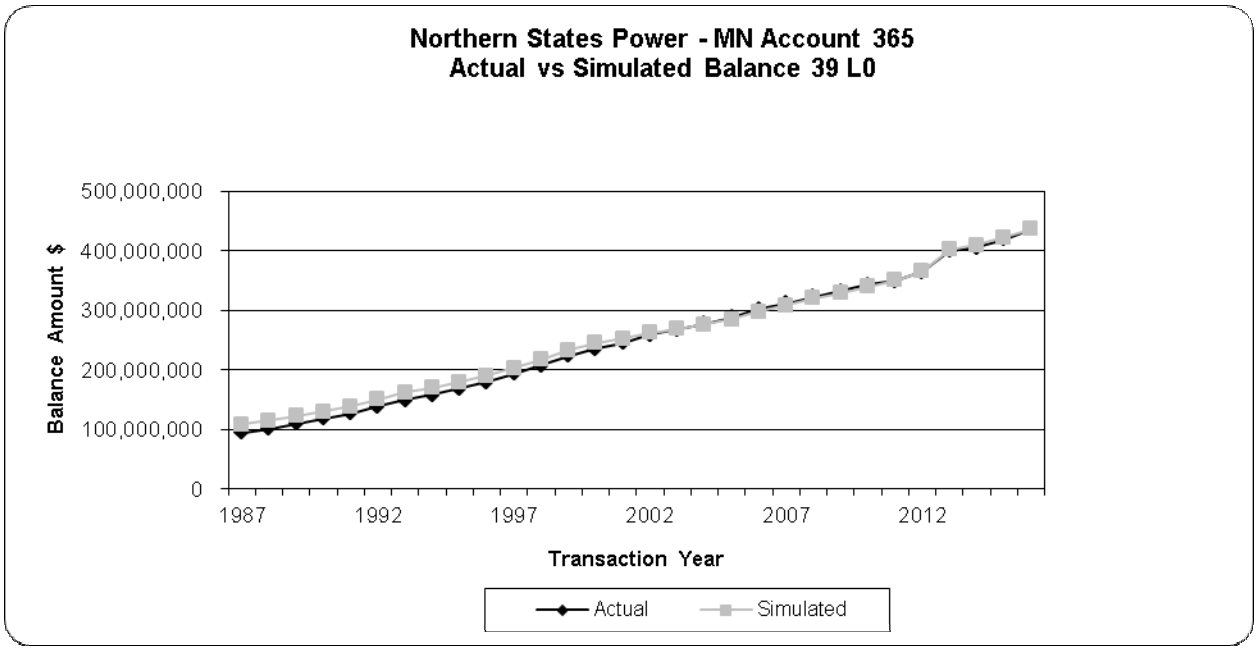
FERC Account 364 Distribution Poles, Towers & Fixtures (proposed 47 year life with a R1 dispersion curve)

This account contains poles and towers of various material types: wood and steel. Most of the poles across the system are made of wood. The height of these assets can range from 35 feet to 70 feet with the prevalent sizes being 45 feet and up. The current investment balance for Minnesota is $343.5 million for this account. The current approved life is 44 years with a R1 dispersion curve. Life analysis results are based on total Company data. SPR analysis was used since actuarial results are available from 2001 forward only. Company personnel report that western red cedar poles were used up to 10 years ago and poles are now treated pine. Company experts believe the life of cedar would probably be 40-45 years and treated pine would be less than 40 years. The two biggest issues are rot and relocations. A pole testing program is producing proactive replacement activity. Fiberglass cross arms are starting to be installed which will have a longer life. Steel is only used when building near a transmission structure. Based on life analysis results and input from Company personnel a 47 year life with a R1 dispersion curve is recommended for this account. A comparison of actual versus simulated balances is shown below.



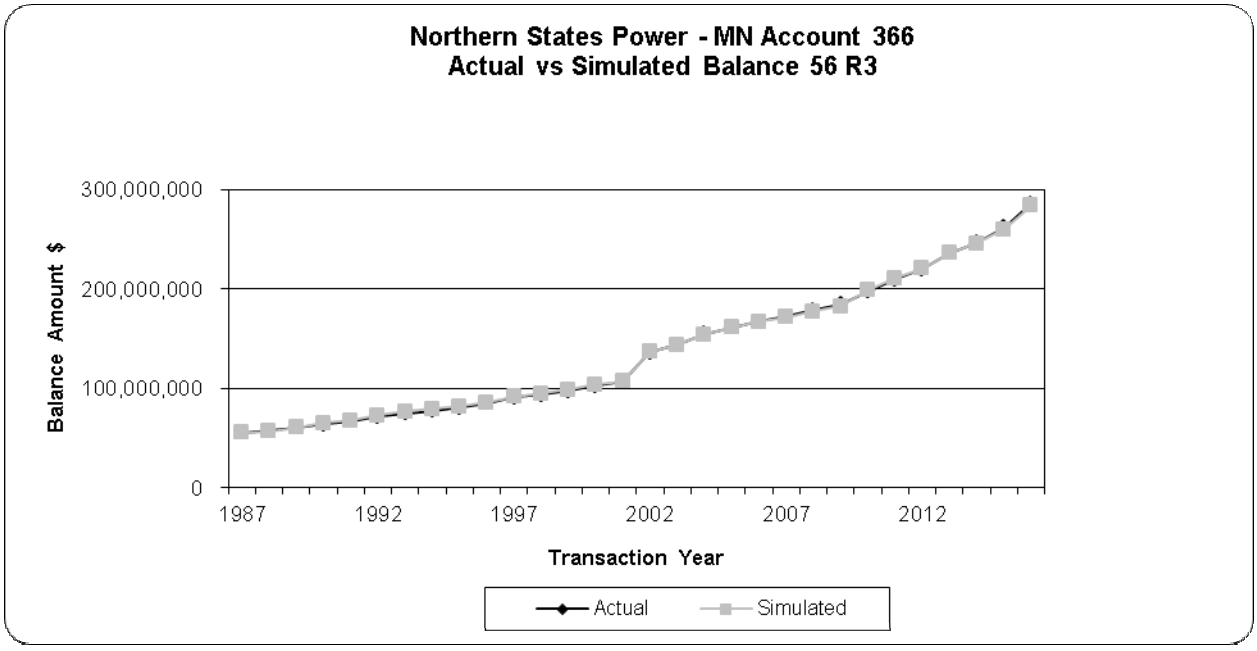
FERC Account 365 Distribution Overhead Conductor & Devices (proposed 39 year life with a L0 dispersion curve)

This account consists of overhead conductor of various thickness, as well as various switches and reclosers. The current investment balance for Minnesota is $373.2 million for this account. The current approved life is a 39 years with a L0 dispersion curve. Life analysis results are based on total Company data. Company personnel report that insulators are made of porcelain and polymer. Polymer has only been used for the past 8-12 years, so there is limited experience. The primary reasons for retirements are overloads, tree issues, more than 2 splices in a span, and capacity issues. Life analysis shows a shorter life than poles with life increasing in the narrowest bands. Based on life analysis and judgment, a 39 year life with a L0 dispersion curve is recommended for this account. A comparison of actual versus simulated balances is shown below.



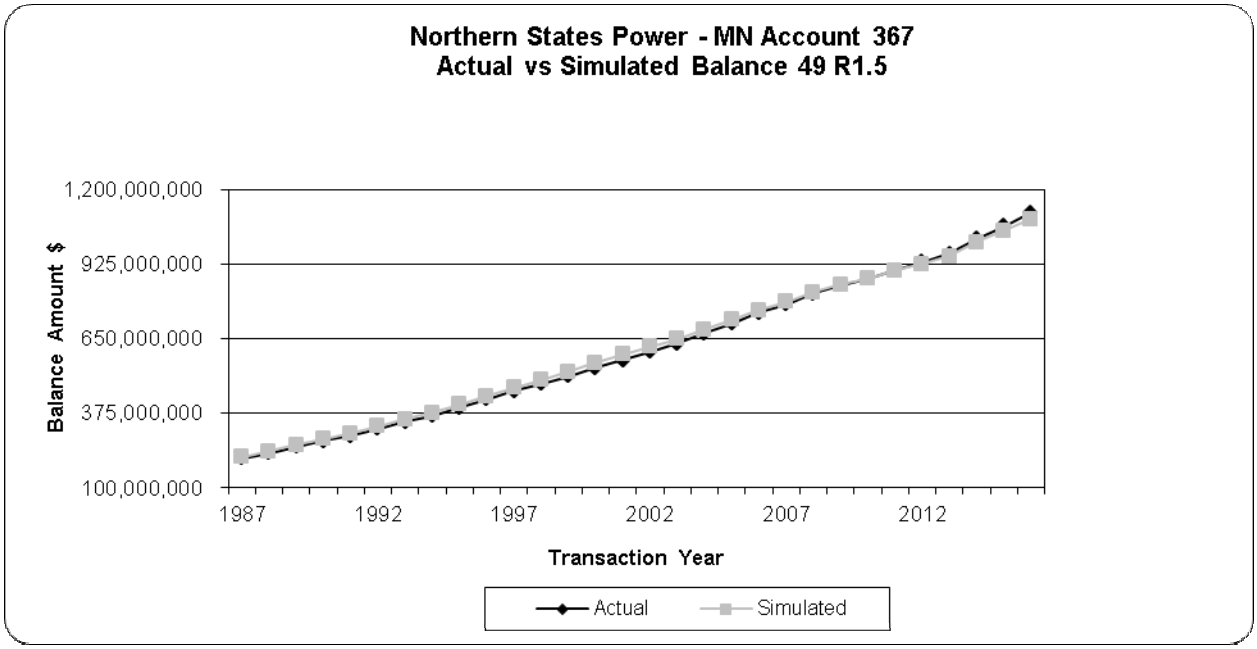
FERC Account 366 Distribution Underground Conduit (proposed 56 year life with a R3 dispersion curve)

This account consists of conduit, duct banks, vaults, manholes, and ventilating system equipment. The current investment balance for Minnesota is $261.3 million for this account. The current approved life is 52 years with a R3 dispersion curve. After reviewing SPR results, a mid-range dispersion appears is the best fit. After review of multiple bands, this study recommends a 56 year life while retaining the R3 dispersion curve. A comparison of the actual vs. simulated balances is shown below.



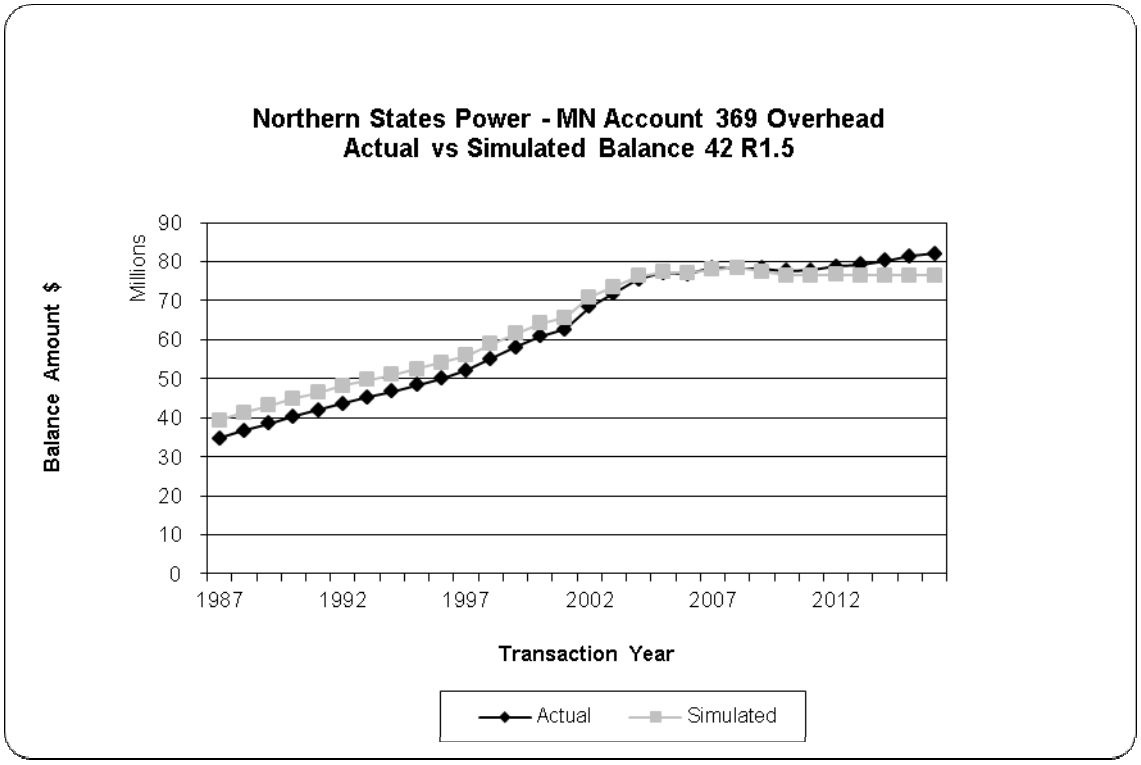
FERC Account 367 Distribution Underground Conductor & Devices (proposed 49 life with a R1.5 dispersion curve)

This account consists of underground distribution conductor, switches, and switchgear. The current investment balance for Minnesota is $967.9 million for this account. The currently approved life is a 45 years with a R2.5 dispersion curve. Life analysis results are based on total Company data. The SPR method was used to select the life parameter for this account. The best ranked curve with an REI of 100 across multiple bands was the 49 R1.5. After review of multiple bands, this study recommends a 49 year life while moving to a R1.5 dispersion curve. A comparison of the actual vs. simulated balances is shown below.



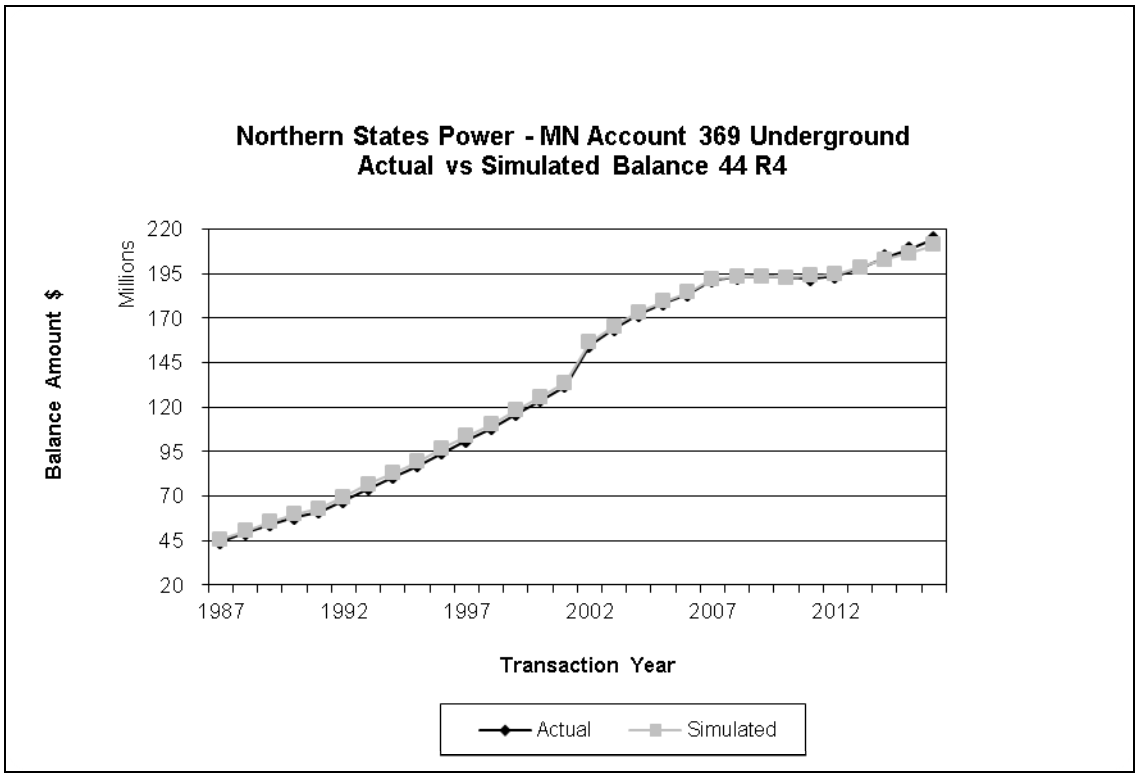
FERC Account 369 Distribution Services – Overhead (proposed 42 year life with a R1.5 dispersion curve)

This account includes overhead services with a current investment balance in Minnesota of $71.6 million. The current approved life is 40 years with a R1.5 dispersion. Life analysis results are based on total Company data. Company experts expect the life for services, both underground and overhead to be approximately 40 years. Many overhead services have been replaced for aesthetic reasons. After viewing SPR results and comparing actual versus simulated balances, a 42 year life with a R1.5 dispersion curve is recommended for this account.



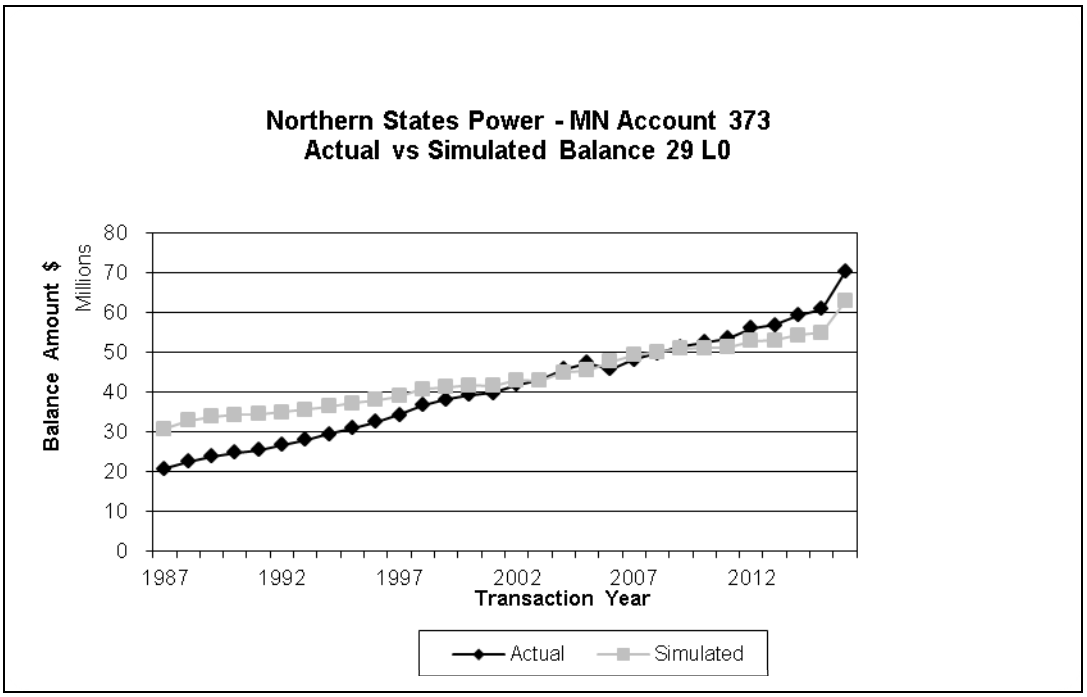
FERC Account 369 Distribution Services – Underground (proposed 44 year life with a R4 dispersion curve)

This account includes underground services and has a current investment balance in Minnesota of $185.8 million. The currently approved life is 41 years with a R4 dispersion curve. Life analysis results are based on total Company data. Company experts expect the life for services, both underground and overhead to be approximately 40 years. Better materials have been used for underground services since the 1970s. After viewing SPR results and comparing actual versus simulated balances, a 44 year life with a R4 dispersion curve is recommended for this account.



FERC Account 373 Distribution Street Lighting & Signal Systems (proposed 29 year life with a L0 dispersion curve)

This account includes all distribution streetlights, conductor, conduit, luminaire, and standards. The current investment balance for Minnesota is $64.2 million. The current approved life is 29 years with a L0 dispersion curve. Life analysis results are based on total Company data. SPR was used on this account, since actuarial results are only available from 2001 forward. The L0 is the top curve for many bands. As the band becomes narrower, the life increases. A comparison of the proposed curve vs. actual data is shown below. Based on judgment and Company experience, a 29 year life with a L0 dispersion curve is recommended for this account.

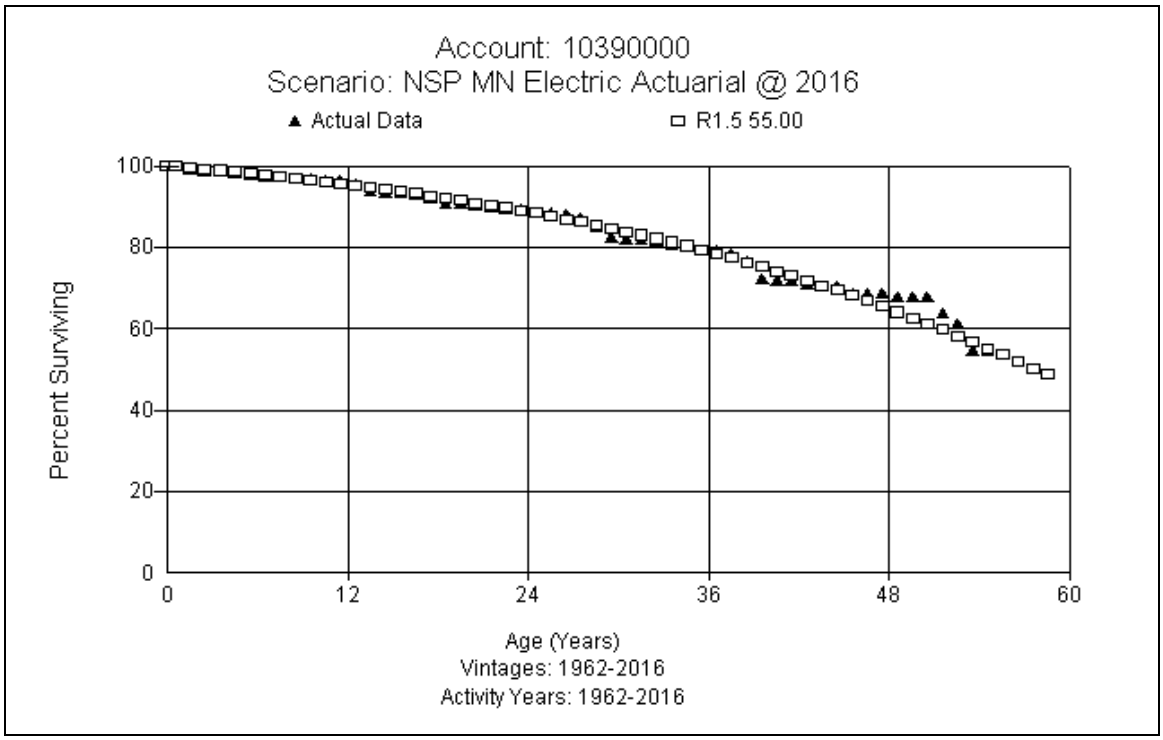


GENERAL

General Accounts, FERC Accounts 390

FERC Account 390 General Structures & Improvements (proposed 55 year life with a R1.5 dispersion curve)

This account includes the cost of general structures and improvements used for utility service. The current investment balance is $63.5 million. The current approved life is 57 years with a R1.5 dispersion curve. Many components such as heating, ventilation, and air conditioning ("HVAC") systems, lighting, controls, finishes, and roofing in buildings will have a much shorter life than the structure itself. Some consolidation of buildings occurs, but the Company redeploys buildings for other use when possible. Going forward, Company personnel expect to replace roofs at 20 years (currently have some that have only lasted 10 years and some that have lasted 25 years or longer) and anticipate the same time frame for HVAC (which would include boilers, cooling towers, chillers, etc.). Depending on the location (heat or heavy trucks can shorten life), parking lots would be expected to last 15-20 years. At that point, the Company would tear up the old lot, retire and replace it with a new one. Removal cost is charged for replacing lots – a fixed percentage that can change based on specific facts of the project. The average age of buildings is over 40 years. Based on the analysis and mix of assets, this study recommends moving to a 55 year life with a R1.5 dispersion curve.


Account: 10390000
Scenario: NSP MN Electric Actuarial @ 2016
Actual Data
R1.5 55.00
Percent Surviving
100
80
60
40
20
0
0
12
24
36
48
60
Age (Years)
Vintages: 1962-2016
Activity Years: 1962-2016

FERC Account 390 General Structures & Improvements - Leased (proposed 10 life with a SQ dispersion curve)

This account includes the cost of leasehold improvements used for utility service. There is approximately $36 thousand in this account which is fully accrued. The approved life for this account is 10 years with a SQ dispersion curve. Based on type of assets this study recommends retaining the existing 10 year life with a SQ dispersion curve. However, if the lease term changes the asset life should change accordingly. No graph is shown.

ELECTRIC VINTAGE GROUP (AMORTIZED) ACCOUNTS

For many years, NSP has used vintage group amortization where assets are large in number, but low in cost. To implement this amortization mechanism, it is necessary to first retire the assets whose age is longer than the recommended service life for each group are retired. Then, the remaining plant in service for each account is amortized using the amortization rates shown in Appendix A-1 and B. Annually, assets which reach the average service life of each account are retired when the assets reach their average service life. Thus no dispersion curve is used for assets being recovered through vintage group amortization.

DISTRIBUTION

FERC Account 368 Distribution Line Transformers (proposed 32 year life)

This account consists of line transformers and regulators. The current investment is $372.6 million for Minnesota in this account. The current approved life of 32 years should be retained.

FERC Account 368 Distribution Line Capacitors (proposed 25 year life)

This account consists of line capacitors. The current investment is $18.8 million for Minnesota in this account. However, $3.6 million is considered fully depreciated, so the adjusted balance is $15.2 million. The current approved life of 25 years should be retained.

FERC Account 370 Distribution Meters (proposed 15 year life)

This account includes new distribution meters. The current investment is $96.3 million for Minnesota. However, $42.0 million is considered fully depreciated, so the adjusted balance is $54.3 million. The current approved life of 15 years should be retained.

GENERAL PLANT VINTAGE GROUP (AMORTIZED) ACCOUNTS

FERC Account 303 Intangible Computer Software – 5 year (proposed 5 year life)

This account consists of miscellaneous computer software. The current investment is $115.2 million. However, $27.8 million is considered fully accrued so the adjusted balance is $87.4 million. The current approved life of 5 years should be retained.

FERC Account 391 General Office Furniture & Equipment (proposed 20 year life)

This account consists of miscellaneous office furniture such as desks, chairs, filing cabinets, and tables used for general utility service. The current investment is $27.6 million. The current approved life of 20 years should be retained.

FERC Account 391 General Network Equipment (proposed 6 year life)

This account consists of computer equipment used for general utility service. The current investment is $32.4 million. The currently approved life is 4 years. Interviews with Company personnel show this equipment is lasting longer, and this study recommends moving to a 6 year life for this account.

FERC Account 392 General Transportation Equipment - Automobiles (proposed 10 year life)

This account consists of automobiles used for general utility service. The current investment is $1.1 million. The current approved life of 10 years should be retained.

FERC Account 392 General Transportation Equipment - Light Trucks (proposed 10 year)

This account consists of light trucks used for general utility service. The

current investment is $32.8 million. However, $6.2 million is considered fully accrued so the adjusted balance is $26.6 million. The current approved life is 12 years. Interviews with Company personnel show they are retiring light trucks earlier than in the past; therefore, this study recommends moving to a 10 year life for this account.

FERC Account 392 General Transportation Equipment - Trailers (proposed 12 year life)

This account consists of trailers used for general utility service. The current investment is $17.9 million. The current approved life is 15 years. Interviews with Company personnel show they are retiring trailers earlier than in the past; therefore, this study recommends moving to a 12 year life for this account.

FERC Account 392 General Transportation Equipment - Heavy Trucks (proposed 12 year)

This account consists of heavy trucks used for general utility service. The current investment is $97.6 million. However, $4.1 million is considered fully accrued so the adjusted balance is $93.5 million. The current approved life is 14 years. Interviews with Company personnel show they are retiring heavy trucks earlier than in the past; therefore, this study recommends moving to a 12 year life for this account.

FERC Account 393 General Stores Equipment (proposed 20 year)

This account consists of stores equipment used for general utility service. The current investment is $1.6 million. The current approved life of 20 years should be retained.

FERC Account 394 General Tools, Shop & Garage Equipment (proposed 15 year life)

This account consists of various items or tools used in shop and garages

such as air compressors, grinders, mixers, hoists, and cranes. The current investment is $81.3 million. However, $188 thousand is considered fully accrued so the adjusted balance is $81.1 million. The current approved life of 15 years should be retained.

FERC Account 395 General Laboratory Equipment (proposed 10 year life)

This account consists of laboratory equipment used in general utility service. The current investment is $3.2 million. The current approved life of 10 years should be retained.

FERC Account 396 General Power Operated Equipment (proposed 12 year life)

This account consists of bulldozers, forklifts, trenchers, and other power operated equipment that cannot be licensed on roadways. The current investment is $45.1 million. The current approved life is 12 years should be retained.

FERC Account 397 General Communication Equipment (proposed 10 year life)

This account consists of miscellaneous communication equipment used in general utility service. The current investment is $17.1 million. However, $159 thousand is considered fully accrued so there will be an adjusted balance of $16.9 million. The current approved life of 9 years. Interviews with Company personnel show this equipment is lasting longer, and this study recommends moving to a 10 year life for this account.

FERC Account 397 General Communication Equipment – Two Way (proposed 10 year life)

This account consists of miscellaneous two way communication equipment used in general utility service. The current investment is $6.5 million. The current approved life is 9 years. Interviews with Company personnel show this equipment is lasting longer, and this study recommends moving to a 10 year life for this account.

FERC Account 397 General Communication Equipment – AES (proposed 15 year life)

This account consists of miscellaneous automated energy services ("AES") including electronic or automated meter reading communication equipment used in general utility service. The current investment is $7.1 million. The current approved life of 15 years should be retained.

FERC Account 397 General Communication Equipment – EMS (proposed 15 year life)

This account consists of energy management system ("EMS") communication equipment used for energy monitoring and controlling equipment to manage general utility service. The current investment is $47.3 million. The current approved life of 15 years should be retained.

FERC Account 398 General Miscellaneous Equipment (proposed 15 year life)

This account consists of miscellaneous equipment used in general utility service. The current investment is $2.72 million. However, $66 thousand is considered fully accrued so there will be an adjusted balance of $2.66 million. The current approved life of 15 years should be retained.

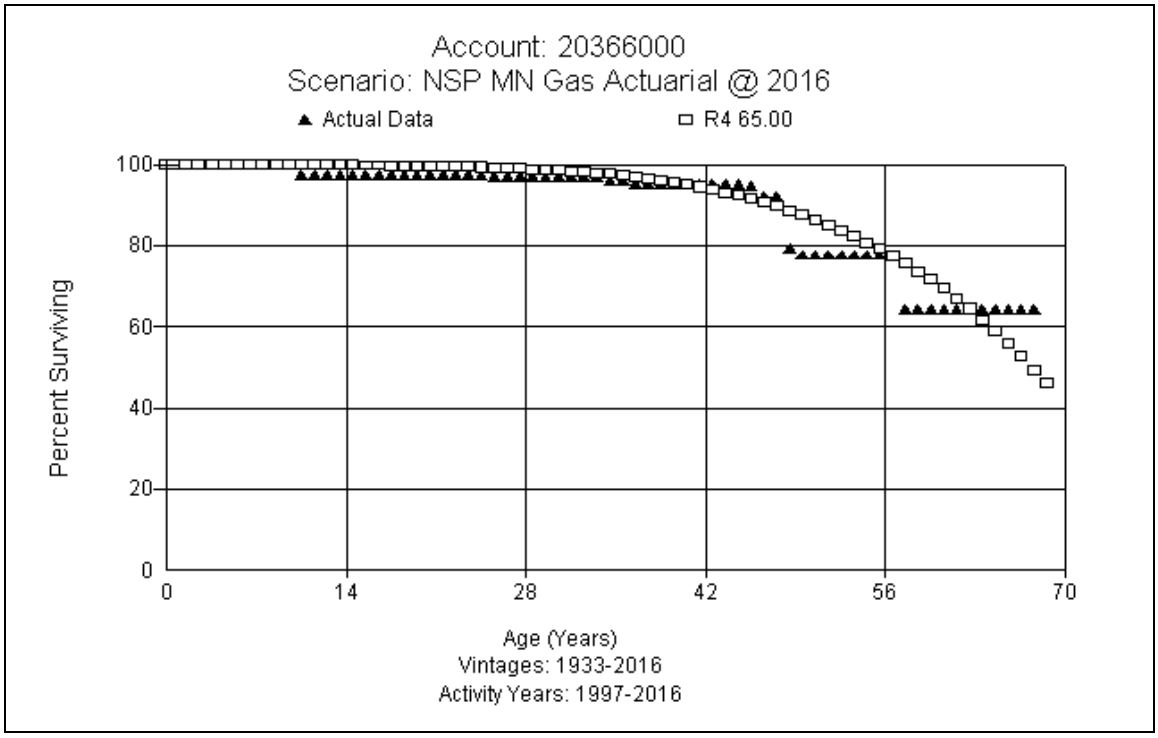
GAS PLANT

TRANSMISSION

Transmission Accounts, FERC Accounts 366 - 369

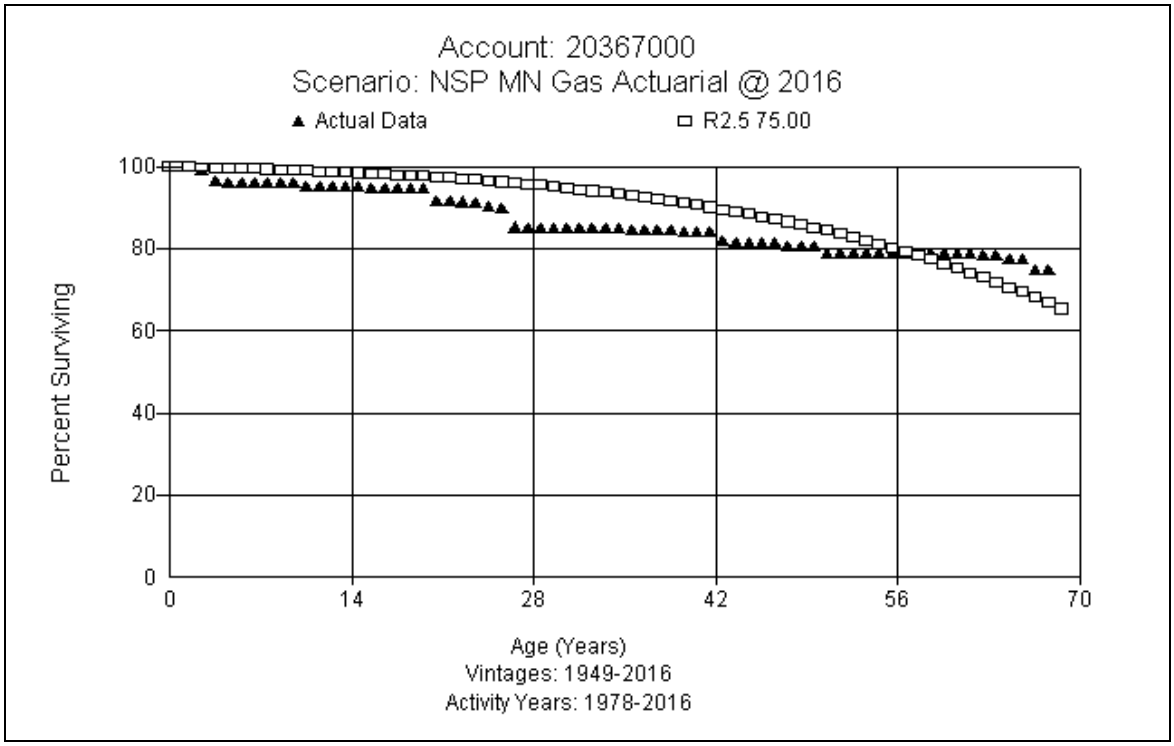
FERC Account 366 Transmission Structures & Improvements (proposed 65 year life with a R4 dispersion curve)

This account includes the cost of structures and improvements used in conjunction with transmission operations such as buildings, fences, or other structures. The plant balance in this account is $1.1 million. The current approved life is 52 years with a R3 dispersion curve. Life analysis shows a longer life. Based on actuarial analysis, a 65 year life with a R4 dispersion curve is recommended. A graph of the observed life table vs. the proposed life and curve is shown below.



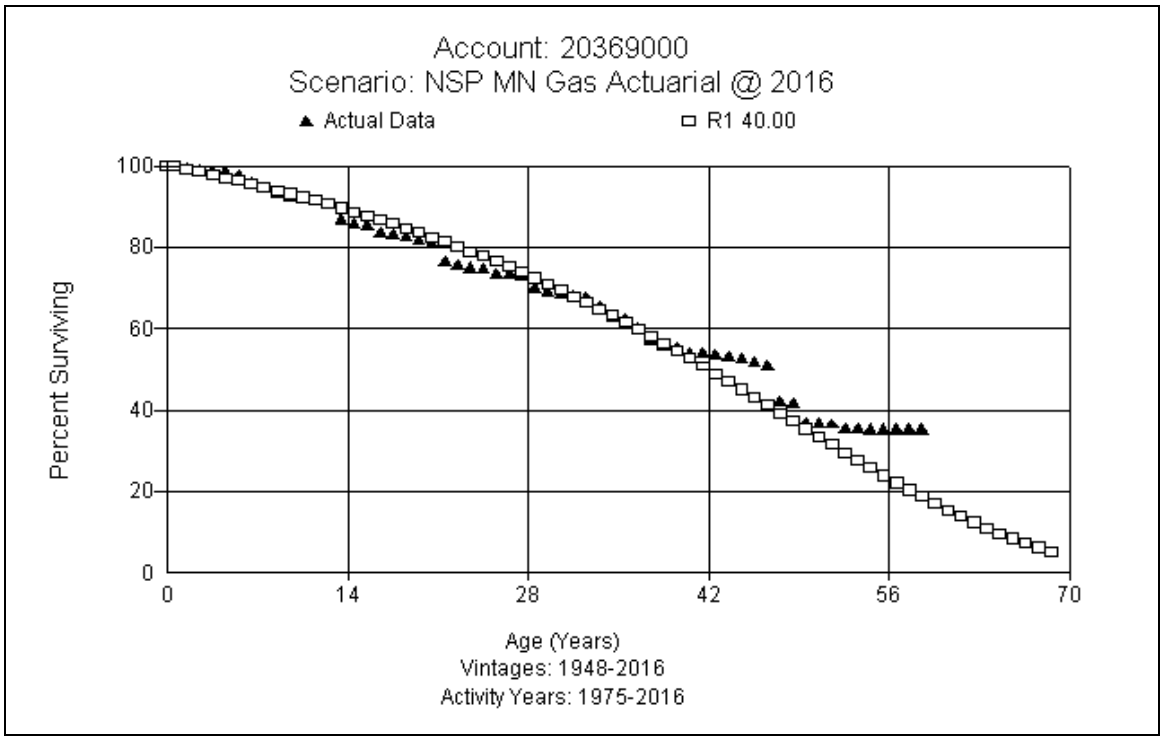
FERC Account 367 Transmission Mains (proposed 75 year life with a R2.5 dispersion curve)

This account includes the cost of transmission system mains including excavation costs, pipe, valves, and other equipment. The plant balance in this account is $65.8 million. The current approved life is 75 years with a R2.5 dispersion curve. There are only 100 miles of transmission mains in Minnesota – nothing older than 1940s (very few miles prior to 1950s). A large project started in 2013 to replace nearly 15% of the transmission pipe (pressure coupled). Much of it was installed in late 1960s and early 1970s. For the existing asset base, 13 miles was installed in the 1940s, 27 miles in 1950s, 6 miles in the 60s, 10 miles in the70s, 3 miles in the 80s, 13 miles in the 1990s (1995), with the rest being newer. Based on actuarial analysis and the mix of assets, this study recommends retaining a 75 year life with a R2.5 dispersion curve. A graph of actual data versus the proposed curve is shown below.



FERC Account 369 Transmission Measure & Regulating Station Equipment (proposed 40 year life with a R1 dispersion curve)

This account includes the costs of meters, gauges, and other equipment used to measure or regulate gas in connection with transmission city gate (town border station) operations. The plant balance in this account is $13.6 million. The current approved life is 33 years with a R1.5 dispersion curve. Measurement equipment is replaced as technology improves – (e.g. from mercury meters, to chart recorders, to electronic flow meters). Life indications across various placement and experience bands show the 40 R1 to be a good match. Based on actuarial analysis and the mix of assets, this study recommends moving to a 40 year life with a R1 dispersion curve. A graph of actual data versus the proposed curve is shown below.

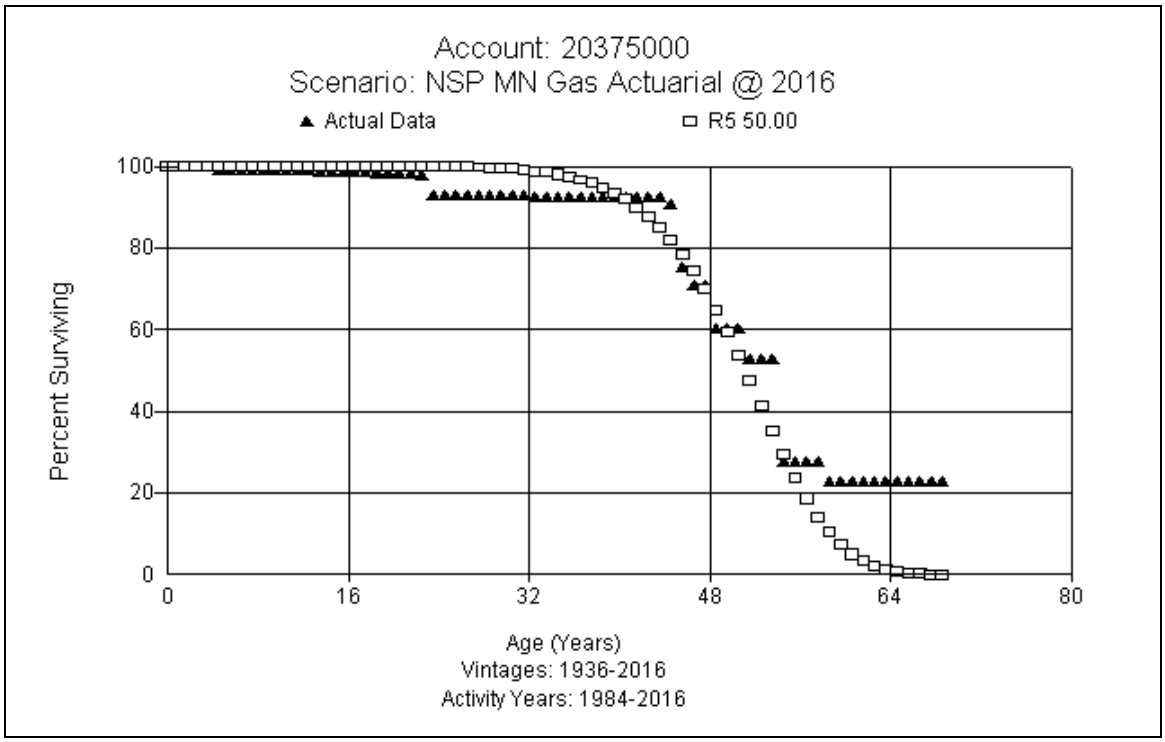


DISTRIBUTION

Distribution Accounts, FERC Accounts 375 - 380

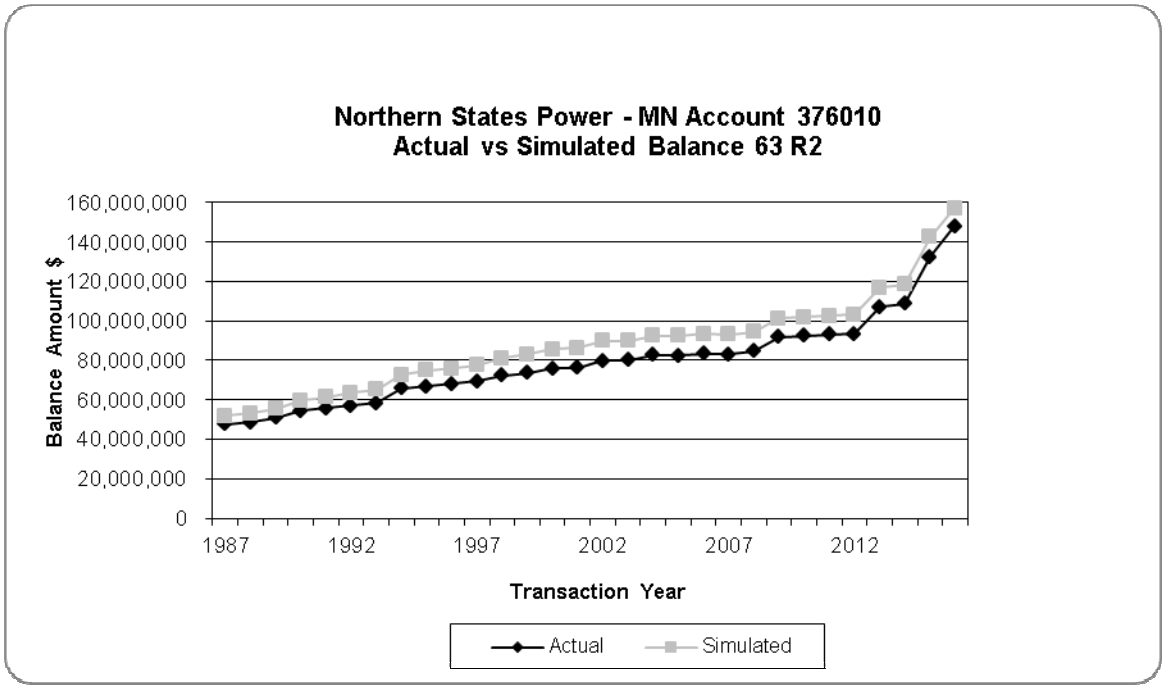
FERC Account 375 Distribution Structures & Improvements (proposed 50 year life with a R5 dispersion curve)

This account consists of small structures and improvements to such structures and associated assets at city gates and on the main line distribution system. The current investment is $728 thousand for Minnesota. The current approved life is 41 year life with a R5 dispersion curve. Based on judgment and general expectations for structures, this study recommends moving to a 50 year life while retaining the R5 dispersion curve for this account. A graph of actual data versus the proposed curve is shown below.



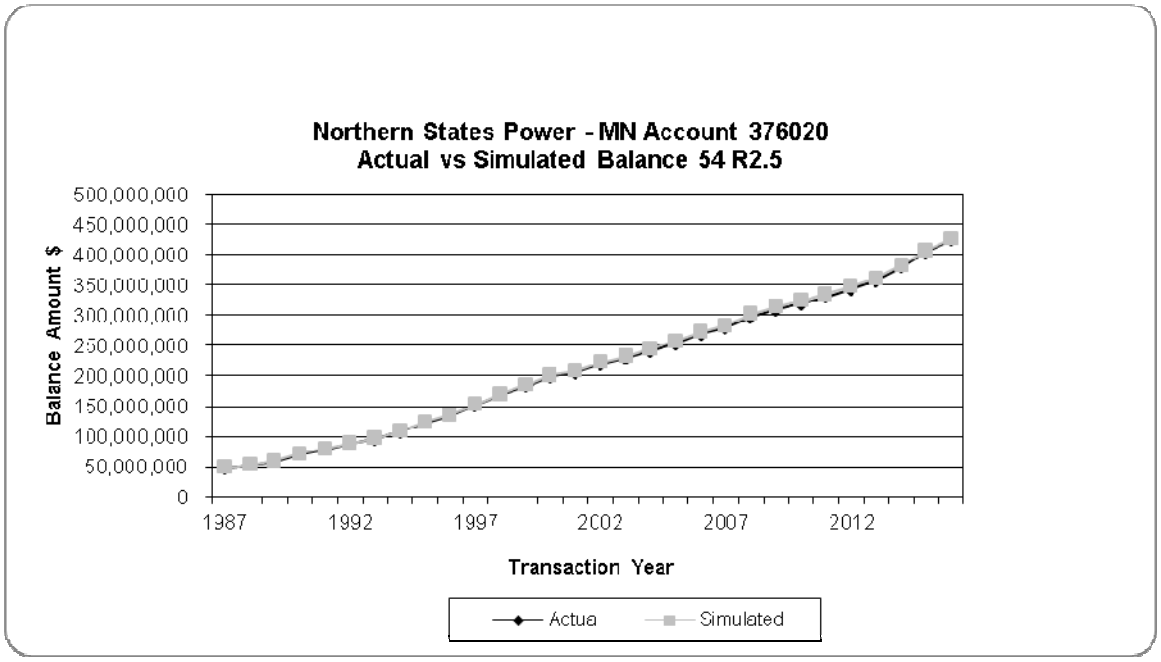
FERC Account 376 Distribution Mains – Metallic (proposed 63 year life with a R2 dispersion curve)

This account includes all steel mains. The current approved life is 51 years with a R1.5 dispersion curve. The current investment balance for Minnesota is $135.1 million for this account. Life analysis results are based on total Company data. The average age of facilities is younger than many other utilities driven by growth in the mid to late 1990s. Actuarial data only exists from 2001 forward. SPR analysis shows a longer life in more recent periods. Based on judgment, this study recommends a change to a 63 year life with a R2 dispersion curve for this account. A comparison of actual versus simulated balances is shown below for the 63 year life with a R2 dispersion curve.



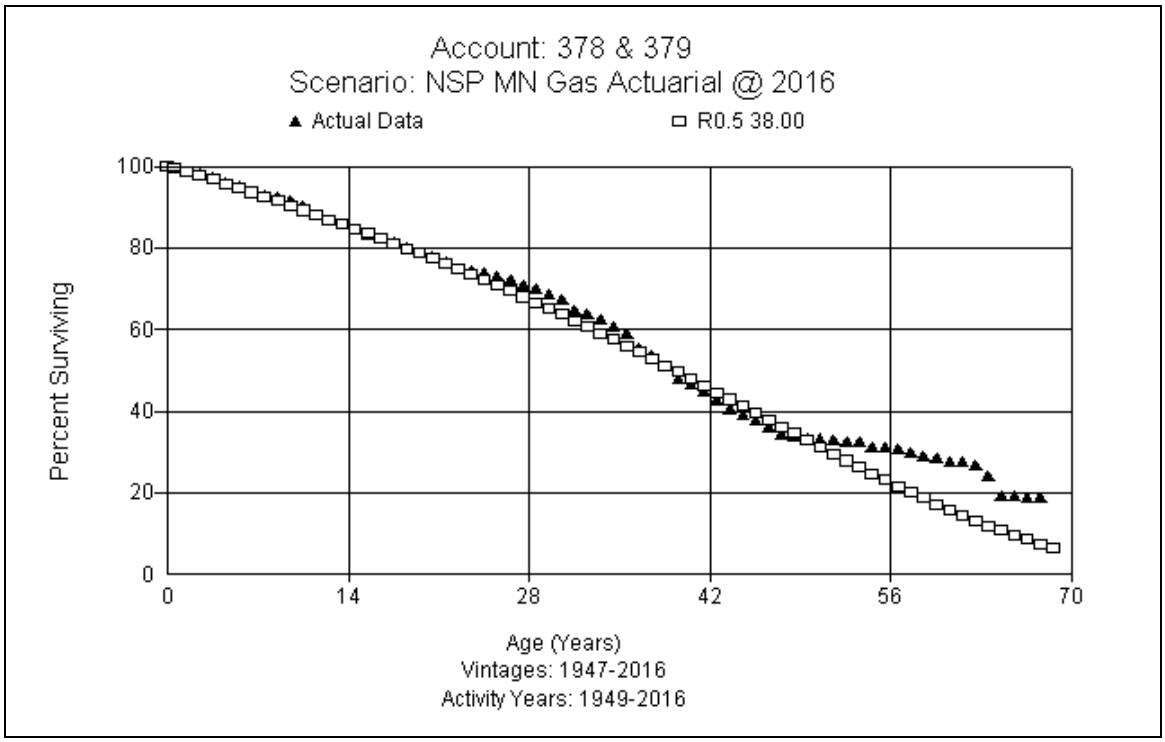
FERC Account 376 Distribution Mains – Plastic (proposed 54 year life with a R2.5 dispersion curve)

This account includes all plastic mains. The current approved life is 45 years with a R2.5 dispersion curve. The current investment balance for Minnesota is $384.4 million for this account. Life analysis results are based on total Company data. Company personnel report that 99% of new distribution mains are plastic. The Company is aggressively replacing pre 1960's assets, with early 1970's polyethylene targeted next. Actuarial data only exists from 2001 forward. SPR analysis shows a similar life to the existing approved life. Based on judgment, this study recommends a 54 year life with a R2.5 dispersion curve. A comparison of actual versus simulated balances is shown below for the 54 year life and R2.5 dispersion curve.



FERC Account 378 Distribution Measure & Regulating Station Equipment – General (proposed 38 year life with a R0.5 dispersion curve)

This account consists of meters, gauges, and other equipment used in measuring and regulating gas in connection with distribution system operations other than the measurement of gas deliveries city gate and to customers. The current approved life is a 38 year life with a R0.5 dispersion curve. The current investment balance for Minnesota is $22.8 million for this account. Life analysis results are based on total Company data. Consistent with the last depreciation study, this study combines the assets in Account 378 and 379 due to the similarity between the assets in each account. Actuarial analysis showed that a 38 year life with a R0.5 dispersion curve is a good match across the various experience bands. This study recommends retaining the existing 38 year life with a R0.5 dispersion. A graph of actual data versus the proposed curve is shown below.

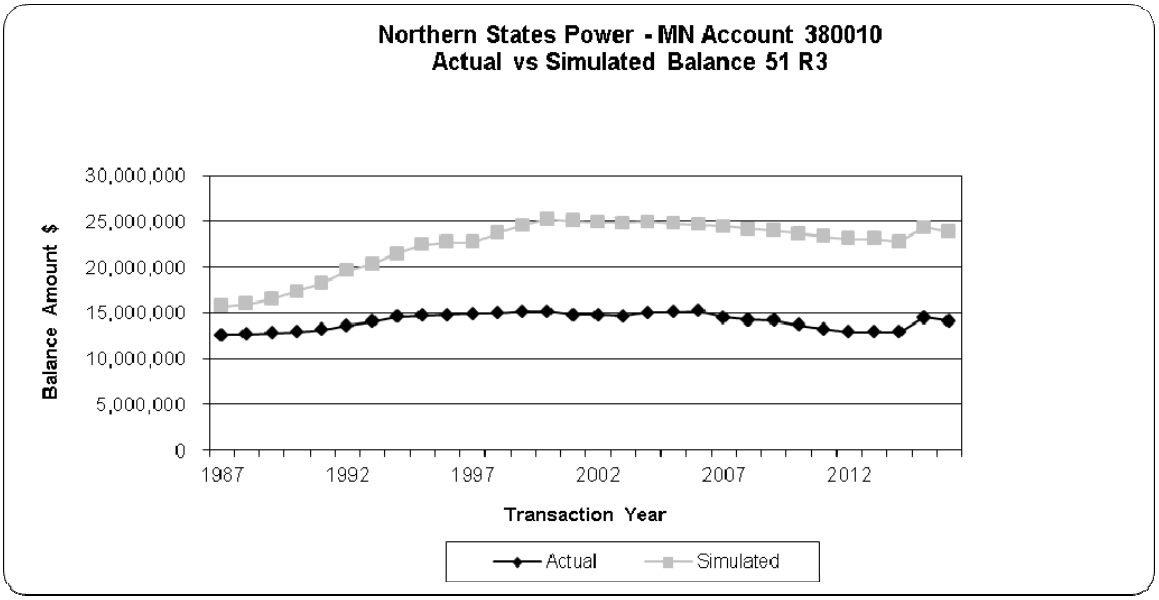


FERC Account 379 Distribution Measure & Regulating Station Equipment - City Gate (proposed 38 year life with a R0.5 dispersion curve)

This account includes the measuring and regulating devices and other apparatus at city gate stations. There is a current investment of $1.4 million for Minnesota in this account. The current approved life is a 38 year life with a R0.5 dispersion curve. Consistent with the prior study Account 378 and 379 were combined for life analysis purposes due to the similarity of the assets, similarity of use and expected lives. The resulting recommendation is a 38 year life with a R0.5 dispersion curve for both accounts. A graph of actual data versus the proposed curve is shown above in Account 378.

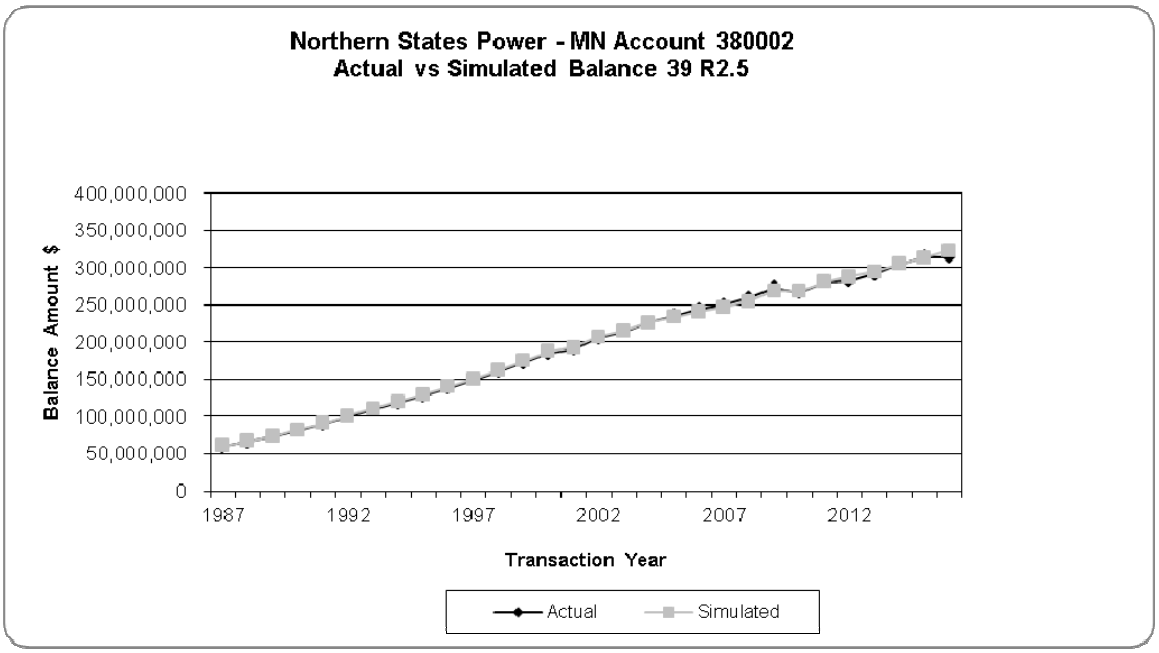
FERC Account 380 Distribution Services - Metallic (proposed 51 year life with a R3 dispersion curve)

Service lines are the steel pipes and accessories leading from the main to the customers' premises. This account has a current investment of $12.6 million for Minnesota. The current approved life is 40 years with a S3 dispersion curve. Life analysis results are based on total Company data. Age is the primary driver of retirement of services. In a renewal area (road or otherwise), the practice is to renew all services when mains are renewed. Normal processes also trigger replacements (e.g. leak issues or compression coupled). Since actuarial data exists only for 2001 forward, this account was analyzed using SPR. Life analysis results show a longer life for this account than is currently approved. Since processes are in place to improve life expectations in this account, this study recommends moving to a 51 year life and R3 dispersion curve for this account. A comparison of actual versus simulated balances is shown below for the 51 R3 curve.



FERC Account 380 Distribution Services - Plastic (proposed 39 year life with a R2.5 dispersion curve)

Service lines are the plastic pipes and accessories leading from the main to the customers' premises. This account has a current investment of $272.7 million for Minnesota. Life analysis results are based on total Company data. The current approved life is 39 R2.5. Since actuarial data exists only for 2001 forward, this account was analyzed using SPR. Life analysis results show a similar life to the existing approved life for this account. This study recommends retaining the existing 39 year life with a R2.5 dispersion curve for this account. A comparison of actual versus simulated is shown for the proposed 39 year life and R2.5 dispersion curve.

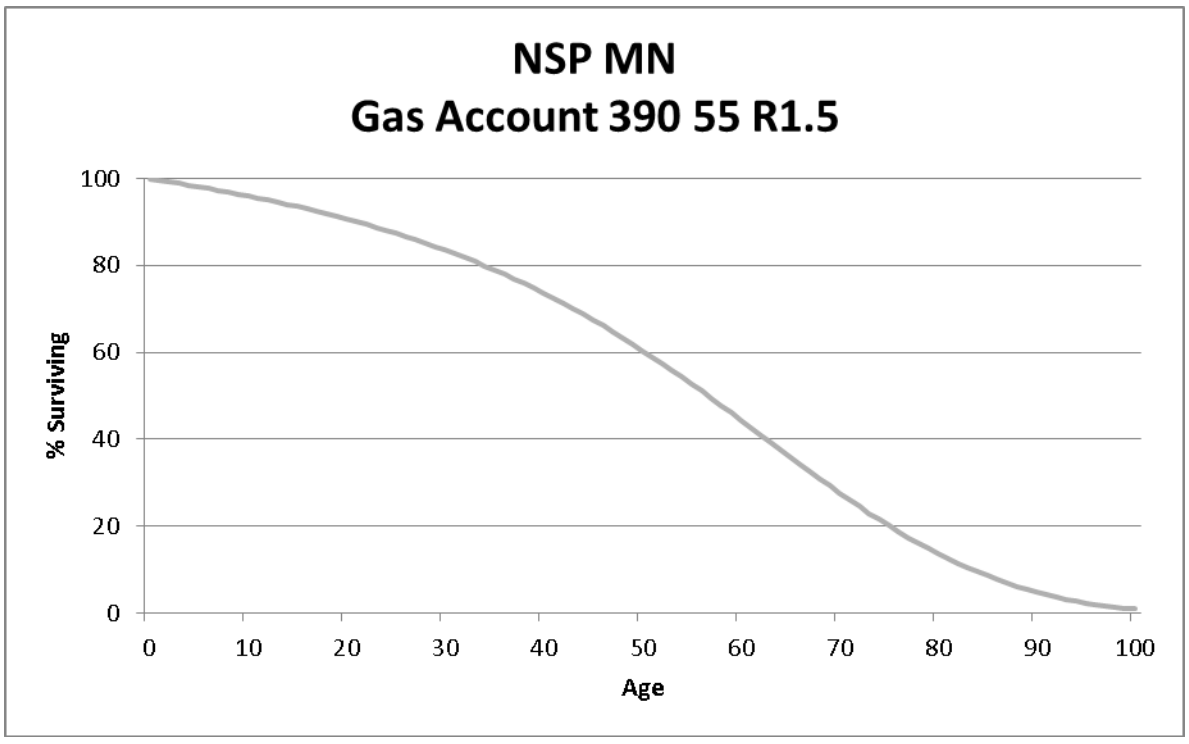


GENERAL

General Accounts, FERC Accounts 390

FERC Account 390 General Structures & Improvements (proposed 55 year life with a R1.5 dispersion curve)

This account includes the cost of general structures and improvements used for utility service. The current investment balance is $1.5 million. The current approved life is 55 years with a R1.5 dispersion curve. Gas mortality data in this account shows a shorter life than currently approved, but this trend is not expected to continue. Based on judgment, this study proposes to retain the existing 55 year life with a R1.5 dispersion curve for this account. A graph of the proposed curve for this account is shown below.



GAS VINTAGE GROUP (AMORTIZED) ACCOUNTS

GAS DISTRIBUTION

Account 381 Distribution Meters (proposed 20 year life)

This account includes the cost of meters and house regulators installed after 1994. The current investment is $105.1 million for Minnesota. However, $12.9 million is considered fully accrued and results in an adjusted study balance of $92.2 million. The current approved life of 20 years should be retained.

Account 381 Distribution Meters - Telemetering (proposed 8 year life)

This account includes the cost of telemetering assets. The current investment is $37 thousand for Minnesota. However, the current investment is fully amortized. The current approved life of 8 years should be retained. This analysis is for any future investment in this account.

Account 383 Distribution House Regulators (proposed 20 year life)

This account includes the cost of house regulators installed before 1995 that were not combined with the meter account. The current investment is $10.1 million for Minnesota. The current approved life of 20 years should be retained.

GAS GENERAL PLANT VINTAGE GROUP (AMORTIZED) ACCOUNTS

The same life parameters used for electric plant are proposed for amortized gas plant due to the similar operations and policies. The table below summarizes recommendations and plant balances by account.

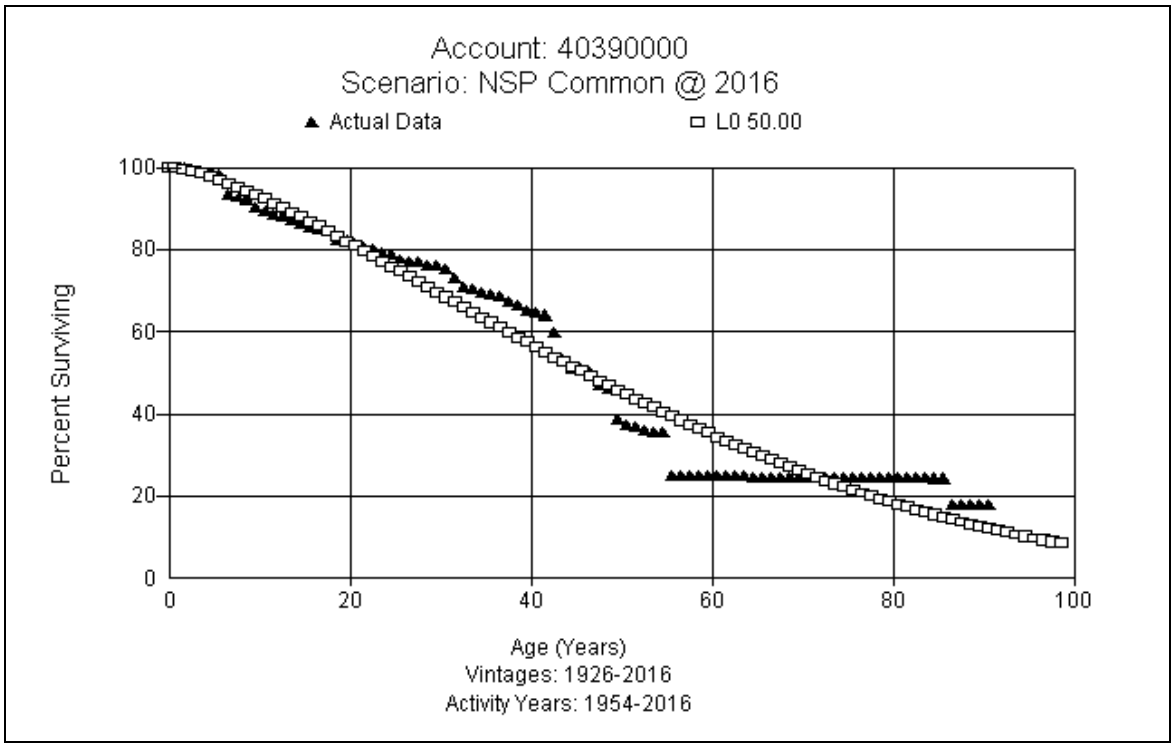
Acct	Description	Plant $ x 000	Fully Accrued $ x 000	Adjusted $ x 000	Current Life	Proposed Life
Intangible						
303	Computer Software - 5 Year	7,256.6	3,062.6	4,194.0	5	5
303	Computer Software – 10 Year	234.3	0.0	234.3	10	10
General Plant						
391	Office Furniture & Equipment	906.4	0.0	906.4	20	20
391	Network Equipment	38.0	0.0	38.0	4	6
392	Transportation Equipment - Automobiles	376.9	0.0	376.9	10	10
392	Transportation Equipment – Light Trucks	6,054.5	847.5	5,207.0	12	10
392	Transportation Equipment - Trailers	1,504.1	50.3	1,453.8	15	12
392	Transportation Equipment - Heavy Trucks	8,425.9	725.1	7,700.8	14	12
393	Stores Equipment	10.1	0.0	10.1	20	20
394	Tools, Shop & Garage Equipment	6,257.8	59.1	6,198.7	15	15
395	Laboratory Equipment	0.0	0.0	0.0	10	10
396	Power Operated Equipment	2,858.2	0.0	2,858.2	12	12
397	Communication Equipment	4,722.3	0.0	4,722.3	9	10
397	Communication Equipment – Two Way	120.1	0.0	120.1	9	10
397	Communication Equipment - AES	15,492.8	0.0	15,492.8	15	15
397	Communication Equipment - EMR	764.4	0.0	764.4	15	15
398	Miscellaneous Equipment	50.7	0.0	50.7	15	15

COMMON UTILITY PLANT DEPRECIATED ACCOUNTS

General Accounts, FERC Accounts 390

FERC Account 390 General Structures & Improvements (proposed 50 year life with a L0 dispersion curve)

This account includes the cost of general structures and improvements used for utility service. There is approximately $151.8 million in this account. The approved life for this account is 55 years and a R1.5 dispersion curve. Based on actuarial analysis, this study recommends moving to a 50 year life with a L0 dispersion curve.



FERC Account 390 General Structures & Improvements - Leased (proposed 10 life with a SQ dispersion curve)

This account includes the cost of leasehold improvements used for utility service. There is approximately $18.5 million in this account for one property where the lease is set to expire June 2026. The approved life for this account is 10 years with a SQ dispersion curve. Based on type of assets this study recommends retaining the existing 10 year life with a SQ dispersion curve. However, if the lease term changes the asset life should change accordingly. No graph is shown.

GENERAL PLANT VINTAGE GROUP (AMORTIZED) ACCOUNTS

The same life parameters used for electric and gas plant are proposed for amortized common plant due to the similar operations and policies with the exception of Account 391 Network Equipment. In Common plant, there are a large number of laptops booked in this account and a 5 year life is recommended for Common plant. The table below summarizes recommendations and plant balances by account.

Acct	Description	Plant $ x 000	Fully Accrued $ x 000	Adjusted $ x 000	Current Life	Proposed Life
Intangible						
303	Computer Software - 3 Year	7,673.5	7,673.5	0.0	3	3
303	Computer Software - 5 Year	197,541.3	87,306.0	110,232.3	5	5
303	Computer Software - 7 Year	44,140.6	44,140.6	0.0	7	7
303	Computer Software - 10 Year	68,449.2	58,267.7	10,181.5	10	10
303	Computer Software - 15 Year	61,015.4	0.0	61,015.4	15	15
General Plant						
391	Office Furniture & Equipment	27,141.6	2,929.1	24,212.5	20	20
391	Network Equipment	100,446.2	3.3	100,442.9	4	5
392	Transportation Equipment - Automobiles	823.5	0.0	823.5	10	10
392	Transportation Equipment - Light Trucks	3,431.5	25.3	3,406.2	12	10
392	Transportation Equipment - Trailers	1,099.7	104.3	995.3	15	12
392	Transportation Equipment - Heavy Trucks	5,505.4	1,252.3	4,253.1	14	12
393	Stores Equipment	246.2	0.0	246.2	20	20
394	Tools, Shop & Garage Equipment	4,041.7	10.9	4,030.8	15	15
395	Laboratory Equipment	0.0	0.0	0.0	10	10
396	Power Operated Equipment	990.9	281.2	709.7	12	12
397	Communication Equipment	964.4	248.6	715.8	9	10
397	Communication Equipment - Two Way	75.1	0.0	75.1	9	10
398	Miscellaneous Equipment	582.2	0.0	582.2	15	15

Salvage Analysis

When a capital asset is retired, physically removed from service and finally disposed of, terminal retirement is said to have occurred. The residual value of a terminal retirement is called gross salvage. Net salvage is the difference between the gross salvage (what the asset was sold for) and the removal cost (cost to remove and dispose of the asset). Salvage and removal cost percentages are calculated by dividing the current cost of salvage or removal by the original installed cost of the asset. Some plant assets can experience significant negative removal cost percentages due to the timing of the original addition versus the retirement.

The net salvage analysis uses the history of the individual accounts to estimate the future net salvage that NSP can expect in its operations. This study also removes reimbursements for relocations that may have been booked to gross salvage. Any associated retirements are also removed from the data for consistency. As a result, the analysis not only looks at the historical experience of NSP, but also takes into account recent and expected changes in operations that could reasonably lead to different future expectations for net salvage than were experienced in the past.

Salvage Characteristics

For most accounts, data for retirements, gross salvage, and cost of removal for each account is available from 1950-2016. Some accounts have shorter periods with available data. Moving averages, which remove timing differences between retirement and salvage and removal cost, were analyzed over periods varying from two to 10 years.

ELECTRIC PLANT

TRANSMISSION

Transmission Accounts, FERC Accounts 352-358

FERC Account 352 Transmission Structures & Improvements (proposed negative 5 percent net salvage)

This account consists of any gross salvage and cost of removal associated transmission structures and improvements which include buildings, fencing and other structures found in a transmission substation. The approved net salvage for this account is 0 percent. The most recent moving averages show negative net salvage and increased costs of removal due to changes in capacity and station reconfiguration. Taking that into consideration, negative 5 percent net salvage for this account is recommended.

FERC Account 353 Transmission Station Equipment (proposed negative 15 percent net salvage)

This account consists of any gross salvage and cost of removal associated with transmission substation equipment, from circuit breakers to switchgear. The approved net salvage for this account is negative 10 percent. The most recent 5 and 10 year moving averages show negative 16.93 percent and negative 20.10 percent net salvage respectively. Moving in the direction of that trend, negative 15 percent net salvage for this account is recommended.

FERC Account 354 Transmission Towers & Fixtures (proposed negative 35 percent net salvage)

This account consists of any gross salvage and cost of removal associated with transmission towers and fixtures, which are used to transmit electricity at a voltage of 69 kV and above. This study recommends the current approved net salvage of negative 35 percent should be retained.

FERC Account 355 Transmission Poles & Fixtures (proposed negative 50 percent net salvage)

This account consists of any gross salvage and cost of removal associated with transmission poles and fixtures, which are used to transmit electricity at a voltage of 69 kV and above. The approved net salvage for this account is negative 35 percent. The most recent 5 and 10 year moving averages show negative 108.84 percent and negative 105.28 percent net salvage respectively. Moving in the direction of that trend, negative 50 percent net salvage for this account is recommended.

FERC Account 356 Transmission Overhead Conductor & Devices (proposed negative 35 percent net salvage)

This account consists of any gross salvage and cost of removal associated with Transmission overhead conductors, which are used to transmit electricity at voltages of 69 kV and above. The approved net salvage for this account is negative 30 percent. The most recent 5 and 10 year moving averages show negative 69.71 percent and negative 41.68 percent net salvage respectively. Moving in the direction of that trend, negative 35 percent net salvage for this account is recommended.

FERC Account 357 Transmission Underground Conduit (proposed 0 percent net salvage)

This account consists of any gross salvage and cost of removal associated with underground conduit. The approved net salvage for this account is 0 percent. There is limited retirement and net salvage activity in recent years. . Based on judgment, retention of 0 percent net salvage for this account is recommended.

FERC Account 358 Transmission Underground Conductor & Devices (proposed negative 5 percent net salvage)

This account consists of any gross salvage and cost of removal associated

with underground conductor. The lines are low pressure oil filled; paper wrapped 500 MCM copper cable. The approved net salvage for this account is 0 percent. Data is limited for this account. The most recent 5 and 10 year moving averages show negative 132.36 percent and negative 16.03 percent net salvage, respectively. Retirement data is limited for this account, however removal costs are sometimes quite high when retirements occur; therefore, moving to negative 5 percent net salvage for this account is recommended.

DISTRIBUTION

Distribution Accounts, FERC Accounts 361 - 373

FERC Account 361 Distribution Structures & Improvements (proposed negative 30 percent net salvage)

This account contains any gross salvage and cost of removal associated with facilities ranging from fencing to other structures found in distribution substations. The approved net salvage for this account is negative 30 percent. The most recent 5 and 10 year moving averages show negative 196.40 percent and negative 139.35 percent net salvage respectively. Since there is a low level of retirement data and it is sporadic for this account, retention of negative 30 percent net salvage for this account is recommended.

FERC Account 362 Distribution Station Equipment (proposed negative 25 percent net salvage)

This account contains any gross salvage and cost of removal associated with a wide variety of distribution substation equipment, from circuit breakers to switchgear. The approved net salvage for this account is negative 20 percent The most recent 5 and 10 year moving averages show negative 26.77 percent and negative 26.68 percent net salvage respectively. Moving in the direction of that trend, negative 25 percent net salvage for this account is recommended.

FERC Account 364 Distribution Poles, Towers & Fixtures (proposed negative

120 percent net salvage)

This account contains any gross salvage and cost of removal associated with poles and towers of various material types: wood and steel. The approved net salvage for this account is negative 100 percent. The most recent 5 and 10 year moving averages show negative 255.40 percent and negative 244.52 percent net salvage respectively. Moving in the direction of that trend, negative 120 percent net salvage for this account is recommended.

FERC Account 365 Distribution Overhead Conductor & Devices (proposed negative 25 percent net salvage)

This account consists of any gross salvage and cost of removal associated with overhead conductor of various thickness, as well as various switches and reclosers. The approved net salvage for this account is negative 20 percent. The most recent 5 and 10 year moving averages show negative 44.23 percent and negative 33.49 percent net salvage respectively. Moving in the direction of that trend, negative 25 percent net salvage for this account is recommended.

FERC Account 366 Distribution Underground Conduit (proposed negative 20 percent net salvage)

This account consists of any gross salvage and cost of removal associated with conduit, duct banks, vaults, manholes, and ventilating system equipment. The approved net salvage for this account is negative 10 percent. The most recent 5 and 10 year moving averages show negative 276.23 percent and negative 89.75 percent net salvage respectively. Moving in the direction of that trend, negative 20 percent net salvage for this account is recommended.

FERC Account 367 Distribution Underground Conductor & Devices (proposed negative 10 percent net salvage)

This account consists of any gross salvage and cost of removal associated with underground distribution conductor, switches, and switchgear. The approved

net salvage for this account is 0 percent. The most recent 5 and 10 year moving averages show negative 45.44 percent and negative 26.99 percent net salvage respectively. Moving in the direction of that trend, a negative 10 percent net salvage for this account is recommended.

FERC Account 369 Distribution Services – Overhead (proposed negative 85 percent net salvage)

This account includes any gross salvage or cost of removal associate with overhead services. The approved net salvage for this account is negative 70 percent. The last depreciation study combined data for overhead and underground services, whereas this study separates the two. The most recent 5 and 10 year moving averages show negative 163.18 percent and negative 127.99 percent net salvage respectively. Moving in the direction of that trend, negative 85 percent net salvage for this account is recommended.

FERC Account 369 Distribution Services – Underground (proposed negative 5 percent net salvage)

This account includes any gross salvage and cost of removal associated with underground services. The approved net salvage for this account is negative 5 percent. The last study combined data for overhead and underground services, whereas this study separates the two. The most recent 5 and 10 year moving averages show negative 50.02 percent and negative 7.72 percent net salvage respectively. Retaining the existing negative 5 percent net salvage for this account is recommended.

FERC Account 373 Distribution Street Lighting & Signal Systems (proposed negative 40 percent net salvage)

This account includes any gross salvage and cost of removal associated with distribution streetlights, conductor, conduit, luminaire, and standards. The approved net salvage for this account is negative 35 percent. The most recent 5 and 10 year

moving averages show negative 90.29 percent and negative 91.90 percent net salvage respectively. Moving in the direction of that trend, negative 40 percent net salvage for this account is recommended.

GENERAL

General Accounts, FERC Accounts 390

FERC Account 390 General Structures & Improvements (proposed negative 20 percent net salvage)

This account includes the any gross salvage and cost of removal associated with cost of general structures and improvements used for utility service. The approved net salvage for this account is negative 20 percent. The most recent 5 and 10 year moving averages show negative 15.70 percent and negative 19.32 percent net salvage respectively. Retaining the existing, negative 20 percent net salvage for this account is recommended.

ELECTRIC VINTAGE GROUP (AMORTIZED) ACCOUNTS

DISTRIBUTION

FERC Account 368 Distribution Line Transformers (proposed negative 5 percent net salvage)

This account consists of any gross salvage and cost of removal associated with line transformers and regulators. The approved net salvage for this account is negative 5 percent. The most recent 5 year moving averages shows negative 10.45 and negative 9.37 percent respectively. Removal and salvage vary fairly significantly over time. Therefore, retaining negative 5 percent net salvage for this account is recommended.

FERC Account 368 Distribution Line Capacitors (proposed negative 7 percent net salvage)

This account consists of line capacitors. The approved net salvage for this

account is negative 10 percent. The most recent 5 and 10 year moving averages show negative 4.18 percent and negative 6.77 percent net salvage respectively. Moving in the direction of that trend, negative 7 percent net salvage for this account is recommended.

FERC Account 370 Distribution Meters (proposed negative 5 percent net salvage)

This account includes any gross salvage and cost of removal associated with new distribution meters. The approved net salvage for this account is zero percent. The most recent 5 and 10 year moving averages show negative 7.99 percent and negative 11.77 percent net salvage respectively. Moving in the direction of that trend, negative 5 percent net salvage for this account is recommended.

FERC Account 370 Distribution Meters – Old (proposed zero percent net salvage)

This account includes any gross salvage and cost of removal associated with all old distribution meters. The approved net salvage for this account is zero percent. Limited data shows zero percent net salvage for this account. Thus, retention of zero percent net salvage for this account is recommended.

GENERAL PLANT VINTAGE GROUP (AMORTIZED) ACCOUNTS

FERC Account 303 Intangible Computer Software – 5 year (proposed zero percent net salvage)

This account consists of any gross salvage and cost of removal associated with miscellaneous computer software. The approved net salvage for this account is zero percent. The most recent 5 and 10 year moving averages show zero percent net salvage. Based on history and judgment, retention of zero percent net salvage for this account is recommended.

FERC Account 391 General Office Furniture & Equipment (proposed zero percent net salvage)

This account consists of any gross salvage and cost of removal associated with miscellaneous office furniture such as desks, chairs, filing cabinets, and tables used for general utility service. The approved net salvage for this account is zero percent. The most recent 5 and 10 year moving averages show negative 4.52 percent and negative 1.43 percent, respectively. Based on history and judgment, retention of zero percent net salvage for this account is recommended.

FERC Account 391 General Network Equipment (proposed zero percent net salvage)

This account consists of any gross salvage and cost of removal associated with computer equipment used for general utility service. The approved net salvage for this account is zero percent. The most recent 5 and 10 year moving average shows zero percent net salvage for both periods. Based on history and judgment, retention of zero percent net salvage for this account is recommended.

FERC Account 392 General Transportation Equipment - Automobiles (proposed 5 percent net salvage)

This account consists of any gross salvage and cost of removal associated with automobiles used for general utility service. The approved net salvage for this

account is zero percent. In the last depreciation study, the Company applied any gross salvage for transportation equipment to the new asset. That practice has been discontinued and all salvage proceeds are now being booked to the accumulated provision for depreciation. Based on recent retirement history, 5 percent net salvage for this account is recommended.

FERC Account 392 General Transportation Equipment - Light Trucks (proposed 10 percent net salvage)

This account consists of any gross salvage and cost of removal associated with light trucks used for general utility service. The approved net salvage for this account is zero percent. In the last depreciation study, the Company applied any gross salvage for transportation equipment to the new asset. That practice has been discontinued and all salvage proceeds are now being booked to the accumulated provision for depreciation. Based on recent retirement history, 10 percent net salvage for this account is recommended.

FERC Account 392 General Transportation Equipment - Trailers (proposed 20 percent net salvage)

This account consists of any gross salvage and cost of removal associated with trailers used for general utility service. The approved net salvage for this account is zero percent. In the last depreciation study, the Company applied any gross salvage for transportation equipment to the new asset. That practice has been discontinued and all salvage proceeds are now being booked to the accumulated provision for depreciation. Based on recent retirement history, 20 percent net salvage for this account is recommended.

FERC Account 392 General Transportation Equipment - Heavy Trucks (proposed 15 percent net salvage)

This account consists of any gross salvage and cost of removal associated with heavy trucks used for general utility service. The approved net salvage for this

account is zero percent. In the last depreciation study, the Company applied any gross salvage for transportation equipment to the new asset. That practice has been discontinued and all salvage proceeds are now being booked to the accumulated provision for depreciation. Based on recent retirement history, 15 percent net salvage for this account is recommended.

FERC Account 393 General Stores Equipment (proposed zero percent net salvage)

This account consists of any gross salvage and cost of removal associated with stores equipment used for general utility service. The approved net salvage for this account is zero percent. The most recent 5 and 10 year moving averages show less than 1 percent net salvage for both periods. Based on history and judgment, retention of zero percent net salvage for this account is recommended.

FERC Account 394 General Tools, Shop & Garage Equipment (proposed zero percent net salvage)

This account consists of any gross salvage and cost of removal associated with various items or tools used in shop and garages such as air compressors, grinders, mixers, hoists, and cranes. The approved net salvage for this account is zero percent. The most recent 5 and 10 year moving averages show zero percent net salvage. Based on history and judgment, retention of zero percent net salvage for this account is recommended.

FERC Account 395 General Laboratory Equipment (proposed zero percent net salvage)

This account consists of any gross salvage and cost of removal associated with laboratory equipment used in general utility service. The approved net salvage for this account is zero percent. The most recent 5 and 10 year moving averages show zero percent net salvage. Based on history and judgment, retention of zero percent net salvage is recommended for this account.

FERC Account 396 General Power Operated Equipment (proposed 15 percent net salvage)

This account consists of any gross salvage and cost of removal associated with bulldozers, forklifts, trenchers, and other power operated equipment that cannot be licensed on roadways. The approved net salvage for this account is zero percent. In the last depreciation study, the Company applied any gross salvage for transportation equipment to the new asset. That practice has been discontinued and all salvage proceeds are now being booked to the accumulated provision for depreciation. Based on recent retirement history, 15 percent net salvage for this account is recommended.

FERC Account 397 General Communication Equipment (proposed zero percent net salvage)

This account consists of any gross salvage and cost of removal associated with miscellaneous communication equipment used in general utility service. The approved net salvage for this account is zero percent. The most recent 5 and 10 year moving averages show negative 0.35 percent and negative 0.56 percent net salvage respectively. Following that trend, retention of zero percent net salvage for this account is recommended.

FERC Account 397 General Communication Equipment – Two Way (proposed zero percent net salvage)

This account consists of any gross salvage and cost of removal associated with miscellaneous two way communication equipment used in general utility service. The approved net salvage for this account is zero percent. Based on experience with the other 397 accounts, retention of zero percent net salvage for this account is recommended.

FERC Account 397 General Communication Equipment – AES (proposed zero

percent net salvage)

This account consists of any gross salvage and cost of removal associated with miscellaneous AES including electronic or automated meter reading communication equipment used in general utility service. The approved net salvage for this account is zero percent. No data for this subaccount exists. Based on experience with the other 397 accounts, retention of zero percent net salvage for this account is recommended.

FERC Account 397 General Communication Equipment – EMS (proposed zero percent net salvage)

This account consists of any gross salvage and cost of removal associated with EMS communication equipment used for energy monitoring and controlling equipment to manage general utility service. The approved net salvage for this account is zero percent. No data for this subaccount exists. Based on experience with the other 397 accounts and the characteristics of the assets in this account, retention of zero percent net salvage for this account is recommended.

FERC Account 398 General Miscellaneous Equipment (proposed zero percent net salvage)

This account consists of any gross salvage and cost of removal associated with miscellaneous equipment used in general utility service. The approved net salvage for this account is zero percent. There is minimal retirement experience in this account. The most recent 5 and 10 year moving averages show zero and negative 3.18 percent net salvage, respectively. Based on history and judgment, retention of zero percent net salvage for this account is recommended.

GAS DEPRECIATED PLANT

TRANSMISSION

Transmission Accounts, FERC Accounts 366 - 369

FERC Account 366 Transmission Structures & Improvements (proposed negative 5 percent net salvage)

This account includes any gross salvage and cost of removal associated with structures and improvements used in conjunction with transmission operations such as buildings, fences, or other structures. The approved net salvage for this account is negative 5 percent. There is limited retirement activity in this account. Based on history and judgment, retention of negative 5 percent net salvage for this account is recommended.

FERC Account 367 Transmission Mains (proposed negative 15 percent net salvage)

This account includes any gross salvage and cost of removal associated with the costs of transmission system mains including excavation costs, pipe, valves, and other equipment. The approved net salvage for this account is negative 15 percent. The most recent 5 and 10 year moving averages show negative 65.39 percent and negative 54.80 percent net salvage respectively. The high negative net salvage is driven by large removal cost in one year and is discounted. Based on history and judgment, retention of negative 15 percent net salvage for this account is recommended.

FERC Account 369 Transmission Measure & Regulating Station Equipment (proposed negative 30 percent net salvage)

This account includes any gross salvage and cost of removal associated with the costs of meters, gauges, and other equipment used to measure or regulate gas in connection with transmission city gate (town border station) operations. The approved net salvage for this account is negative 30 percent. The most recent 5 and 10 year moving averages show negative 75.01 percent and negative 58.19

percent net salvage respectively. Based on history and judgment, retention of negative 30 percent net salvage for this account is recommended.

DISTRIBUTION

Distribution Accounts, FERC Accounts 375 - 380

FERC Account 375 Distribution Structures & Improvements (proposed negative 5 percent net salvage)

This account any gross salvage and cost of removal associated with small structures and improvements to such structures and associated assets at city gates and on the main line distribution system. The approved net salvage for this account is zero percent. Data is limited for this account. The most recent 10 year moving averages shows negative 63.47 percent net salvage. Moving in the direction of that trend, negative 5 percent net salvage for this account is recommended.

FERC Account 376 Distribution Mains – Metallic (proposed negative 25 percent net salvage)

This account includes any gross salvage and cost of removal associated with all steel mains. The approved net salvage for this account is negative 20 percent. The most recent 5 and 10 year moving averages show negative 49.60 percent and negative 41.17 percent net salvage respectively. Moving in the direction of that trend, negative 25 percent net salvage for this account is recommended.

FERC Account 376 Distribution Mains – Plastic (proposed negative 20 percent net salvage)

This account includes any gross salvage and cost of removal associated with all plastic mains. The approved net salvage for this account is negative 15 percent. The most recent 5 and 10 year moving averages show negative 133.57 percent and negative 56.76 percent net salvage respectively. Moving in the direction of that trend, negative 20 percent net salvage for this account is recommended.

FERC Account 378 Distribution Measure & Regulating Station Equipment – General (proposed negative 25 percent net salvage)

This account consists of any gross salvage and cost of removal associated with meters, gauges, and other equipment used in measuring and regulating gas in connection with distribution system operations other than the measurement of gas deliveries city gate and to customers. The approved net salvage for this account is negative 25 percent. The most recent 5 and 10 year moving averages show negative 20.03 percent and negative 28.56 percent net salvage respectively. Retention of negative 25 percent net salvage for this account is recommended.

FERC Account 379 Distribution Measure & Regulating Station Equipment - City Gate (proposed negative 5 percent net salvage)

This account consists of any gross salvage and cost of removal associated with measuring and regulating devices and other apparatus at city gate stations. The approved net salvage for this account is negative 2 percent. The most recent 5 and 10 year moving averages show negative 73.36 percent and negative 71.54 percent net salvage respectively. There are few retirement in recent years in this account which would caution against a significant movement in net salvage. A negative 5 percent net salvage for this account is recommended.

FERC Account 380 Distribution Services - Metallic (proposed negative 40 percent net salvage)

Service lines are the steel pipes and accessories leading from the main to the customers' premises. The approved net salvage for this account is negative 40 percent. The most recent 5 and 10 year moving averages show negative 40.33 percent and negative 44.77 percent net salvage respectively. Moving in the direction of that trend, negative 40 percent net salvage for this account is recommended.

FERC Account 380 Distribution Services - Plastic (proposed negative 25 percent net salvage)

Service lines are the plastic pipes and accessories leading from the main to the customers' premises. The approved net salvage for this account is negative 30 percent. The most recent 5 and 10 year moving averages show negative 11.62 percent and negative 18.24 percent net salvage respectively. The decrease in 2016 is due to a large retirement in 2016. The 5 and 10 year bands from 2015 demonstrate a net salvage more negative than 25 percent. A negative 25 percent net salvage for this account is recommended.

GENERAL

General Accounts, FERC Accounts 390

FERC Account 390 General Structures & Improvements (proposed negative 14 percent net salvage)

This account includes any gross salvage and cost of removal associated with cost of general structures and improvements used for utility service. The approved net salvage for this account is negative 20 percent. There has been little retirement activity in this account. Based on data for Account 390 Electric and 390 Common, negative 14 percent net salvage for this account is recommended.

GAS VINTAGE GROUP (AMORTIZED) ACCOUNTS

GAS DISTRIBUTION

Account 381 Distribution Meters (proposed negative 5 percent net salvage)

This account includes any gross salvage and cost of removal associated with the cost of meters. The approved net salvage for this account is negative 3 percent. The most recent 5 and 10 year moving averages show negative 4.11 percent and negative 5.82 percent net salvage respectively. A negative 5 percent net salvage for this account is recommended.

Account 381 Distribution Meters - Telemetering (proposed zero percent net salvage)

This account includes any gross salvage and cost of removal associated with the cost of telemetering assets. The approved net salvage for this account is 0 percent. There has been limited retirement experience. Based on data and judgment, retention of zero percent net salvage for this account is recommended. This analysis is for any future investment in this account. The investment in this account is fully amortized in 2017.

Account 383 Distribution House Regulators (proposed negative 1 percent net salvage)

This account includes any gross salvage and cost of removal associated with cost of house regulators. The approved net salvage for this account is zero percent. The most recent 10 year moving average shows negative 1.25 percent net salvage. Based on recent history and judgment, negative 1 percent net salvage for this account is recommended.

GENERAL PLANT VINTAGE GROUP (AMORTIZED) ACCOUNTS

The same net salvage parameters used for electric plant are proposed for amortized gas plant due to the similar operations and policies. The table below summarizes recommendations by account.

GAS AMORTIZED ACCOUNTS

Acct	Description	Current Net Salvage	Proposed Net Salvage
Intangible			
303	Computer Software - 5 Year	0	0
303	Computer Software – 10 Year	0	0
General Plant			
391	Office Furniture & Equipment	0	0
391	Network Equipment	0	0
392	Transportation Equipment - Automobiles	0	5
392	Transportation Equipment - Light Trucks	0	10
392	Transportation Equipment - Trailers	0	20
392	Transportation Equipment - Heavy Trucks	0	15
393	Stores Equipment	0	0
394	Tools, Shop & Garage Equipment	0	0
395	Laboratory Equipment	0	0
396	Power Operated Equipment	0	15
397	Communication Equipment	0	0
397	Communication Equipment - AES	0	0
397	Communication Equipment - EMS	0	0
398	Miscellaneous Equipment	0	0

COMMON UTILITY PLANT DEPRECIATED ACCOUNTS

General Accounts, FERC Account 390

FERC Account 390 General Structures & Improvements (proposed negative 25 percent net salvage)

This account includes any gross salvage or cost of removal associated with the cost of general structures and improvements used for utility service. The approved net salvage for this account is negative 20 percent. Net salvage data shows negative net salvage in most bands. The most recent 5 and 10 year averages are negative 23.43 percent and negative 41.13 percent respectively. A negative 25 percent net salvage for this account is recommended.

FERC Account 390 General Structures & Improvements – Leased (proposed zero percent net salvage)

This account includes any gross salvage or cost of removal associated with the cost of leasehold improvements used for utility service. The approved net salvage for this account is zero percent. There has been no retirement experience in this account. These assets typically have no net salvage. Based on judgment, retaining zero percent net salvage for this account is recommended.

GENERAL PLANT VINTAGE GROUP (AMORTIZED) ACCOUNTS

The same net salvage parameters used for electric and gas plant are proposed for amortized common plant due to the similar operations and policies. The table below summarizes recommendations by account.

COMMON AMORTIZED PLANT

Acct	Description	Current Net Salvage	Proposed Net Salvage
Intangible			
303	Computer Software - 3 Year	0	0
303	Computer Software - 5 Year	0	0
303	Computer Software - 7 Year	0	0
303	Computer Software - 10 Year	0	0
303	Computer Software – 15 Year	0	0
General Plant			
391	Office Furniture & Equipment	0	0
391	Network Equipment	0	0
392	Transportation Equipment - Automobiles	0	5
392	Transportation Equipment - Light Trucks	0	10
392	Transportation Equipment - Trailers	0	20
392	Transportation Equipment - Heavy Trucks	0	15
393	Stores Equipment	0	0
394	Tools, Shop & Garage Equipment	0	0
395	Laboratory Equipment	0	0
396	Power Operated Equipment	0	15
397	Communication Equipment	0	0
397	Communication Equipment Two Way	0	0
398	Miscellaneous Equipment	0	0

APPENDIX A

Depreciation Rate Calculations

Appendix A- Accrual Rate Computation
1 of 3

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy
2017 Summary of Annual Depreciation Accruals
Average Service Life
Utility Accounts

FERC Account	Company Account	Account Description	Plant Balance 01/01/2017	Depreciation Reserve 01/01/2017	Est. Future Net Salvage %	Est. Future Net Salvage Amount	Unaccrued Balance	Remaining Life (Yrs)	Annual Accrual	Depr Rate	Reserve Ratio
Electric Utility											
Transmission											
352	10352000	Structures & Improvements	103,086,366	16,791,010	-5%	(5,154,318)	91,449,675	58.75	1,556,629	1.51%	16.29%
353	10353000	Station Equipment	1,181,449,210	266,220,136	-15%	(177,217,381)	1,092,446,456	44.63	24,478,696	2.07%	22.53%
354	10354000	Towers & Fixtures	118,631,858	66,493,064	-35%	(41,521,150)	93,659,945	42.73	2,191,928	1.85%	56.05%
355	10355000	Poles & Fixtures	1,330,556,061	188,365,602	-50%	(665,278,031)	1,807,468,490	55.94	32,313,257	2.43%	14.16%
356	10356000	Overhead Conductor & Devices	532,704,102	89,241,054	-35%	(186,446,436)	629,909,483	58.38	10,789,141	2.03%	16.75%
357	10357000	Underground Conduit	25,910,138	3,722,204	0%	-	22,187,934	62.13	357,111	1.38%	14.37%
358	10358000	Underground Conductor & Devices	30,710,573	6,723,959	-5%	(1,535,529)	25,522,143	39.20	651,157	2.12%	21.89%
		Total Transmission	3,323,048,309	637,557,028		(1,077,152,845)	3,762,644,126		72,337,918		
Distribution - Minnesota Only											
361	10361000	Structures & Improvements	43,721,596	14,082,032	-30%	(13,116,479)	42,756,043	47.26	904,773	2.07%	32.21%
362	10362000	Station Equipment	552,978,032	194,058,095	-25%	(138,244,508)	497,164,446	37.99	13,086,190	2.37%	35.09%
364	10364000	Poles, Towers & Fixtures	343,536,905	194,086,158	-120%	(412,244,286)	561,695,032	34.83	16,128,736	4.69%	56.50%
365	10365000	Overhead Conductor & Devices	373,235,852	101,963,938	-25%	(93,308,963)	364,580,877	30.40	11,991,745	3.21%	27.32%
366	10366000	Underground Conduit	261,312,548	77,065,329	-20%	(52,262,510)	236,509,728	42.12	5,615,408	2.15%	29.49%
367	10367000	Underground Conductor & Devices	967,850,933	266,729,577	-10%	(96,785,093)	797,906,449	36.62	21,790,377	2.25%	27.56%
369	10369010	Services - Overhead	71,641,753	53,940,897	-85%	(60,895,490)	78,596,346	24.76	3,174,525	4.43%	75.29%
369	10369020	Services - Underground	185,773,119	83,201,886	-5%	(9,288,656)	111,859,888	25.07	4,461,977	2.40%	44.79%
373	10373000	Street Lighting & Signal Systems	64,184,329	20,920,586	-40%	(25,673,732)	68,937,475	22.19	3,106,722	4.84%	32.59%
		Total Distribution	2,864,235,067	1,006,048,499		(901,819,716)	2,760,006,284		80,260,452		
General											
390	10390000	Structures & Improvements	63,508,306	23,807,986	-20%	(12,701,661)	52,401,982	36.29	1,444,043	2.27%	37.49%
390	10390007	Leasehold Improvements*	35,652	35,652	0%	-	-	0.00	-	0.00%	100.00%
		Total General	63,543,958	23,843,637		(12,701,661)	52,401,982		1,444,043		
		Total Electric Utility	6,250,827,334	1,667,449,165		(1,991,674,222)	6,575,052,391		154,042,413		

* Rate if plant added to group

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy
2017 Summary of Annual Depreciation Accruals
Average Service Life
Utility Accounts

FERC Account	Company Account	Account Description	Plant Balance 01/01/2017	Depreciation Reserve 01/01/2017	Est. Future Net Salvage %	Est. Future Net Salvage Amount	Unaccrued Balance	Remaining Life (Yrs)	Annual Accrual	Depr Rate	Reserve Ratio
Gas Utility											
Transmission											
366	20366000	Structures & Improvements	1,130,639	631,260	-5%	(56,532)	555,910	42.90	12,958	1.15%	55.83%
367	20367000	Mains	65,790,678	23,607,633	-15%	(9,868,602)	52,051,647	60.44	861,239	1.31%	35.88%
369	20369000	Measure & Regulating Station Equipment	13,617,811	6,322,674	-30%	(4,085,343)	11,380,481	31.13	365,544	2.68%	46.43%
		Total Transmission	80,539,128	30,561,568		(14,010,477)	63,988,038		1,239,741		
Distribution - Minnesota Only											
375	20375000	Structures & Improvements	727,864	78,795	-5%	(36,393)	685,462	45.78	14,973	2.06%	10.83%
376	20376010	Mains - Metallic	135,069,020	47,649,540	-25%	(33,767,255)	121,186,735	48.59	2,493,923	1.85%	35.28%
376	20376020	Mains - Plastic	384,394,656	138,702,955	-20%	(76,878,931)	322,570,631	40.84	7,897,877	2.05%	36.08%
378	20378000	Measure & Regulating Station Equipment - General	22,768,672	4,523,719	-25%	(5,692,168)	23,937,121	33.10	723,205	3.18%	19.87%
379	20379000	Measure & Regulating Station Equipment - City Gate	1,392,566	303,648	-5%	(69,628)	1,158,546	31.61	36,656	2.63%	21.80%
380	20380010	Services - Metallic	12,590,915	11,375,605	-40%	(5,036,366)	6,251,676	24.13	259,080	2.06%	90.35%
380	20380020	Services - Plastic	272,681,597	142,142,133	-25%	(68,170,399)	198,709,863	25.82	7,695,540	2.82%	52.13%
		Total Distribution	829,625,290	344,776,397		(189,651,141)	674,500,034		19,121,255		
General											
390	20390000	Structures & Improvements	1,493,079	70,882	-14%	(209,031)	1,631,228	46.31	35,226	2.36%	4.75%
		Total General	1,493,079	70,882		(209,031)	1,631,228		35,226		
		Total Gas Utility	911,657,497	375,408,846		(203,870,649)	740,119,300		20,396,222		

Appendix A- Accrual Rate Computation
3 of 3

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy
2017 Summary of Annual Depreciation Accruals
Average Service Life
Utility Accounts

FERC Account	Company Account	Account Description	Plant Balance 01/01/2017	Depreciation Reserve 01/01/2017	Est. Future Net Salvage %	Est. Future Net Salvage Amount	Unaccrued Balance	Remaining Life (Yrs)	Annual Accrual	Depr Rate	Reserve Ratio
Common Utility											
General											
390	40390000	Structures & Improvements	151,813,406	21,297,336	-25%	(37,953,352)	168,469,422	42.93	3,923,825	2.58%	14.03%
390	40390007	Structures & Improvements - Leased	18,509,449	1,409,381	0%	-	17,100,068	9.04	1,891,324	10.22%	7.61%
		Total General	170,322,855	22,706,717		(37,953,352)	185,569,490		5,815,149		
		Total Common Utility	170,322,855	22,706,717		(37,953,352)	185,569,490		5,815,149		
		Total ASL- All Utilities	7,332,807,686	2,065,564,727		(2,233,498,223)	7,500,741,181		180,253,784		

Xcel Energy
Computation of Amortization Rate
Vintage Group
Electric Utility

FERC Account	Company Account	Account Description	Plant Balance 01/01/2017	Depreciation Reserve 01/01/2017	Est. Future Net Salvage %	Est. Future Net Salvage Amount	Unaccrued Balance	Remaining Life (Yrs)	Annual Accrual	Depr Rate	Reserve Ratio
Distribution - Minnesota Only											
368	10368000	Line Transformers	372,629,100	171,239,942	-5%	(18,631,455)	220,020,612	18.27	12,045,571	3.23%	45.95%
368	10368010	Line Capacitors	15,188,563	8,150,381	-7%	(1,063,199)	8,101,381	12.71	637,473	4.20%	53.66%
370	10370000	Meters	54,362,948	24,702,877	-5%	(2,718,147)	32,378,218	8.64	3,749,220	6.90%	45.44%
		Total Electric Vintage Group	442,180,610	204,093,201		(22,412,802)	260,500,211		16,432,264		

Note: Electric Amortized Accounts exclude known change retirements which will occur when the age of the asset is greater than average service life.

Xcel Energy
Computation of Amortization Rate
Vintage Group
Gas Utility

FERC Account	Company Account	Account Description	Plant Balance 01/01/2017	Depreciation Reserve 01/01/2017	Est. Future Net Salvage %	Est. Future Net Salvage Amount	Unaccrued Balance	Remaining Life (Yrs)	Annual Accrual	Depr Rate	Reserve Ratio
Distribution- Minnesota Only											
381	20381000	Meters	92,178,273	57,890,884	-5%	(4,608,914)	38,896,303	9.76	3,986,321	4.32%	62.80%
381	20381010	Meters - Telemetering	-	-	0%	-	-	NA	-	NA	NA
383	20383000	House Regulators	10,070,258	10,170,961	-1%	(100,703)	0	2.00	0	0.00%	101.00%
		Total Gas Vintage Group	102,248,532	68,061,845		(4,709,616)	38,896,303		3,986,321		

Note: Gas Amortized Accounts exclude known change retirements which will occur when the age of the asset is greater than average service life.

Appendix A-1: Amortization Rate Computation
1 of 3

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy
Computation of Amortization Amount
For Amortized Property
At January 1, 2017
Electric Utility

FERC Account	Description	Plant Balance 01/01/2017	Allocated Reserve 01/01/2017	Theoretical Reserve 01/01/2017	Reserve Difference	Remaining Life	Amortize Reserve Difference
Intangible							
303	Intangible Computer Software - 5 Year	115,172,555	72,443,511	77,704,767	(5,261,257)	2.14	2,453,471
	Total Intangible	115,172,555	72,443,511	77,704,767	(5,261,257)		2,453,471
General							
391	Office Furniture & Equipment	27,593,861	14,947,880	13,486,891	1,460,989	10.22	(142,888)
391	Network Equipment	32,398,061	11,957,884	10,809,106	1,148,778	4.00	(287,324)
392	Transportation Equipment - Automobiles	1,108,813	391,080	352,850	38,230	6.65	(5,749)
392	Transportation Equipment - Light Trucks	32,832,470	19,387,112	18,141,619	1,245,493	5.03	(247,756)
392	Transportation Equipment - Trailers	17,878,078	5,631,534	5,107,733	523,801	7.71	(67,898)
392	Transportation Equipment - Heavy Trucks	97,589,361	37,083,215	33,922,126	3,161,090	7.50	(421,554)
393	Stores Equipment	1,648,791	790,289	715,144	75,145	11.33	(6,635)
394	Tools, Shop & Garage Equipment	81,301,137	33,694,832	30,556,536	3,138,296	9.38	(334,430)
395	Laboratory Equipment	3,209,733	1,630,248	1,487,920	142,328	5.36	(26,532)
396	Power Operated Equipment	45,134,817	15,825,286	14,318,885	1,506,401	7.52	(200,287)
397	Communication Equipment	17,117,461	11,636,242	10,799,860	836,381	3.73	(224,517)
397	Communication Equipment - Two Way	6,532,362	669,209	603,791	65,418	9.08	(7,208)
397	Communication Equipment - AES	7,071,726	3,976,600	3,587,868	388,732	7.39	(52,605)
397	Communication Equipment - EMS	47,275,858	8,169,456	7,370,853	798,604	12.66	(63,074)
398	Miscellaneous Equipment	2,723,841	2,211,897	2,004,226	207,671	4.06	(51,122)
	Total General	421,416,370	168,002,764	153,265,408	14,737,356		(2,139,579)
	Total Electric Intangible and General	536,588,924	240,446,274	230,970,175	9,476,099		313,892

Excluding Fully Accrued Assets

FERC Account	Description	Plant Balance 01/01/2017	Allocated Reserve 01/01/2017	Amortization Life	Net Salvage %	Annual Amortization	Accrual For Reserve Difference	Total Amortization	Amortization Rate
Intangible									
303	Intangible Computer Software - 5 Year	87,361,384	44,632,341	5.00	0.00%	17,472,277	2,453,471	19,925,748	22.81%
	Total Intangible	87,361,384	44,632,341			17,472,277	2,453,471	19,925,748	
General									
391	Office Furniture & Equipment	27,593,861	14,947,880	20.00	0.00%	1,379,693	(142,888)	1,236,805	4.48%
391	Network Equipment	32,398,061	11,957,884	6.00	0.00%	5,399,677	(287,324)	5,112,352	15.78%
392	Transportation Equipment - Automobiles	1,108,813	391,080	10.00	5.00%	105,337	(5,749)	99,589	8.98%
392	Transportation Equipment - Light Trucks	26,592,763	13,147,406	10.00	10.00%	2,393,349	(247,756)	2,145,592	8.07%
392	Transportation Equipment - Trailers	17,878,078	5,631,534	12.00	20.00%	1,191,872	(67,898)	1,123,974	6.29%
392	Transportation Equipment - Heavy Trucks	93,469,576	32,963,431	12.00	15.00%	6,620,762	(421,554)	6,199,207	6.63%
393	Stores Equipment	1,648,791	790,289	20.00	0.00%	82,440	(6,635)	75,804	4.60%
394	Tools, Shop & Garage Equipment	81,113,250	33,506,944	15.00	0.00%	5,407,550	(334,430)	5,073,120	6.25%
395	Laboratory Equipment	3,209,733	1,630,248	10.00	0.00%	320,973	(26,532)	294,441	9.17%
396	Power Operated Equipment	45,134,817	15,825,286	12.00	15.00%	3,197,050	(200,287)	2,996,763	6.64%
397	Communication Equipment	16,958,859	11,477,639	10.00	0.00%	1,695,886	(224,517)	1,471,369	8.68%
397	Communication Equipment - Two Way	6,532,362	669,209	10.00	0.00%	653,236	(7,208)	646,028	9.89%
397	Communication Equipment - AES	7,071,726	3,976,600	15.00	0.00%	471,448	(52,605)	418,844	5.92%
397	Communication Equipment - EMS	47,275,858	8,169,456	15.00	0.00%	3,151,724	(63,074)	3,088,650	6.53%
398	Miscellaneous Equipment	2,657,198	2,145,253	15.00	0.00%	177,147	(51,122)	126,025	4.74%
	Total General	410,643,745	157,230,139			32,248,143	(2,139,579)	30,108,564	
	Total Electric Intangible & General	498,005,130	201,862,480			49,720,419	313,892	50,034,312	

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Gas Utility

FERC Account	Description	Plant Balance 01/01/2017	Allocated Reserve 01/01/2017	Theoretical Reserve 01/01/2017	Reserve Difference	Remaining Life	Amortize Reserve Difference
Intangible							
303	Intangible Computer Software - 10 Year	7,256,644	5,122,739	5,090,801	31,937.94	2.58	(12,369)
303	Intangible Computer Software - 5 Year	234,274	85,975	81,996	3,978.61	6.50	(612)
	Total Intangible	7,490,919	5,208,713	5,172,797	35,917		(12,981)
General							
391	Office Furniture & Equipment	906,378	467,586	299,696	167,890	13.39	(12,541)
391	Network Equipment	38,023	25,279	15,843	9,436	3.50	(2,696)
392	Transportation Equipment - Automobiles	376,943	67,568	42,346	25,222	8.82	(2,860)
392	Transportation Equipment - Light Trucks	6,054,537	3,889,243	2,961,227	928,016	5.49	(169,051)
392	Transportation Equipment - Trailers	1,504,110	753,603	550,626	202,977	6.84	(29,686)
392	Transportation Equipment - Heavy Trucks	8,425,887	5,125,059	3,787,150	1,337,909	6.39	(209,494)
393	Stores Equipment	10,091	4,428	2,775	1,653	14.50	(114)
394	Tools, Shop & Garage Equipment	6,257,777	2,797,083	1,878,476	918,606	10.40	(88,335)
396	Power Operated Equipment	2,858,219	946,052	622,370	323,682	8.93	(36,263)
397	Communication Equipment	4,722,283	4,554,658	3,635,958	918,700	2.30	(399,361)
397	Communication Equipment - Two Way	120,072	15,970	10,009	5,961	9.17	(650)
397	Communication Equipment - AES	15,492,768	6,555,265	4,108,288	2,446,977	11.02	(222,001)
397	Communication Equipment - EMS	764,413	356,090	223,167	132,923	10.62	(12,515)
398	Miscellaneous Equipment	50,705	42,589	33,509	9,080	5.09	(1,785)
	Total General	47,582,206	25,600,471	18,171,440	7,429,031		(1,187,353)
	Total Gas Intangible & General	55,073,125	30,809,184	23,344,237	7,464,947		(1,200,334)

Excluding Fully Accrued Assets

FERC Account	Description	Plant Balance 01/01/2017	Allocated Reserve 01/01/2017	Amortization Life	Net Salvage %	Annual Amortization	Accrual For Reserve Difference	Total Amortization	Amortization Rate
Intangible									
303	Intangible Computer Software - 5 Year	4,194,027	2,060,121	5	0	838,805	(12,369)	826,436	19.71%
303	Intangible Computer Software - 10 Year	234,274	81,996	10	0	23,427	(612)	22,815	9.74%
	Total Intangible	4,428,301	2,142,117			862,233	(12,981)	849,251	
General									
391	Office Furniture & Equipment	906,378	468,787	20	0.00%	45,319	(12,541)	32,778	3.62%
391	Network Equipment	38,023	25,348	6	0.00%	6,337	(2,696)	3,641	9.58%
392	Transportation Equipment - Automobiles	376,943	67,753	10	5.00%	35,810	(2,860)	32,949	8.74%
392	Transportation Equipment - Light Trucks	5,207,054	3,044,907	10	10.00%	468,635	(169,051)	299,584	5.75%
392	Transportation Equipment - Trailers	1,453,858	704,544	12	20.00%	96,924	(29,686)	67,238	4.62%
392	Transportation Equipment - Heavy Trucks	7,700,813	4,406,250	12	15.00%	545,474	(209,494)	335,981	4.36%
393	Stores Equipment	10,091	4,440	20	0.00%	505	(114)	391	3.87%
394	Tools, Shop & Garage Equipment	6,316,850	2,861,461	15	0.00%	421,123	(88,335)	332,788	5.27%
396	Power Operated Equipment	2,858,219	947,870	12	15.00%	202,457	(36,263)	166,194	5.81%
397	Communication Equipment	4,722,283	4,556,223	10	0.00%	472,228	(399,361)	72,867	1.54%
397	Communication Equipment - Two Way	120,072	16,014	10	0.00%	12,007	(650)	11,357	9.46%
397	Communication Equipment - AES	15,492,768	6,573,194	15	0.00%	1,032,851	(222,001)	810,850	5.23%
397	Communication Equipment - EMS	764,413	357,064	15	0.00%	50,961	(12,515)	38,446	5.03%
398	Miscellaneous Equipment	50,705	2,878	15	0.00%	3,380	(1,785)	1,596	3.15%
	Total General	46,018,470	24,036,734			3,394,012	(1,187,353)	2,206,659	
	Total Gas Intangible & General	50,446,771	26,178,851			4,256,244	(1,200,334)	3,055,910	

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Common Utility

FERC Account	Account Description	Plant Balance 01/01/2017	Allocated Reserve 01/01/2017	Theoretical Reserve 01/01/2017	Reserve Difference	Remaining Life	Amortize Reserve Difference
Intangible							
303	Intangible Computer Software - 3 Year	7,673,530	7,673,530	7,673,530	0	0.00	0
303	Intangible Computer Software - 5 Year	197,541,349	133,587,921	137,960,011	(4,372,090)	2.70	1,617,774
303	Intangible Computer Software - 7 Year	44,140,612	44,140,612	44,140,612	0	0.00	0
303	Intangible Computer Software - 10 Year	68,449,240	61,860,387	62,199,795	(339,408)	6.14	55,296
303	Intangible Computer Software - 15 Year	61,015,418	3,523,252	3,856,103	(332,851)	14.05	23,687
	Total Intangible	378,820,150	250,785,703	255,830,052	(5,044,349)		1,696,756
General							
391	Office Furniture & Equipment	27,141,560	15,321,726	14,505,093	816,633	10.44	(78,237)
391	Network Equipment	100,446,164	46,842,989	43,560,690	3,282,299	2.83	(1,159,189)
392	Transportation Equipment - Automobiles	823,465	290,391	270,044	20,346	6.55	(3,107)
392	Transportation Equipment - Light Trucks	3,431,469	1,949,727	1,924,358	25,369	3.81	(6,667)
392	Transportation Equipment - Trailers	1,099,687	661,080	622,073	39,008	4.20	(9,292)
392	Transportation Equipment - Heavy Trucks	5,505,442	3,756,624	3,612,498	144,126	4.17	(34,598)
393	Stores Equipment	246,162	44,140	41,047	3,093	16.67	(186)
394	Tools, Shop & Garage Equipment	4,041,708	1,492,666	1,389,262	103,404	9.87	(10,476)
395	Laboratory Equipment	0	0	0	0	0.00	0
396	Power Operated Equipment	990,912	565,370	545,459	19,912	6.74	(2,953)
397	Communication Equipment	964,432	831,102	790,286	40,815	2.43	(16,778)
397	Communication Equipment - Two Way	75,068	4,036	3,753	283	9.50	(30)
398	Miscellaneous Equipment	582,227	420,760	400,574	20,186	4.68	(4,313)
	Total General	145,348,298	72,180,609	67,665,137	4,515,473		(1,325,825)
	Total Common Intangible & General	524,168,448	322,966,313	323,495,189	(528,876)		370,931

Common Utility

Excluding Fully Accrued Assets

FERC Account	Description	Plant Balance 01/01/2017	Allocated Reserve 01/01/2017	Amortization Life	Net Salvage %	Annual Amortization	Accrual For Reserve Difference	Total Amortization	Amortization Rate	
Intangible										
303	Intangible Computer Software - 3 Year	0	0	3.00	0.00%	0	0	0	33.33%	(2)
303	Intangible Computer Software - 5 Year	110,232,298	46,278,871	5.00	0.00%	22,046,460	1,617,774	23,664,233	21.47%	
303	Intangible Computer Software - 7 Year	0	0	7.00	0.00%	0	0	0	14.29%	(2)
303	Intangible Computer Software - 10 Year	10,181,505	3,592,653	10.00	0.00%	1,018,150	55,296	1,073,446	10.54%	
303	Intangible Computer Software - 15 Year	61,015,418	3,523,252	15.00	0.00%	4,067,695	23,687	4,091,382	6.71%	
	Total Intangible	181,429,222	53,394,775			27,132,305	1,696,756	28,829,061		
(2) Rate if new plant is added										
General										
391	Office Furniture & Equipment	24,212,478	12,392,643	20	0.00%	1,210,624	(78,237)	1,132,387	4.68%	
391	Network Equipment	100,449,425	46,846,249	5	0.00%	20,089,885	(1,159,189)	18,930,696	18.85%	
392	Transportation Equipment - Automobiles	823,465	290,391	10	5.00%	78,229	(3,107)	75,122	9.12%	
392	Transportation Equipment - Light Trucks	3,406,217	1,924,475	10	10.00%	306,560	(6,667)	299,892	8.80%	
392	Transportation Equipment - Trailers	995,338	556,732	12	20.00%	66,356	(9,292)	57,063	5.73%	
392	Transportation Equipment - Heavy Trucks	4,253,089	2,504,271	12	15.00%	301,260	(34,598)	266,663	6.27%	
393	Stores Equipment	246,162	44,140	20	0.00%	12,308	(186)	12,123	4.92%	
394	Tools, Shop & Garage Equipment	4,030,816	1,481,774	15	0.00%	268,721	(10,476)	258,245	6.41%	
395	Laboratory Equipment	0	0	10	0.00%	0	0	0	10.00%	
396	Power Operated Equipment	709,729	284,187	12	15.00%	50,272	(2,953)	47,320	6.67%	
397	Communication Equipment	715,864	582,533	10	0.00%	71,586	(16,778)	54,808	7.66%	
397	Communication Equipment - Two Way	75,068	4,036	10	0.00%	7,507	(30)	7,477	9.96%	
398	Miscellaneous Equipment	582,227	420,760	15	0.00%	38,815	(4,313)	34,502	5.93%	
	Total General	140,499,879	67,332,190			22,502,124	(1,325,825)	21,176,299		
	Total Common Intangible & General	321,929,101	120,726,966			49,634,429	370,931	50,005,360		

APPENDIX B

Depreciation Expense Comparison

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy
Comparison of Present and Proposed Accruals
Average Service Life
Electric Utility

FERC Account	Account Description	Plant Balance 01/01/2017	Fully Accrued	Adjusted Plant Balance 01/01/2017	Present Annual Rate	Present Annual Accrual	Proposed Annual Rate	Proposed Annual Accrual	Proposed Less Present Accrual
Transmission									
352	Structures & Improvements	103,086,366		103,086,366	1.47	1,515,976	1.51%	1,556,604	40,628
353	Station Equipment	1,181,449,210		1,181,449,210	1.96	23,207,038	2.07%	24,455,999	1,248,961
354	Towers & Fixtures	118,631,858		118,631,858	1.93	2,287,900	1.85%	2,194,689	(93,211)
355	Poles & Fixtures	1,330,556,061		1,330,556,061	2.18	28,971,785	2.43%	32,332,512	3,360,727
356	Overhead Conductor & Devices	532,704,102		532,704,102	2.06	10,992,307	2.03%	10,813,893	(178,414)
357	Underground Conduit	25,910,138		25,910,138	1.37	354,933	1.38%	357,560	2,627
358	Underground Conductor & Devices	30,710,573		30,710,573	1.82	558,374	2.12%	651,064	92,690
	Total Transmission	3,323,048,309		3,323,048,309		67,888,314		72,362,322	4,474,008
Distribution - Minnesota Only									
361	Structures & Improvements	43,721,596		43,721,596	2.17	947,301	2.07%	905,037	(42,264)
362	Station Equipment	552,978,032		552,978,032	2.18	12,064,975	2.37%	13,105,579	1,040,604
364	Poles, Towers & Fixtures	343,536,905		343,536,905	4.55	15,615,314	4.69%	16,111,881	496,567
365	Overhead Conductor & Devices	373,235,852		373,235,852	3.08	11,484,180	3.21%	11,980,871	496,691
366	Underground Conduit	261,312,548		261,312,548	2.12	5,527,765	2.15%	5,618,220	90,454
367	Underground Conductor & Devices	967,850,933		967,850,933	2.22	21,507,799	2.25%	21,776,646	268,847
369	Services - Overhead	71,641,753		71,641,753	4.25	3,044,774	4.43%	3,173,730	128,955
369	Services - Underground	185,773,119		185,773,119	2.56	4,757,604	2.40%	4,458,555	(299,049)
373	Street Lighting & Signal Systems	64,184,329		64,184,329	4.66	2,987,891	4.84%	3,106,522	118,630
	Total Distribution	2,864,235,067		2,864,235,067		77,937,604		80,237,040	2,299,436
General									
390	Structures & Improvements	63,508,306		63,508,306	2.11	1,337,017	2.27%	1,441,639	104,622
390	Leasehold Improvements	35,652		35,652	10.00	3,565	10.00%	3,565	-
	Total General	63,543,958		63,543,958		1,340,582		1,445,204	104,622
	Total Electric Utility	6,250,827,334		6,250,827,334		147,166,500		154,044,565	6,878,065

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy
Comparison of Present and Proposed Accruals
Average Service Life
Gas Utility

FERC Account	Account Description	Plant Balance 01/01/2017	Fully Accrued	Adjusted Plant Balance 01/01/2017	Present Annual Rate	Present Annual Accrual	Proposed Annual Rate	Proposed Annual Accrual	Proposed Less Present Accrual
Transmission									
366	Structures & Improvements	1,130,639		1,130,639	2.02	22,830	1.15%	13,002	(9,828)
367	Mains	65,790,678		65,790,678	1.53	1,008,790	1.31%	861,858	(146,933)
369	Measure & Regulating Station Equipment	13,617,811		13,617,811	3.94	536,459	2.68%	364,957	(171,502)
	Total Transmission	80,539,128		80,539,128		1,568,080		1,239,818	(328,262)
Distribution - Minnesota Only									
375	Structures & Improvements	727,864		727,864	2.44	17,753	2.06%	14,994	(2,759)
376	Mains - Metallic	135,069,020		135,069,020	2.35	3,178,095	1.85%	2,498,777	(679,318)
376	Mains - Plastic	384,394,656		384,394,656	2.56	9,823,419	2.05%	7,880,090	(1,943,329)
378	Measure & Regulating Station Equipment - General	22,768,672		22,768,672	3.29	748,969	3.18%	724,044	(24,926)
379	Measure & Regulating Station Equipment - City Gate	1,392,566		1,392,566	2.68	37,379	2.63%	36,624	(755)
380	Services - Metallic	12,590,915		12,590,915	3.50	440,682	2.06%	259,373	(181,309)
380	Services - Plastic	272,681,597		272,681,597	3.33	9,089,387	2.82%	7,689,621	(1,399,766)
	Total Distribution	829,625,290		829,625,290		23,335,684		19,103,523	(4,232,160)
General									
390	Structures & Improvements	1,493,079		1,493,079	2.18	32,576	2.36%	35,237	2,660
	Total General	1,493,079		1,493,079		32,576		35,237	2,660
	Total Gas Utility	911,657,497		911,657,497		24,936,340		20,378,578	(4,557,762)

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy
Comparison of Present and Proposed Accruals
Average Service Life
Common Utility

FERC Account	Account Description	Plant Balance 01/01/2017	Fully Accrued	Adjusted Plant Balance 01/01/2017	Present Annual Rate	Present Annual Accrual	Proposed Annual Rate	Proposed Annual Accrual	Proposed Less Present Accrual
General									
390	Structures & Improvements	151,813,406		151,813,406	2.18	3,312,292	2.58%	3,916,786	604,493
390	Structures & Improvements - Leased	18,509,449		18,509,449	10.00	1,850,945	10.22%	1,891,666	40,721
	Total General	170,322,855		170,322,855		5,163,237		5,808,452	645,214
	Total Common Utility	170,322,855		170,322,855		5,163,237		5,808,452	645,214
	Total ASL All Utilities	7,332,807,686		7,332,807,686		177,266,077		180,231,595	2,965,517

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy
Comparison of Present and Proposed Accruals
Vintage Group
Electric Utility

FERC Account	Account Description	Plant Balance 01/01/2017	Fully Accrued	Adjusted Plant Balance 01/01/2017	Present Annual Rate	Present Annual Accrual	Proposed Annual Rate	Proposed Annual Accrual	Proposed Less Present Accrual
Intangible									
303	Intangible Computer Software - 5 Year	115,172,555	27,811,170	87,361,385	20.00	17,472,277	22.81%	19,927,132	2,454,855
	Total Intangible	115,172,555	27,811,170	87,361,385		17,472,277		19,927,132	2,454,855
General									
391	Office Furniture & Equipment	27,593,861	-	27,593,861	5.00	1,379,693	4.48%	1,236,205	(143,488)
391	Network Equipment	32,398,061	-	32,398,061	25.00	8,099,515	15.78%	5,112,414	(2,987,101)
392	Transportation Equipment - Automobiles	1,108,813	-	1,108,813	10.00	110,881	8.98%	99,571	(11,310)
392	Transportation Equipment - Light Trucks	32,832,470	6,239,706	26,592,763	8.33	2,216,064	8.07%	2,146,036	(70,028)
392	Transportation Equipment - Trailers	17,878,078	-	17,878,078	6.67	1,191,872	6.29%	1,124,531	(67,341)
392	Transportation Equipment - Heavy Trucks	97,589,361	4,119,785	93,469,576	7.14	6,676,398	6.63%	6,197,033	(479,365)
393	Stores Equipment	1,648,791	-	1,648,791	5.00	82,440	4.60%	75,844	(6,595)
394	Tools, Shop & Garage Equipment	81,301,137	187,888	81,113,250	6.67	5,407,550	6.25%	5,069,578	(337,972)
395	Laboratory Equipment	3,209,733	-	3,209,733	10.00	320,973	9.17%	294,333	(26,641)
396	Power Operated Equipment	45,134,817	-	45,134,817	8.33	3,761,235	6.64%	2,996,952	(764,283)
397	Communication Equipment	17,117,461.30	158,602	16,958,859	11.11	1,884,318	8.68%	1,472,029	(412,289)
		6,532,362.47	-	6,532,362	11.11	725,818	9.89%	646,051	(79,767)
397	Communication Equipment - AES	7,071,725.74	-	7,071,726	6.67	471,448	5.92%	418,646	(52,802)
397	Communication Equipment - EMS	47,275,857.53	-	47,275,858	6.67	3,151,724	6.53%	3,087,113	(64,610)
398	Miscellaneous Equipment	2,723,841	66,643	2,657,198	6.67	177,147	4.74%	125,951	(51,195)
	Total General	421,416,370	10,772,624	410,643,745		35,657,075		30,102,288	(5,554,788)
Distribution - Minnesota Only (Vintage Group Treatment)		Plant Balance 01/01/2017	Fully Accrued	Adjusted Plant Balance 01/01/2017					
368	Line Transformers	372,629,100	0.00	372,629,100	3.28	12,226,892	3.23%	12,035,920	(190,972)
368	Line Capacitors	18,759,258	3,570,694.95	15,188,563	4.40	668,297	4.20%	637,920	(30,377)
370	Meters	96,316,591	41,953,643	54,362,948	6.67	3,624,197	6.90%	3,751,043	126,847
	Total Distribution	487,704,949	45,524,338	442,180,610		16,519,386		16,424,883	(94,503)
	Total Electric Utility	1,024,293,873	84,108,133	940,185,740		69,648,738		66,454,302	(3,194,435)

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy
Comparison of Present and Proposed Accruals
Vintage Group
Gas Utility

FERC Account	Account Description	Plant Balance 01/01/2017	Fully Accrued	Adjusted Plant Balance 01/01/2017	Present Annual Rate	Present Annual Accrual	Proposed Annual Rate	Proposed Annual Accrual	Proposed Less Present Accrual
Intangible									
303	Intangible Computer Software - 5 Year	7,256,644	3,062,618	4,194,027	20.00	838,805	19.71%	826,643	(12,163)
303	Intangible Computer Software - 10 Year	234,274	-	234,274	10.00	23,427	9.74%	22,818	(609)
	Total Intangible	7,490,919	3,062,618	4,428,301		862,233		849,461	(12,772)
General									
391	Office Furniture & Equipment	906,378	-	906,378	5.00	45,319	3.62%	32,811	(12,508)
391	Network Equipment	38,023	-	38,023	25.00	9,506	9.58%	3,643	(5,863)
392	Transportation Equipment - Automobiles	376,943	-	376,943	10.00	37,694	8.74%	32,945	(4,749)
392	Transportation Equipment - Light Trucks	6,054,537	847,483	5,207,054	8.33	433,921	5.75%	299,406	(134,516)
392	Transportation Equipment - Trailers	1,504,110	50,252	1,453,858	6.67	96,924	4.62%	67,168	(29,756)
392	Transportation Equipment - Heavy Trucks	8,425,887	725,075	7,700,813	7.14	550,058	4.36%	335,755	(214,303)
393	Stores Equipment	10,091	-	10,091	5.00	505	3.87%	391	(114)
394	Tools, Shop & Garage Equipment	6,257,777	(59,073)	6,316,850	6.67	421,123	5.27%	332,898	(88,225)
396	Laboratory Equipment	2,858,219	-	2,858,219	8.33	238,185	5.81%	166,062	(72,122)
397	Communication Equipment	4,722,283	-	4,722,283	11.11	524,698	1.54%	72,723	(451,975)
397	Communication Equipment - Two Way	120,072	-	120,072	11.11	13,341	9.46%	11,359	(1,983)
397	Communication Equipment - AES	15,492,768	-	15,492,768	6.67	1,032,851	5.23%	810,272	(222,579)
397	Communication Equipment - EMS	764,413	-	764,413	6.67	50,961	5.03%	38,450	(12,511)
398	Miscellaneous Equipment	50,705	-	50,705	6.67	3,380	3.15%	1,597	(1,783)
	Total General	47,582,206	1,563,737	46,018,470		3,458,467		2,205,480	(1,252,987)

Distribution - Minnesota Only (Vintage Group Treatment)	Plant Balance 01/01/2017	Fully Accrued	Adjusted Plant Balance 01/01/2017	Present Annual Rate	Present Annual Accrual	Proposed Annual Rate	Proposed Annual Accrual	Proposed Less Present Accrual
381 Meters	105,068,640	12,890,367	92,178,273	5.15	4,747,181	4.32%	3,982,101	(765,080)
381 Meters - Telemetering	36,778	36,778	-	12.50	-	12.50%	-	-
383 House Regulators	10,070,258	-	10,070,258	5.00	-	0.00%	-	-
Total Distribution	115,175,677	12,927,145	102,248,532		4,747,181		3,982,101	(765,080)
Total Gas Utility	170,248,802	17,553,499	152,695,302		9,067,880		7,037,042	(2,030,839)

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy
Comparison of Present and Proposed Accruals
Vintage Group
Common Utility

FERC Account	Account Description	Plant Balance 01/01/2017	Fully Accrued	Adjusted Plant Balance 01/01/2017	Present Annual Rate	Present Annual Accrual	Proposed Annual Rate	Proposed Annual Accrual	Proposed Less Present Accrual
Intangible									
303	Intangible Computer Software - 3 Year	7,673,530	7,673,530	-	33.33	-	33.33%	-	-
303	Intangible Computer Software - 5 Year	197,541,349	87,309,050	110,232,298	20.00	22,046,460	21.47%	23,666,874	1,620,415
303	Intangible Computer Software - 7 Year	44,140,612	44,140,612	-	14.29	-	14.29%	-	-
303	Intangible Computer Software - 10 Year	68,449,240	58,267,735	10,181,505	10.00	1,018,150	10.54%	1,073,131	54,980
303	Intangible Computer Software - 15 Year	61,015,418		61,015,418	6.67	4,067,695	6.71%	4,094,135	26,440
	Total Intangible	378,820,150	197,390,928	181,429,222		27,132,305		28,834,140	1,701,835
General									
391	Office Furniture & Equipment	27,141,560	2,929,083	24,212,478	5.00	1,210,624	4.68%	1,133,144	(77,480)
391	Network Equipment	100,446,164	(3,261)	100,449,425	25.00	25,112,356	18.85%	18,934,717	(6,177,640)
392	Transportation Equipment - Automobiles	823,465	-	823,465	10.00	82,347	9.12%	75,100	(7,246)
392	Transportation Equipment - Light Trucks	3,431,469	25,252	3,406,217	8.33	283,851	8.80%	299,747	15,896
392	Transportation Equipment - Trailers	1,099,687	104,349	995,338	6.67	66,356	5.73%	57,033	(9,323)
392	Transportation Equipment - Heavy Trucks	5,505,442	1,252,353	4,253,089	7.14	303,792	6.27%	266,669	(37,123)
393	Stores Equipment	246,162	-	246,162	5.00	12,308	4.92%	12,111	(197)
394	Tools, Shop & Garage Equipment	4,041,708	10,892	4,030,816	6.67	268,721	6.41%	258,375	(10,346)
395	Laboratory Equipment	-	-	-	10.00	-	10.00%	-	-
396	Power Operated Equipment	990,912	281,183	709,729	8.33	59,144	6.67%	47,339	(11,805)
397	Communication Equipment	964,432	248,569	715,864	11.11	79,540	7.66%	54,835	(24,705)
397	Communication Equipment - Two Way	75,068	-	75,068	11.11	8,341	9.96%	7,477	(864)
398	Miscellaneous Equipment	582,227	-	582,227	6.67	38,815	5.93%	34,526	(4,289)
	Total General	145,348,298	4,848,419	140,499,879		27,526,196		21,181,073	(6,345,123)
	Total Common Utility	524,168,448	202,239,347	321,929,101		54,658,501		50,015,212	(4,643,288)
	Total Vintage All Utilities	1,718,711,122	303,900,979	1,414,810,143		133,375,119		123,506,557	(9,868,562)
	Total ASL and Vintage All Utilities	9,051,518,808	303,900,979	8,747,617,828		310,641,196		303,738,151	(6,903,045)
	Total Electric Utility	7,275,121,206	84,108,133	7,191,013,073		216,815,238		220,498,868	3,683,630
	Total Gas Utility	1,081,906,298	17,553,499	1,064,352,799		34,004,220		27,415,620	(6,588,601)
	Total Common Utility	694,491,303	202,239,347	492,251,956		59,821,738		55,823,664	(3,998,074)
	Total ASL and Vintage All Utilities	9,051,518,808	303,900,979	8,747,617,828		310,641,196		303,738,151	(6,903,045)

APPENDIX C

Depreciation Parameter Comparison

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy
Comparison of Present and Proposed Depreciation Rates
Average Service Life
Electric Utility

FERC Account	Account Description	Present Average Life	Present Curve	Present Net Salvage	Proposed Average Life	Proposed Curve	Proposed Net Salvage	Difference Life	Difference Net Salvage
Transmission									
352	Structures & Improvements	68	R5	0	70	R5	-5	2	-5
353	Station Equipment	56	R2	-10	56	R2	-15	0	-5
354	Towers & Fixtures	70	R4	-35	75	R4	-35	5	0
355	Poles & Fixtures	62	R2	-35	62	R2	-50	0	-15
356	Overhead Conductor & Devices	63	R1	-30	67	R1	-35	4	-5
357	Underground Conduit	73	R4	0	73	R4	0	0	0
358	Underground Conductor & Devices	55	R2	0	50	R3	-5	-5	-5
Distribution									
361	Structures & Improvements	60	R3	-30	63	R2.5	-30	3	0
362	Station Equipment	55	R1.5	-20	53	R2	-25	-2	-5
364	Poles, Towers & Fixtures	44	R1	-100	47	R1	-120	3	-20
365	Overhead Conductor & Devices	39	L0	-20	39	L0	-25	0	-5
366	Underground Conduit	52	R3	-10	56	R3	-20	4	-10
367	Underground Conductor & Devices	45	R2.5	0	49	R1.5	-10	4	-10
369	Services - Overhead	40	R1.5	-70	42	R1.5	-85	2	-15
369	Services - Underground	41	R4	-5	44	R4	-5	3	0
373	Street Lighting & Signal Systems	29	L0	-35	29	L0	-40	0	-5
General									
390	Structures & Improvements	57	R1.5	-20	55	R1.5	-20	-2	0
390	Leasehold Improvements	10	SQ	0	10	SQ	0	0	0

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy
Comparison of Present and Proposed Depreciation Rates
Average Service Life
Gas Utility

FERC Account	Account Description	Present Average Life	Present Curve	Present Net Salvage	Proposed Average Life	Proposed Curve	Proposed Net Salvage	Difference Life	Difference Net Salvage
Transmission									
366	Structures & Improvements	52	R3	-5	65	R4	-5	13	0
367	Mains	75	R2.5	-15	75	R2.5	-15	0	0
369	Measure & Regulating Station Equipment	33	R1.5	-30	40	R1	-30	7	0
Distribution									
375	Structures & Improvements	41	R5	0	50	R5	-5	9	-5
376	Mains - Metallic	51	R1.5	-20	63	R2	-25	12	-5
376	Mains - Plastic	45	R2.5	-15	54	R2.5	-20	9	-5
378	Measure & Regulating Station Equipment - General	38	R0.5	-25	38	R0.5	-25	0	0
379	Measure & Regulating Station Equipment - City Gate	38	R0.5	-2	38	R0.5	-5	0	-3
380	Services - Metallic	40	S3	-40	51	R3	-40	11	0
380	Services - Plastic	39	R2.5	-30	39	R2.5	-25	0	5
General									
390	Structures & Improvements	55	R1.5	-20	55	R1.5	-14	0	6

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy
Comparison of Present and Proposed Depreciation Rates
Average Service Life
Common Utility

FERC Account	Account Description	Present Average Life	Present Curve	Present Net Salvage	Proposed Average Life	Proposed Curve	Proposed Net Salvage	Difference Life	Difference Net Salvage
390	Structures & Improvements	55	R1.5	-20	50	L0	-25	-5	-5
390	Structures & Improvements - Leased	10	SQ	0	10	SQ	0	0	0

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy
Comparison of Present and Proposed Depreciation Rates
Vintage Group
Electric Utility

FERC Account	Account Description	Present Average Life	Present Curve	Present Net Salvage	Proposed Average Life	Proposed Curve	Proposed Net Salvage	Difference Life	Difference Net Salvage
Intangible									
303	Intangible Computer Software - 5 Year	5	(1)	0	5	(1)	0	0	0
General									
391	Office Furniture & Equipment	20	(1)	0	20	(1)	0	0	0
391	Network Equipment	4	(1)	0	6	(1)	0	2	0
392	Transportation Equipment - Automobiles	10	(1)	0	10	(1)	5	0	5
392	Transportation Equipment - Light Trucks	12	(1)	0	10	(1)	10	-2	10
392	Transportation Equipment - Trailers	15	(1)	0	12	(1)	20	-3	20
392	Transportation Equipment - Heavy Trucks	14	(1)	0	12	(1)	15	-2	15
393	Stores Equipment	20	(1)	0	20	(1)	0	0	0
394	Tools, Shop & Garage Equipment	15	(1)	0	15	(1)	0	0	0
395	Laboratory Equipment	10	(1)	0	10	(1)	0	0	0
396	Power Operated Equipment	12	(1)	0	12	(1)	15	0	15
397	Communication Equipment	9	(1)	0	10	(1)	0	1	0
397	Communication Equipment - Two Way	9	(1)	0	10	(1)	0	1	0
397	Communication Equipment - AES	15	(1)	0	15	(1)	0	0	0
397	Communication Equipment - EMS	15	(1)	0	15	(1)	0	0	0
398	Miscellaneous Equipment	15	(1)	0	15	(1)	0	0	0
Distribution									
(Vintage Group Treatment)									
368	Line Transformers	32	(1)	-5	32	(1)	-5	0	0
368	Line Capacitors	25	(1)	-10	25	(1)	-7	0	3
370	Meters - Old	20	(1)	0	20	(1)	-5	0	-5
370	Meters	15	(1)	0	15	(1)	-5	0	-5

(1) No curve is used for amortized accounts.

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy
Comparison of Present and Proposed Depreciation Rates
Vintage Group
Gas Utility

FERC Account	Account Description	Present Average Life	Present Curve	Present Net Salvage	Proposed Average Life	Proposed Curve	Proposed Net Salvage	Difference Life	Difference Net Salvage
Intangible									
303	Intangible Computer Software - 5 Year	5	(1)	0	5	(1)	0	0	0
303	Intangible Computer Software - 10 Year	10	(1)	0	10	(1)	0	0	0
General									
391	Office Furniture & Equipment	20	(1)	0	20	(1)	0	0	0
391	Network Equipment	4	(1)	0	6	(1)	0	2	0
392	Transportation Equipment - Automobiles	10	(1)	0	10	(1)	5	0	5
392	Transportation Equipment - Light Trucks	12	(1)	0	10	(1)	10	-2	10
392	Transportation Equipment - Trailers	15	(1)	0	12	(1)	20	-3	20
392	Transportation Equipment - Heavy Trucks	14	(1)	0	12	(1)	15	-2	15
393	Stores Equipment	20	(1)	0	20	(1)	0	0	0
394	Tools, Shop & Garage Equipment	15	(1)	0	15	(1)	0	0	0
395	Laboratory Equipment	10	(1)	0	10	(1)	0	0	0
396	Power Operated Equipment	12	(1)	0	12	(1)	15	0	15
397	Communication Equipment	9	(1)	0	10	(1)	0	1	0
397	Communication Equipment - Two Way	9	(1)	0	10	(1)	0	1	0
397	Communication Equipment - AES	15	(1)	0	15	(1)	0	0	0
397	Communication Equipment - EMS	15	(1)	0	15	(1)	0	0	0
398	Miscellaneous Equipment	15	(1)	0	15	(1)	0	0	0
Distribution									
(Vintage Group Treatment)									
381	Meters	20	(1)	-3	20	(1)	-5	0	-2
381	Meters - Telemetering	8	(1)	0	8	(1)	0	0	0
383	House Regulators	20	(1)	0	20	(1)	-1	0	-1

(1) No curve is used for amortized accounts.

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy
Comparison of Present and Proposed Depreciation Rates
Vintage Group
Common Utility

		Present			Proposed			Difference	
		Average Life	Curve	Net Salvage	Average Life	Curve	Net Salvage	Life	Net Salvage
303	Intangible Computer Software - 3 Year	3	(1)	0	3	(1)	0	0	0
303	Intangible Computer Software - 5 Year	5	(1)	0	5	(1)	0	0	0
303	Intangible Computer Software - 7 Year	7	(1)	0	7	(1)	0	0	0
303	Intangible Computer Software - 10 Year	10	(1)	0	10	(1)	0	0	0
303	Intangible Computer Software - 15 Year	15	(1)	0	15	(1)	0	0	0
General									
391	Office Furniture & Equipment	20	(1)	0	20	(1)	0	0	0
391	Network Equipment	4	(1)	0	5	(1)	0	1	0
392	Transportation Equipment - Automobiles	10	(1)	0	10	(1)	5	0	5
392	Transportation Equipment - Light Trucks	12	(1)	0	10	(1)	10	-2	10
392	Transportation Equipment - Trailers	15	(1)	0	12	(1)	20	-3	20
392	Transportation Equipment - Heavy Trucks	14	(1)	0	12	(1)	15	-2	15
393	Stores Equipment	20	(1)	0	20	(1)	0	0	0
394	Tools, Shop & Garage Equipment	15	(1)	0	15	(1)	0	0	0
395	Laboratory Equipment	10	(1)	0	10	(1)	0	0	0
396	Power Operated Equipment	12	(1)	0	12	(1)	15	0	15
397	Communication Equipment	9	(1)	0	10	(1)	0	1	0
397	Communication Equipment - Two Way	9	(1)	0	10	(1)	0	1	0
398	Miscellaneous Equipment	15	(1)	0	15	(1)	0	0	0

(1) No curve is used for amortized accounts.

APPENDIX D

Comparison of Book and Theoretical Depreciation Reserve

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy
Comparison of Actual and Theoretical Reserve
Electric Utility

FERC Account	Account Description	Plant Balance 01/01/2017	Recoverable Cost	Theoretical Reserve	Actual Reserve	Difference
Transmission						
352	Structure & Improvements	103,086,366	103,086,366	17,398,079	16,791,010	(607,070)
353	Station Equipment	1,181,449,210	1,181,449,210	275,895,262	266,220,136	(9,675,127)
354	Towers & Fixtures	118,631,858	118,631,858	68,909,593	66,493,064	(2,416,530)
355	Poles & Fixtures	1,330,556,061	1,330,556,061	195,211,295	188,365,602	(6,845,692)
356	Overhead Conductor & Devices	532,704,102	532,704,102	92,484,304	89,241,054	(3,243,250)
357	Underground Conduit	25,910,138	25,910,138	3,857,479	3,722,204	(135,275)
358	Underground Conductor & Devices	30,710,573	30,710,573	6,968,325	6,723,959	(244,366)
	Total Transmission	3,323,048,309	3,323,048,309	660,724,337	637,557,028	(23,167,309)
Distribution - Minnesota Only						
361	Structure & Improvements	43,721,596	43,721,596	14,204,039	14,082,032	(122,007)
362	Station Equipment	552,978,032	552,978,032	195,739,418	194,058,095	(1,681,323)
364	Poles, Towers & Fixtures	343,536,905	343,536,905	195,767,725	194,086,158	(1,681,566)
365	Overhead Conductor & Devices	373,235,852	373,235,852	102,847,356	101,963,938	(883,418)
366	Underground Conduit	261,312,548	261,312,548	77,733,025	77,065,329	(667,695)
367	Underground Conductor & Devices	967,850,933	967,850,933	269,040,527	266,729,577	(2,310,950)
369	Services - Overhead	71,641,753	71,641,753	54,408,242	53,940,897	(467,345)
369	Services - Underground	185,773,119	185,773,119	83,922,749	83,201,886	(720,863)
373	Street Lighting & Signal Systems	64,184,329	64,184,329	21,101,842	20,920,586	(181,256)
	Total Distribution	2,864,235,067	2,864,235,067	1,014,764,923	1,006,048,499	(8,716,423)
General						
390	Structures and Improvements	63,508,306	63,508,306	25,927,493	23,807,986	(2,119,507)
390	Leasehold Improvements	35,652	35,652	35,652	35,652	-
	Total General	63,543,958	63,543,958	25,963,144	23,843,637	(2,119,507)
	Total Electric Utility	6,250,827,334	6,250,827,334	1,701,452,404	1,667,449,165	(34,003,239)

Xcel Energy
Comparison of Actual and Theoretical Reserve
Gas Utility

FERC Account	Account Description	Plant Balance 01/01/2017	Recoverable Cost	Theoretical Reserve	Actual Reserve	Difference
Transmission						
366	Structure & Improvements	1,130,639	1,130,639	403,631	631,260	227,629
367	Mains	65,790,678	65,790,678	14,689,913	23,607,633	8,917,720
369	Measure & Regulating Station Equipment	13,617,811	13,617,811	3,924,334	6,322,674	2,398,340
	Total Transmission	80,539,128	80,539,128	19,017,879	30,561,568	11,543,689
Distribution - Minnesota Only						
375	Structure & Improvements	727,864	727,864	64,516	78,795	14,279
376	Mains - Metallic	135,069,020	135,069,020	38,610,427	47,649,540	9,039,114
376	Mains - Plastic	384,394,656	384,394,656	112,391,017	138,702,955	26,311,938
378	Measure & Regulating Station Equipment - General	22,768,672	22,768,672	3,670,958	4,523,719	852,761
379	Measure & Regulating Station Equipment - City Gat	1,392,566	1,392,566	246,046	303,648	57,602
380	Services - Metallic	12,590,915	12,590,915	9,287,056	11,375,605	2,088,549
380	Services - Plastic	272,681,597	272,681,597	115,177,977	142,142,133	26,964,156
	Total Distribution	829,625,290	829,625,290	279,447,997	344,776,397	65,328,400
General						
390	Structure & Improvements	1,493,079	1,493,079	269,011	70,882	(198,129)
	Total Gas Utility	911,657,497	911,657,497	298,734,887	375,408,846	76,673,959

Xcel Energy
Comparison of Actual and Theoretical Reserve
Common Utility

FERC Account	Account Description	Plant Balance 01/01/2017	Recoverable Cost	Theoretical Reserve	Actual Reserve	Difference
General						
390	Structures & Improvements	151,813,406	151,813,406	26,814,057	21,297,336	(5,516,722)
390	Structures & Improvements - Leased	18,509,449	18,509,449	1,774,458	1,409,381	(365,077)
	Total Common Utility	170,322,855	170,322,855	28,588,515	22,706,717	(5,881,799)
	Total All Utilities	7,332,807,686	7,332,807,686	2,028,775,806	2,065,564,727	36,788,921

Xcel Energy
Comparison of Actual and Theoretical Reserve
Electric Utility
Amortized Acct

FERC Account	Account Description	Plant Balance 01/01/2017	Fully Accrued	Recoverable Cost	Theoretical Reserve	Actual Reserve	Difference
Intangible							
303	Intangible Computer Software - 5 Year	115,172,555	27,811,170	87,361,384	49,893,597	44,632,341	(5,261,257)
	Total Intangible	115,172,555	27,811,170	87,361,384	49,893,597	44,632,341	(5,261,257)
General						-	
391	Office Furniture & Equipment	27,593,861	-	27,593,861	13,486,891	14,947,880	1,460,989
391	Network Equipment	32,398,061	-	32,398,061	10,809,106	11,957,884	1,148,778
392	Transportation Equipment - Automobiles	1,108,813	-	1,108,813	352,850	391,080	38,230
392	Transportation Equipment - Light Trucks	32,832,470	6,239,706	26,592,763	11,901,913	13,147,406	1,245,493
392	Transportation Equipment - Trailers	17,878,078	-	17,878,078	5,107,733	5,631,534	523,801
392	Transportation Equipment - Heavy Trucks	97,589,361	4,119,785	93,469,576	29,802,341	32,963,431	3,161,090
393	Stores Equipment	1,648,791	-	1,648,791	715,144	790,289	75,145
394	Tools, Shop & Garage Equipment	81,301,137	187,888	81,113,250	30,368,648	33,506,944	3,138,296
395	Laboratory Equipment	3,209,733	-	3,209,733	1,487,920	1,630,248	142,328
396	Power Operated Equipment	45,134,817	-	45,134,817	14,318,885	15,825,286	1,506,401
397	Communication Equipment	17,117,461	158,602	16,958,859	10,641,258	11,477,639	836,381
397	Communication Equipment - Two Way	6,532,362	-	6,532,362	603,791	669,209	65,418
397	Communication Equipment - AES	7,071,726	-	7,071,726	3,587,868	3,976,600	388,732
397	Communication Equipment - EMS	47,275,858	-	47,275,858	7,370,853	8,169,456	798,604
398	Miscellaneous Equipment	2,723,841	66,643	2,657,198	1,937,582	2,145,253	207,671
	Total General	421,416,370	10,772,624	410,643,745	142,492,783	157,230,139	14,737,356
Distribution - Minnesota Only (Vintage Group Treatment)							
368	Line Transformers	372,629,100	-	372,629,100	167,927,992	171,239,942	3,311,950
368	Line Capacitors	18,759,258	3,570,695	15,188,563	7,990,287	8,150,381	160,095
370	Meters	96,316,591	41,953,643	54,362,948	24,217,649	24,702,877	485,229
	Total Distribution	487,704,949	45,524,338	442,180,610	200,135,927	204,093,201	3,957,273
	Total Electric Utility	1,024,293,873	84,108,133	940,185,740	392,522,307	405,955,680	13,433,373

Xcel Energy
Comparison of Actual and Theoretical Reserve
Gas Utility

FERC Account	Account Description	Plant Balance 01/01/2017	Fully Accrued	Recoverable Cost	Theoretical Reserve	Actual Reserve	Difference
Intangible							
303	Intangible Computer Software - 5 Year	7,256,644	3,062,618	4,194,027	2,028,183	2,060,121	31,938
303	Intangible Computer Software - 10 Year	234,274	-	234,274	81,996	85,975	3,979
	Total Intangible	7,490,919	3,062,618	4,428,301	2,110,179	2,146,096	35,917
General							
391	Office Furniture & Equipment	906,378	-	906,378	299,696	467,586	167,890
391	Network Equipment	38,023	-	38,023	15,843	25,279	9,436
392	Transportation Equipment - Automobiles	376,943	-	376,943	42,346	67,568	25,222
392	Transportation Equipment - Light Trucks	6,054,537	847,483	5,207,054	2,113,744	3,041,760	928,016
392	Transportation Equipment - Trailers	1,504,110	50,252	1,453,858	500,374	703,350	202,977
392	Transportation Equipment - Heavy Trucks	8,425,887	725,075	7,700,813	3,062,075	4,399,984	1,337,909
393	Stores Equipment	10,091	-	10,091	2,775	4,428	1,653
394	Tools, Shop & Garage Equipment	6,257,777	(59,073)	6,316,850	1,937,549	2,856,156	918,606
396	Power Operated Equipment	2,858,219	-	2,858,219	622,370	946,052	323,682
397	Communication Equipment	4,722,283	-	4,722,283	3,635,958	4,554,658	918,700
397	Communication Equipment - Two Way	120,072	-	120,072	10,009	15,970	5,961
397	Communication Equipment - AES	15,492,768	-	15,492,768	4,108,288	6,555,265	2,446,977
397	Communication Equipment - EMS	764,413	-	764,413	223,167	356,090	132,923
398	Miscellaneous Equipment	50,705	-	50,705	33,509	42,589	9,080
	Total General	47,582,206	1,563,737	46,018,470	16,607,703	24,036,734	7,429,031
Distribution - Minnesota Only (Vintage Group Treatment)							
381	Meters	105,068,640	12,890,367	92,178,273	49,567,409	57,890,884	8,323,475
381	Meters - Telemetering	36,778	36,778	-	-	-	-
383	House Regulators	10,070,258	-	10,070,258	10,170,961	10,170,961	-
	Total Distribution	115,175,677	12,927,145	102,248,532	59,738,370	68,061,845	8,323,475
	Total Gas Utility	170,248,802	17,553,499	152,695,302	78,456,252	94,244,675	15,788,422

Xcel Energy
Comparison of Present and Proposed Accruals
Common Utility

Vintage Group

FERC Account	Account Description	Plant Balance 01/01/2017	Fully Accrued	Recoverable Cost	Theoretical Reserve	Actual Reserve	Difference
Intangible							
303.004	Computer Software- 3 Year	7,673,530	7,673,530	-	-	-	-
303.004	Computer Software- 5 Year	197,541,349	87,309,050	110,232,298	50,650,961	46,278,871	(4,372,090)
303.004	Computer Software- 7 Year	44,140,612	44,140,612	-	-	-	
303.004	Computer Software- 10 Year	68,449,240	58,267,735	10,181,505	3,932,060	3,592,653	(339,408)
303	Computer Software- 15 Year	61,015,418	-	61,015,418	3,856,103	3,523,252	(332,851)
	Total Intangible	378,820,150	197,390,928	181,429,222	58,439,124	53,394,775	(5,044,349)
General Plant							
391	Office Furniture & Equipment	27,141,560	2,929,083	24,212,478	11,576,010	12,392,643	816,633
391	Network Equipment	100,446,164	(3,261)	100,449,425	43,563,951	46,846,249	3,282,299
392	Transportation Equipment - Automobiles	823,465	-	823,465	270,044	290,391	20,346
392	Transportation Equipment - Light Trucks	3,431,469	25,252	3,406,217	1,899,106	1,924,475	25,369
392	Transportation Equipment - Trailers	1,099,687	104,349	995,338	517,724	556,732	39,008
392	Transportation Equipment - Heavy Trucks	5,505,442	1,252,353	4,253,089	2,360,145	2,504,271	144,126
393	Stores Equipment	246,162	-	246,162	41,047	44,140	3,093
394	Tools, Shop & Garage Equipment	4,041,708	10,892	4,030,816	1,378,370	1,481,774	103,404
395	Laboratory Equipment	-	-	-	-	-	-
396	Power Operated Equipment	990,912	281,183	709,729	264,275	284,187	19,912
397	Communication Equipment	964,432	248,569	715,864	541,718	582,533	40,815
397	Communication Equipment - Two Way	75,068	-	75,068	3,753	4,036	283
398	Miscellaneous Equipment	582,227	-	582,227	400,574	420,760	20,186
				-			
	Total General	145,348,298	4,848,419	140,499,879	62,816,718	67,332,190	4,515,473
	Total Common Utility	524,168,448	202,239,347	321,929,101	121,255,842	120,726,966	(528,876)
	Total Vintage All Utilities	1,718,711,122	303,900,979	1,414,810,143	592,234,402	620,927,321	28,692,919
	Total ASL and Vintage All Utilities	9,051,518,808	303,900,979	8,747,617,828	2,621,010,208	2,686,492,048	65,481,840

APPENDIX E

Net Salvage Analysis

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Electric Plant
Transmission Structures & Improvements
Account 352
1950-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1950	896	1,731	1,775	(44)	-4.91%									
1951	1,487	199	528	(329)	-22.13%	-15.65%								
1952	2,385	503	316	187	7.84%	-3.67%	-3.90%							
1953	538	38	246	(208)	-38.66%	-0.72%	-7.94%	-7.43%						
1954	11,453	1,211	514	697	6.09%	4.08%	4.70%	2.19%	1.81%					
1955	3,562	69	424	(355)	-9.97%	2.28%	0.86%	1.79%	-0.04%	-0.26%				
1956	181	50	(8)	58	32.04%	-7.93%	2.63%	1.22%	2.09%	0.26%	0.03%			
1957	3,790	4,473	371	4,102	108.23%	104.76%	50.51%	23.71%	21.99%	20.45%	17.75%	16.91%		
1958	698	-	387	(387)	-55.44%	82.78%	80.81%	41.53%	20.91%	19.32%	18.11%	15.63%	14.89%	
1959	3,809	1,309	499	810	21.27%	9.39%	54.54%	54.06%	35.12%	20.96%	19.63%	18.56%	16.40%	15.73%
1960	6,773	-	1,048	(1,048)	-15.47%	-2.25%	-5.54%	23.07%	23.18%	16.90%	12.81%	11.91%	11.62%	10.17%
1961	-	-	4	(4)	NA	-15.53%	-2.29%	-5.58%	23.05%	23.15%	16.88%	12.80%	11.90%	11.61%
1962	-	-	-	0	NA	NA	-15.53%	-2.29%	-5.58%	23.05%	23.15%	16.88%	12.80%	11.90%
1963	7766	-	-	0	0.00%	0.00%	-0.05%	-7.24%	-1.32%	-3.30%	15.21%	15.34%	11.95%	10.18%
1964	847	63	169	(106)	-12.51%	-1.23%	-1.23%	-1.28%	-7.53%	-1.81%	-3.69%	14.22%	14.35%	11.19%
1965	-	-	-	0	NA	-12.51%	-1.23%	-1.23%	-1.28%	-7.53%	-1.81%	-3.69%	14.22%	14.35%
1966	1820	-	899	(899)	-49.40%	-49.40%	-37.68%	-9.63%	-9.63%	-9.67%	-11.96%	-5.93%	-7.53%	9.68%
1967	-	-	-	0	NA	-49.40%	-49.40%	-37.68%	-9.63%	-9.63%	-9.67%	-11.96%	-5.93%	-7.53%
1968	1262	157	116	41	3.25%	3.25%	-27.84%	-27.84%	-24.54%	-8.24%	-8.24%	-8.28%	-10.92%	-5.41%
1969	1221	-	-	0	0.00%	1.65%	1.65%	-19.94%	-19.94%	-18.72%	-7.46%	-7.46%	-7.49%	-10.24%
1970	67	-	272	(272)	-405.97%	-21.12%	-9.06%	-9.06%	-25.86%	-25.86%	-23.69%	-9.52%	-9.52%	-9.55%
1971	7298	82	-	82	1.12%	-2.58%	-2.21%	-1.51%	-1.51%	-8.98%	-8.98%	-9.22%	-5.69%	-5.69%
1972	1105	100	181	(81)	-7.33%	0.01%	-3.20%	-2.80%	-2.10%	-2.10%	-8.84%	-8.84%	-9.07%	-5.77%
1973	-	150	304	(154)	NA	-21.27%	-1.82%	-5.02%	-4.39%	-3.51%	-3.51%	-10.04%	-10.04%	-10.20%
1974	-	-	-	0	NA	NA	-21.27%	-1.82%	-5.02%	-4.39%	-3.51%	-3.51%	-10.04%	-10.04%
1975	-	-	144	(144)	NA	NA	NA	-34.30%	-3.53%	-6.72%	-5.87%	-4.82%	-4.82%	-11.17%
1976	906	30	20	10	1.10%	-14.79%	-14.79%	-31.79%	-18.35%	-3.08%	-5.96%	-5.28%	-4.37%	-4.37%
1977	7646	30,541	1,288	29,253	382.59%	342.18%	340.49%	340.49%	338.69%	299.10%	170.84%	168.57%	157.29%	147.32%
1978	862	-	29	(29)	-3.36%	343.49%	310.54%	309.01%	309.01%	307.37%	274.31%	162.41%	160.28%	150.04%
1979	763	-	-	0	0.00%	-1.78%	315.22%	287.26%	285.84%	285.84%	284.33%	255.76%	155.74%	153.72%
1980	7535	527	465	62	0.82%	0.75%	0.36%	174.26%	165.40%	164.59%	164.59%	163.72%	153.67%	111.04%
1981	1415	-	95	(95)	-6.71%	-0.37%	-0.34%	-0.59%	160.21%	152.67%	151.92%	151.92%	151.11%	142.46%
1982	4801	-	50	(50)	-1.04%	-2.33%	-0.60%	-0.57%	-0.73%	126.58%	121.83%	121.23%	121.23%	120.58%
1983	26150	1,249	3,697	(2,448)	-9.36%	-8.07%	-8.01%	-6.34%	-6.22%	-6.16%	54.28%	53.32%	53.04%	53.04%
1984	281115	-	-	0	0.00%	-0.80%	-0.80%	-0.83%	-0.79%	-0.79%	-0.79%	8.08%	8.06%	8.02%
1985	610	5,816	-	5,816	953.44%	2.06%	1.09%	1.06%	1.03%	1.02%	1.02%	1.01%	9.82%	9.80%
1986	358	86,263	34	86,229	24086.31%	9508.78%	32.63%	29.07%	28.61%	28.45%	27.80%	27.74%	27.65%	35.84%
1987	99	29,269	264	29,005	29297.98%	25215.32%	11344.89%	42.90%	38.47%	37.86%	37.66%	36.80%	36.71%	36.60%
1988	-	-	-	0	NA	29297.98%	25215.32%	11344.89%	42.90%	38.47%	37.86%	37.66%	36.80%	36.71%
1989	1577	-	-	0	0.00%	0.00%	1730.61%	5665.39%	4578.29%	42.66%	38.27%	37.67%	37.47%	36.62%
1990	-	-	-	0	NA	0.00%	0.00%	1730.61%	5665.39%	4578.29%	42.66%	38.27%	37.67%	37.47%
1991	399	-	540	(540)	-135.34%	-135.34%	-27.33%	-27.33%	1371.81%	4714.10%	3960.24%	42.41%	38.05%	37.45%
1992	-	-	-	0	NA	-135.34%	-135.34%	-27.33%	-27.33%	1371.81%	4714.10%	3960.24%	42.41%	38.05%
1993	-	-	-	0	NA	NA	-135.34%	-135.34%	-27.33%	-27.33%	1371.81%	4714.10%	3960.24%	42.41%
1994	-	-	-	0	NA	NA	NA	-135.34%	-135.34%	-27.33%	-27.33%	1371.81%	4714.10%	3960.24%
1995	-	-	-	0	NA	NA	NA	NA	-135.34%	-135.34%	-27.33%	-27.33%	1371.81%	4714.10%
1996	226	-	7,845	(7,845)	-3471.24%	-3471.24%	-3471.24%	-3471.24%	-3471.24%	-1341.60%	-1341.60%	-380.79%	-380.79%	896.13%
1997	100	-	572	(572)	-572.00%	-2581.90%	-2581.90%	-2581.90%	-2581.90%	-2581.90%	-1235.45%	-1235.45%	-389.10%	-389.10%
1998	7266	-	13,664	(13,664)	-188.05%	-193.27%	-290.85%	-290.85%	-290.85%	-290.85%	-290.85%	-283.08%	-283.08%	-236.42%
1999	1369	-	1,254	(1,254)	-91.60%	-172.76%	-177.33%	-260.41%	-260.41%	-260.41%	-260.41%	-260.41%	-255.07%	-255.07%
2000	20274	2,888	195	2,693	13.28%	6.65%	-42.29%	-44.11%	-70.61%	-70.61%	-70.61%	-70.61%	-70.61%	-71.48%
2001	-	-	-	0	NA	13.28%	6.65%	-42.29%	-44.11%	-70.61%	-70.61%	-70.61%	-70.61%	-70.61%
2002	167	-	-	0	0.00%	0.00%	13.17%	6.60%	-42.04%	-43.86%	-70.21%	-70.21%	-70.21%	-70.21%
2003	-	-	(293,236)	293,236	NA	175590.56%	175590.56%	1447.72%	1351.10%	966.47%	961.20%	927.13%	927.13%	927.13%
2004	-	-	-	0	NA	NA	175590.56%	175590.56%	1447.72%	1351.10%	966.47%	961.20%	927.13%	927.13%
2005	302.4	-	265,029	(265,029)	-87641.87%	-87641.87%	9327.79%	6009.21%	6009.21%	148.96%	134.07%	54.40%	52.28%	25.47%
2006	29998.99	-	-	0	0.00%	-874.64%	-874.64%	93.09%	92.58%	92.58%	60.90%	56.89%	26.92%	25.91%
2007	-	-	6,761	(6,761)	NA	-22.54%	-896.96%	-896.96%	70.78%	70.39%	70.39%	47.57%	43.92%	15.53%
2008	18372.08	-	6,167	(6,167)	-33.57%	-70.37%	-26.73%	-571.06%	-571.06%	31.39%	31.28%	31.28%	26.00%	23.72%
2009	27,066.74	0.00	-	0	0.00%	-13.57%	-28.45%	-17.14%	-366.99%	-366.99%	20.17%	20.13%	20.13%	18.69%
2010	34,423.64	0	865	(865)	-2.51%	-1.41%	-8.81%	-17.27%	-12.56%	-253.10%	-253.10%	13.08%	13.06%	13.06%
2011	10,040.30	0	-	0	0.00%	-1.95%	-1.21%	-7.82%	-15.34%	-11.50%	-231.96%	-231.96%	11.99%	11.97%
2012	4,777.00	0	2,381	(2,381)	-49.84%	-16.07%	-6.59%	-4.25%	-9.94%	-17.08%	-12.97%	-225.00%	-225.00%	9.63%
2013	70,691.00	2,866	11,272	(8,406)	-11.89%	-14.29%	-12.62%	-9.72%	-7.93%	-10.78%	-14.86%	-12.58%	-148.01%	-148.01%
2014	5,105.00	0	24,713	(24,713)	-484.09%	-43.69%	-44.06%	-39.18%	-29.08%	-23.91%	-24.95%	-28.92%	-24.59%	-156.55%
2015	70,653.00	0	2	(2)	0.00%	-32.62%	-22.62%	-23.48%	-22.01%	-18.58%	-16.33%	-17.64%	-20.44%	-18.18%
2016	34,538.00	3,552	28,076	(24,524)	-71.01%	-23.32%	-44.64%	-31.85%	-32.31%	-30.66%	-26.45%	-23.67%	-24.33%	-26.78%

NA - Not applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Electric Plant
Transmission Station Equipment
Account 353
1950-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1950	191,964	176,340	48,541	127,799	66.57%									
1951	70,561	180,071	42,101	137,970	195.53%	101.24%								
1952	159,975	54,947	23,152	31,795	19.87%	73.64%	70.43%							
1953	110,652	79,731	13,886	65,845	59.51%	36.08%	69.06%	68.16%						
1954	116,832	31,302	23,187	8,115	6.95%	32.51%	27.29%	53.21%	57.16%					
1955	146,434	87,842	9,116	78,726	53.76%	32.99%	40.83%	34.55%	53.35%	56.53%				
1956	74,919	50,355	8,746	41,609	55.54%	54.36%	37.98%	43.29%	37.14%	53.59%	56.45%			
1957	88,488	12,975	5,396	7,579	8.57%	30.10%	41.28%	31.88%	37.57%	33.51%	48.40%	52.03%		
1958	410,941	163,277	53,339	109,938	26.75%	23.53%	27.71%	33.00%	29.37%	32.88%	31.00%	40.85%	44.46%	
1959	397,946	118,581	18,089	100,492	25.25%	26.01%	24.29%	26.70%	30.24%	28.04%	30.63%	29.48%	36.92%	40.13%
1960	549,879	386,301	41,072	345,229	62.78%	47.03%	40.89%	38.92%	39.74%	40.97%	38.74%	39.95%	38.39%	43.60%
1961	159,757	59,808	9,108	50,700	31.74%	55.79%	44.82%	39.93%	38.20%	38.98%	40.16%	38.17%	39.31%	37.91%
1962	389,752	161,049	54,014	107,035	27.46%	28.70%	45.75%	40.30%	37.38%	36.11%	36.81%	37.93%	36.38%	37.43%
1963	72,639	24,783	9,442	15,341	21.12%	26.47%	27.82%	44.22%	39.41%	36.79%	35.58%	36.28%	37.40%	35.92%
1964	726,080	297,566	85,882	211,684	29.15%	28.42%	28.11%	28.54%	38.46%	36.17%	34.74%	33.91%	34.48%	35.41%
1965	225,943	84,153	5,444	78,709	34.84%	30.50%	29.84%	29.18%	29.44%	38.07%	36.05%	34.75%	33.98%	34.50%
1966	507,545	192,714	26,904	165,810	32.67%	33.34%	31.26%	30.78%	30.10%	30.23%	37.03%	35.48%	34.44%	33.79%
1967	279,550	35,831	3,231	32,600	11.66%	25.21%	27.36%	28.11%	27.83%	27.76%	28.03%	34.59%	33.47%	32.73%
1968	486,289	167,934	18,934	149,000	30.64%	23.71%	27.28%	28.42%	28.66%	28.42%	28.28%	28.48%	34.03%	33.11%
1969	508,667	126,873	46,479	80,394	15.80%	23.06%	20.56%	24.01%	25.22%	26.27%	26.14%	26.30%	26.56%	31.66%
1970	736,674	216,280	80,729	135,551	18.40%	17.34%	21.08%	19.77%	22.37%	23.39%	24.60%	24.53%	24.82%	25.09%
1971	531,867	201,148	98,705	102,443	19.26%	18.76%	17.92%	20.65%	19.66%	21.83%	22.72%	23.89%	23.84%	24.16%
1972	248,789	83,290	17,122	66,168	26.60%	21.60%	20.05%	18.98%	21.24%	20.28%	22.18%	23.00%	24.05%	24.00%
1973	423,612	132,467	69,255	63,212	14.92%	19.24%	19.25%	18.93%	18.28%	20.33%	19.57%	21.36%	22.13%	23.22%
1974	200,482	25,328	16,391	8,937	4.46%	11.56%	15.85%	17.14%	17.57%	17.23%	19.31%	18.69%	20.49%	21.28%
1975	362,121	119,581	48,000	71,581	19.77%	14.31%	14.57%	17.00%	17.68%	17.89%	17.54%	19.36%	18.79%	20.43%
1976	379,610	312,892	69,690	243,202	64.07%	42.44%	34.36%	28.33%	28.06%	25.88%	23.97%	22.75%	23.74%	22.92%
1977	801,014	206,243	101,718	104,525	13.05%	29.45%	27.18%	24.57%	22.68%	23.08%	22.39%	21.60%	20.89%	21.91%
1978	491,438	136,324	60,333	75,991	15.46%	13.97%	25.34%	24.35%	22.56%	21.35%	21.80%	21.40%	20.87%	20.32%
1979	648,564	132,686	108,806	23,880	3.68%	8.76%	10.53%	19.29%	19.35%	18.32%	17.88%	18.49%	18.59%	18.56%
1980	896,318	233,732	200,756	32,976	3.68%	3.68%	6.52%	8.37%	14.94%	15.43%	14.85%	14.85%	15.51%	15.91%
1981	96,150	130,929	69,919	61,010	63.45%	9.47%	7.18%	9.09%	10.17%	16.35%	16.68%	16.05%	15.94%	16.52%
1982	538,499	(26,070)	141,399	(167,469)	-31.10%	-16.77%	-4.80%	-2.28%	0.99%	3.77%	9.71%	10.58%	10.30%	10.70%
1983	1,076,523	132,045	18,020	114,025	10.59%	-3.31%	0.44%	1.55%	1.98%	3.75%	5.39%	9.91%	10.58%	10.36%
1984	3,778,188	299,712	168,894	130,818	3.46%	5.04%	1.43%	2.52%	2.68%	2.78%	3.60%	4.51%	7.11%	7.61%
1985	1,333,389	55,528	177,732	(122,204)	-9.16%	0.17%	1.98%	-0.67%	0.24%	0.64%	0.87%	1.68%	2.62%	4.95%
1986	681,949	197,685	121,556	76,129	11.16%	-2.29%	1.46%	2.89%	0.42%	1.23%	1.49%	1.65%	2.36%	3.19%
1987	1,495,011	307,955	393,909	(85,954)	-5.75%	-0.45%	-3.76%	-0.02%	1.35%	-0.61%	0.07%	0.40%	0.60%	1.26%
1988	367,753	114,656	102,754	11,902	3.24%	-3.98%	0.08%	-3.10%	0.14%	1.43%	-0.46%	0.19%	0.50%	0.69%
1989	783,633	281,424	111,715	169,709	21.66%	15.77%	3.61%	5.16%	1.06%	2.14%	3.09%	1.26%	1.85%	2.00%
1990	989,156	22,256	96,524	(74,268)	-7.51%	5.38%	5.01%	0.59%	2.26%	-0.44%	1.13%	2.10%	0.48%	1.02%
1991	802,610	53,860	210,915	(157,055)	-19.57%	-12.91%	-2.39%	-1.69%	-3.06%	-1.16%	-2.82%	-0.50%	0.56%	-0.88%
1992	2,030,582	2,259	69,634	(67,375)	-3.32%	-7.92%	-7.81%	-2.80%	-2.35%	-3.14%	-1.77%	-2.94%	-0.96%	-0.03%
1993	1,561,351	13,192	148,591	(135,399)	-8.67%	-5.65%	-8.19%	-8.06%	-4.29%	-3.86%	-4.21%	-3.01%	-3.83%	-1.84%
1994	710,094	314,444	207,985	106,459	14.99%	-1.27%	-2.24%	-4.96%	-5.38%	-2.30%	-2.02%	-2.65%	-1.65%	-2.59%
1995	3,944,102	16,898	264,933	(248,035)	-6.29%	-3.04%	-4.46%	-4.18%	-5.54%	-5.73%	-3.75%	-3.52%	-3.78%	-3.02%
1996	1,224,121	440,616	149,425	291,191	23.79%	0.84%	2.55%	0.19%	-0.56%	-2.05%	-2.53%	-0.95%	-0.83%	-1.36%
1997	914,410	637,637	155,031	482,606	52.78%	36.18%	8.64%	9.31%	5.95%	4.14%	2.43%	1.63%	2.84%	2.85%
1998	831,318	18,885	241,920	(223,035)	-26.83%	14.87%	18.55%	4.38%	5.37%	2.98%	1.84%	0.41%	-0.19%	1.05%
1999	1,315,619	36,091	156,238	(120,147)	-9.13%	-15.98%	4.55%	10.05%	2.22%	3.23%	1.46%	0.69%	-0.53%	-1.01%
2000	1,639,005	(1,744)	190,275	(192,019)	-11.72%	-10.57%	-14.14%	-1.12%	4.03%	-0.10%	0.92%	-0.32%	-0.75%	-1.76%
2001	39,440	(3,176)	17,727	(20,903)	-53.00%	-12.69%	-11.12%	-14.54%	-1.55%	3.65%	-0.31%	0.72%	-0.49%	-0.89%
2002	1,859,766		-	0	0.00%	-1.10%	-6.02%	-6.86%	-9.78%	-1.11%	2.78%	-0.26%	0.61%	-0.42%
2003	1,085,106	(1,209)	381,872	(383,081)	-35.30%	-13.01%	-13.54%	-12.89%	-12.06%	-13.87%	-5.94%	-1.86%	-3.22%	-2.26%
2004	542,834		41,245	(41,245)	-7.60%	-26.07%	-12.17%	-12.62%	-12.34%	-11.69%	-13.41%	-6.05%	-2.19%	-3.39%
2005	2,000,659	4,383	52,568	(48,185)	-2.41%	-3.52%	-13.02%	-8.61%	-8.93%	-9.56%	-9.50%	-11.04%	-5.34%	-2.23%
2006	3,692,015	550	130,120	(129,570)	-3.51%	-3.12%	-3.51%	-8.22%	-6.56%	-6.76%	-7.51%	-7.68%	-8.91%	-4.85%
2007	1,694,619	7,351	460,554	(453,203)	-26.74%	-10.82%	-8.54%	-8.48%	-11.71%	-9.70%	-9.86%	-10.10%	-10.01%	-10.96%
2008	5,601,754	6,241	479,200	(472,959)	-8.44%	-12.69%	-9.61%	-8.50%	-8.46%	-10.46%	-9.28%	-9.38%	-9.59%	-9.56%
2009	4,134,752	171,442	1,930,047	(1,758,605)	-42.53%	-22.92%	-23.49%	-18.61%	-16.72%	-16.44%	-17.53%	-15.95%	-16.02%	-15.70%
2010	3,712,372	274,770	1,252,152	(977,382)	-26.33%	-34.87%	-23.86%	-24.18%	-20.13%	-18.43%	-18.15%	-18.98%	-17.53%	-17.59%
2011	1,981,644	53,259	535,803	(482,544)	-24.35%	-25.64%	-32.75%	-23.92%	-24.20%	-20.53%	-18.94%	-18.68%	-19.42%	-18.04%
2012	4,500,809.00	220,390	887,873	(667,483)	-14.83%	-17.74%	-20.87%	-27.12%	-21.87%	-22.25%	-19.52%	-18.27%	-18.06%	-18.70%
2013	12,886,849.00	124,426	1,958,717	(1,834,291)	-14.23%	-14.39%	-15.41%	-17.16%	-21.02%	-18.87%	-19.26%	-17.74%	-16.97%	-16.85%
2014	611,451.00	722,177	425,055	297,122	48.59%	-11.39%	-12.25%	-13.45%	-15.47%	-19.49%	-17.64%	-18.08%	-16.69%	-15.99%
2015	3,507,159.00	11,006	739,545	(728,539)	-20.77%	-10.47%	-13.32%	-13.64%	-14.54%	-16.15%	-19.63%	-17.94%	-18.32%	-17.03%
2016	718,155.00	76,216	905,860	(829,644)	-115.52%	-36.88%	-26.07%	-17.46%	-16.93%	-17.54%	-18.71%	-21.78%	-19.80%	-20.10%

NA - Not applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Electric Plant
Transmission Towers & Fixtures
Account 354
1950-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1950	5,137	1,126	1,198	(72)	-1.40%									
1951	4,469	1,211	1,883	(672)	-15.04%	-7.75%								
1952	17,453	3,625	6,653	(3,028)	-17.35%	-16.88%	-13.94%							
1953	95,405	25	1,152	(1,127)	-1.18%	-3.68%	-4.11%	-4.00%						
1954	28,378	6,829	22,713	(15,884)	-55.97%	-13.74%	-14.19%	-14.21%	-13.78%					
1955	48,056	11,358	3,906	7,452	15.51%	-11.03%	-5.56%	-6.65%	-6.84%	-6.70%				
1956	75,376	20,286	10,283	10,003	13.27%	14.14%	1.03%	0.18%	-0.98%	-1.21%	-1.21%			
1957	15,608	(4,253)	3,233	(7,486)	-47.96%	2.77%	7.17%	-3.53%	-2.68%	-3.59%	-3.77%	-3.73%		
1958	4,259	142	473	(331)	-7.77%	-39.35%	2.30%	6.73%	-3.64%	-2.76%	-3.66%	-3.83%	-3.79%	
1959	27,921	2,034	4,693	(2,659)	-9.52%	-9.29%	-21.92%	-0.38%	4.08%	-4.46%	-3.40%	-4.18%	-4.33%	-4.29%
1960	139,212	8,729	11,417	(2,688)	-1.93%	-3.20%	-3.31%	-7.04%	-1.20%	1.38%	-3.42%	-2.93%	-3.49%	-3.60%
1961	80	9,850	116	9,734	12167.50%	5.06%	2.62%	2.37%	-1.83%	2.50%	4.52%	-0.55%	-0.69%	-1.33%
1962	65,157	5,507	6,346	(839)	-1.29%	13.63%	3.04%	1.53%	1.36%	-1.69%	1.75%	3.51%	-0.67%	-0.77%
1963	11,484	1,946	416	1,530	13.32%	0.90%	13.59%	3.58%	2.08%	1.91%	-1.04%	2.14%	3.80%	-0.28%
1964	42,181	12,565	4,938	7,627	18.08%	17.06%	7.00%	15.18%	5.95%	4.44%	4.26%	1.60%	3.91%	5.20%
1965	108,461	32,823	25,965	6,858	6.32%	9.62%	9.88%	6.68%	10.96%	6.06%	4.96%	4.82%	2.83%	4.44%
1966	66,602	11,585	23,391	(11,806)	-17.73%	-2.83%	1.23%	1.84%	1.15%	4.46%	2.40%	1.68%	1.60%	-0.01%
1967	24,852	3,837	2,376	1,461	5.88%	-11.31%	-1.74%	1.71%	2.24%	1.52%	4.57%	2.59%	1.90%	1.81%
1968		21,334	109	21,225	NA	91.28%	11.90%	8.87%	10.48%	10.61%	8.17%	11.23%	7.23%	6.26%
1969	126,023	5,071	4,382	689	0.55%	17.39%	15.49%	5.32%	5.65%	7.08%	7.27%	6.01%	8.20%	5.79%
1970	19,867	22,427	13,606	8,821	44.40%	6.52%	21.07%	18.86%	8.59%	7.88%	8.99%	9.11%	7.65%	9.75%
1971	252,127	35,726	22,723	13,003	5.16%	8.02%	5.66%	10.99%	10.69%	6.82%	6.73%	7.48%	7.58%	6.78%
1972	61,161	(2,185)	13,532	(15,717)	-25.70%	-0.87%	1.83%	1.48%	6.10%	6.09%	3.21%	3.72%	4.59%	4.73%
1973	149,420	42,544	17,215	25,329	16.95%	4.56%	4.89%	6.51%	5.28%	8.77%	8.65%	6.14%	6.17%	6.76%
1974	49,170	18,174	4,985	13,189	26.82%	19.40%	8.78%	6.99%	8.39%	6.89%	10.12%	9.96%	7.50%	7.35%
1975	23,642	14,772	17,507	(2,735)	-11.57%	14.36%	16.10%	7.08%	6.18%	7.54%	6.25%	9.36%	9.24%	6.92%
1976	-	22,717	10,400	12,317	NA	40.53%	31.27%	21.64%	11.43%	8.48%	9.76%	8.06%	11.17%	10.98%
1977	169,482	70,815	29,259	41,556	24.52%	31.79%	26.48%	26.55%	22.89%	16.33%	12.33%	13.21%	11.34%	13.83%
1978	350,643	257,809	41,825	215,984	61.60%	49.52%	51.88%	49.12%	47.28%	41.17%	36.08%	28.70%	28.99%	26.00%
1979	18,201	9,958	12,121	(2,163)	-11.88%	57.97%	47.44%	49.73%	47.15%	45.51%	39.90%	35.02%	28.01%	28.31%
1980	100,524	18,387	14,219	4,168	4.15%	1.69%	46.44%	40.63%	42.55%	40.62%	39.67%	35.73%	31.65%	25.97%
1981	29,197	1,775	5,039	(3,264)	-11.18%	0.70%	-0.85%	43.07%	38.36%	40.21%	38.44%	37.67%	34.19%	30.34%
1982	5,835	(33,129)	9,454	(42,583)	-729.79%	-130.87%	-30.75%	-28.51%	34.13%	31.71%	33.54%	32.01%	31.67%	29.21%
1983	122,176	29,994	41,975	(11,981)	-9.81%	-42.62%	-36.78%	-20.82%	-20.23%	25.56%	25.34%	26.89%	25.78%	25.84%
1984	-	19,000	-	19,000	NA	5.74%	-27.78%	-24.70%	-13.45%	-13.34%	28.59%	27.73%	29.27%	28.10%
1985	1,470	72,266	635	71,631	4872.86%	6165.37%	63.61%	27.86%	20.67%	14.26%	12.55%	39.93%	36.66%	38.20%
1986	771,164	304,620	126,208	178,412	23.14%	32.36%	34.82%	28.73%	23.81%	22.72%	20.90%	20.33%	30.67%	30.01%
1987	85,031	597,823	23,267	574,556	675.70%	87.94%	96.14%	98.36%	84.87%	80.05%	77.43%	70.82%	69.49%	67.63%
1988	6,013	(606,158)	2,157	(608,315)	-10116.66%	-37.08%	16.78%	25.04%	27.24%	22.65%	18.22%	17.38%	16.20%	15.75%
1989	298,129	84,516	154,395	(69,879)	-23.44%	-222.99%	-26.63%	6.44%	12.60%	14.24%	11.95%	8.59%	8.16%	7.87%
1990	32,696	83,803	18,930	64,873	198.41%	-1.51%	-182.08%	-9.19%	11.71%	17.69%	19.28%	16.58%	13.29%	12.76%
1991	9,185	4,127	3,153	974	10.60%	157.22%	-1.19%	-176.97%	-8.77%	11.70%	17.63%	19.21%	16.54%	13.27%
1992	7,695	(71)	1,568	(1,639)	-21.30%	-3.94%	129.51%	-1.63%	-173.58%	-8.99%	11.49%	17.39%	18.95%	16.32%
1993	1,675	2,196	3,800	(1,604)	-95.76%	-34.61%	-12.23%	122.15%	-2.08%	-173.21%	-9.32%	11.34%	17.23%	18.80%
1994	70,269	(2,585)	17,612	(20,197)	-28.74%	-30.30%	-29.43%	-25.29%	34.90%	-6.55%	-149.36%	-11.99%	9.14%	14.71%
1995	69,321	3,601	49,139	(45,538)	-65.69%	-47.09%	-47.67%	-46.31%	-43.00%	-1.64%	-14.93%	-137.65%	-18.41%	5.30%
1996	58,445	1,437	27,924	(26,487)	-45.32%	-56.37%	-46.57%	-46.98%	-46.03%	-43.63%	-11.88%	-18.18%	-127.90%	-20.87%
1997	164,171	22,683	136,727	(114,044)	-69.47%	-63.13%	-63.74%	-56.95%	-57.13%	-56.38%	-54.77%	-34.75%	-30.01%	-114.53%
1998	64,321	157,833	59,740	98,093	152.51%	-6.98%	-14.79%	-24.69%	-25.36%	-25.64%	-25.56%	-24.81%	-9.54%	-14.88%
1999	79,359	80,232	130,791	(50,559)	-63.71%	33.08%	-21.60%	-25.39%	-31.80%	-31.38%	-31.59%	-31.44%	-30.70%	-17.25%
2000	60,059	214,554	(40,817)	255,371	425.20%	146.90%	148.67%	51.33%	38.08%	23.57%	17.08%	16.74%	16.23%	16.15%
2001	-	-	-	0	NA	425.20%	146.90%	148.67%	51.33%	38.08%	23.57%	17.08%	16.74%	16.23%
2002	-	-	-	0	NA	NA	425.20%	146.90%	148.67%	51.33%	38.08%	23.57%	17.08%	16.74%
2003	2,106	-	8,428	(8,428)	-400.19%	-400.19%	-400.19%	397.24%	138.76%	143.06%	48.76%	35.93%	21.78%	15.53%
2004	-	-	-	0	NA	-400.19%	-400.19%	-400.19%	397.24%	138.76%	143.06%	48.76%	35.93%	21.78%
2005	48,071	2,048	-	2,048	4.26%	4.26%	-12.71%	-12.71%	-12.71%	225.87%	104.66%	116.78%	43.65%	32.74%
2006	33,506	-	2,918	(2,918)	-8.71%	-1.07%	-1.07%	-11.11%	-11.11%	-11.11%	171.19%	87.63%	102.15%	39.76%
2007	703,227	15,884	324,292	(308,408)	-43.86%	-42.26%	-39.41%	-39.41%	-40.37%	-40.37%	-40.37%	-7.36%	-12.19%	-1.49%
2008	234,988	34,836	101,780	(66,944)	-28.49%	-40.01%	-38.93%	-36.89%	-36.89%	-37.64%	-37.64%	-37.64%	-11.95%	-15.49%
2009	105,709	1,658	150,046	(148,388)	-140.37%	-63.20%	-50.17%	-48.88%	-46.61%	-46.61%	-47.27%	-47.27%	-47.27%	-23.38%
2010	173,217	9,004	455,095	(446,091)	-257.53%	-213.13%	-128.70%	-79.68%	-77.78%	-74.74%	-74.74%	-75.27%	-75.27%	-75.27%
2011	237,279	69,915	149,116	(79,201)	-33.38%	-127.97%	-130.51%	-98.59%	-72.13%	-70.70%	-68.35%	-68.35%	-68.81%	-68.81%
2012	12,067	1,445	111,364	(109,919)	-910.91%	-75.85%	-150.32%	-148.33%	-111.44%	-79.03%	-77.46%	-74.92%	-74.92%	-75.36%
2013	70,570.00	7,996	79,968	(71,972)	-101.99%	-220.11%	-81.61%	-143.41%	-142.87%	-110.64%	-80.08%	-78.56%	-76.10%	-76.10%
2014	40,284.00	180	30,660	(30,480)	-75.66%	-92.42%	-172.77%	-80.95%	-138.29%	-138.63%	-109.02%	-79.97%	-78.49%	-76.09%
2015	10,264.00	3,645	37,334	(33,689)	-328.22%	-126.95%	-112.40%	-184.75%	-87.80%	-141.88%	-141.63%	-111.57%	-81.58%	-80.07%
2016		0		0	NA	-328.22%	-126.95%	-112.40%	-184.75%	-87.80%	-141.88%	-141.63%	-111.57%	-81.58%

NA - Not applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Electric Plant
Transmission Poles & Fixtures
Account 355
1950-2016

Transaction Year	Transactional History Retirements		Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1950	70,100		32,402	22,397	10,005	14.27%									
1951	50,082		22,546	19,593	2,953	5.90%	10.78%								
1952	201,436		36,689	39,127	(2,438)	-1.21%	0.20%	3.27%							
1953	206,370		35,077	43,073	(7,996)	-3.87%	-2.56%	-1.63%	0.48%						
1954	127,421		24,869	53,065	(28,196)	-22.13%	-10.84%	-7.22%	-6.10%	-3.92%					
1955	91,662		29,835	26,367	3,468	3.78%	-11.29%	-7.69%	-5.61%	-4.76%	-2.97%				
1956	128,899		28,462	57,629	(29,167)	-22.63%	-11.65%	-15.49%	-11.16%	-8.51%	-7.62%	-5.86%			
1957	167,895		43,254	60,301	(17,047)	-10.15%	-15.57%	-11.00%	-13.75%	-10.93%	-8.81%	-8.05%	-6.55%		
1958	111,243		23,080	37,105	(14,025)	-12.61%	-11.13%	-14.76%	-11.36%	-13.55%	-11.15%	-9.22%	-8.52%	-7.14%	
1959	247,433		54,609	65,786	(11,177)	-4.52%	-7.03%	-8.02%	-10.90%	-9.09%	-10.99%	-9.63%	-8.31%	-7.78%	-6.68%
1960	110,397		26,450	29,450	(3,000)	-2.72%	-3.96%	-6.01%	-7.10%	-9.72%	-8.27%	-10.07%	-8.99%	-7.87%	-7.39%
1961	83,212		29,390	27,880	1,510	1.81%	-0.77%	-2.87%	-4.83%	-6.07%	-8.59%	-7.38%	-9.14%	-8.29%	-7.32%
1962	223,750		60,045	74,847	(14,802)	-6.62%	-4.33%	-3.90%	-4.13%	-5.35%	-6.20%	-8.18%	-7.23%	-8.70%	-8.04%
1963	123,649		36,193	37,982	(1,789)	-1.45%	-4.78%	-3.50%	-3.34%	-3.71%	-4.81%	-5.65%	-7.48%	-6.68%	-8.07%
1964	171,286		39,546	88,834	(49,288)	-28.78%	-17.32%	-12.70%	-10.69%	-9.46%	-8.18%	-8.64%	-8.85%	-10.15%	-9.27%
1965	239,572		59,859	91,231	(31,372)	-13.10%	-19.63%	-15.43%	-12.83%	-11.38%	-10.37%	-9.17%	-9.46%	-9.54%	-10.59%
1966	268,572		56,610	93,246	(36,636)	-13.64%	-13.38%	-17.26%	-14.83%	-13.04%	-11.93%	-11.09%	-9.98%	-10.17%	-10.17%
1967	236,404		41,635	69,071	(27,436)	-11.61%	-12.69%	-12.82%	-15.80%	-14.10%	-12.77%	-11.87%	-11.18%	-10.21%	-10.36%
1968	68,692		22,497	800	21,697	31.59%	-1.88%	-7.39%	-9.07%	-12.50%	-11.26%	-10.48%	-9.76%	-9.25%	-8.59%
1969	79,370		19,302	29,837	(10,535)	-13.27%	7.54%	-4.23%	-8.10%	-9.44%	-12.55%	-11.40%	-10.64%	-9.95%	-9.45%
1970	252,523		111,140	99,614	11,526	4.56%	0.30%	5.66%	-0.75%	-4.57%	-6.35%	-9.27%	-8.60%	-8.33%	-7.85%
1971	370,127		138,795	165,556	(26,761)	-7.23%	-2.45%	-3.67%	-0.53%	-3.13%	-5.34%	-6.57%	-8.82%	-8.32%	-8.13%
1972	267,968		84,801	98,589	(13,788)	-5.15%	-6.35%	-3.26%	-4.08%	-1.72%	-3.55%	-5.31%	-6.35%	-8.32%	-7.91%
1973	331,314		61,745	111,817	(50,072)	-15.11%	-10.66%	-9.35%	-6.47%	-6.89%	-4.96%	-5.94%	-7.04%	-7.73%	-9.30%
1974	224,263		131,581	36,855	94,726	42.24%	8.04%	3.75%	0.34%	1.08%	0.33%	1.68%	-0.04%	-1.78%	-2.94%
1975	100,106		204,026	127,550	76,476	76.40%	52.78%	18.47%	11.62%	6.23%	5.96%	5.02%	6.09%	3.93%	1.78%
1976	137,635		184,179	75,773	108,406	78.76%	77.77%	60.52%	28.93%	20.33%	13.20%	11.91%	10.77%	11.55%	8.91%
1977	575,616		333,652	213,369	120,283	20.90%	32.06%	37.52%	38.54%	25.55%	20.53%	15.41%	14.20%	13.27%	13.79%
1978	330,102		256,514	215,647	40,867	12.38%	17.79%	25.84%	30.26%	32.23%	22.99%	19.16%	14.98%	13.97%	13.16%
1979	130,511		270,156	73,349	196,807	150.80%	51.60%	34.54%	39.73%	42.61%	42.55%	32.11%	27.35%	22.16%	20.53%
1980	80,479		168,944	104,321	64,623	80.30%	123.91%	55.87%	37.84%	42.33%	44.85%	44.48%	34.14%	29.31%	24.00%
1981	1,347,903		308,088	81,854	226,234	16.78%	20.36%	31.28%	27.98%	26.33%	29.10%	30.85%	31.72%	26.96%	24.52%
1982	188,625		213,387	220,081	(6,694)	-3.55%	14.29%	17.57%	27.52%	25.12%	24.20%	26.89%	28.61%	29.59%	25.29%
1983	284,723		100,616	186,190	(85,574)	-30.06%	-19.49%	7.36%	10.44%	19.46%	18.47%	18.94%	21.62%	23.35%	24.59%
1984	128,508		122,917	98,108	24,809	19.31%	-14.70%	-11.21%	8.14%	11.00%	19.45%	18.51%	18.96%	21.53%	23.19%
1985	203,768		355,866	235,581	120,285	59.03%	43.67%	9.65%	6.56%	12.96%	15.38%	22.86%	21.57%	21.46%	23.77%
1986	334,582		1,323,661	229,431	1,094,230	327.04%	225.60%	185.85%	121.25%	100.60%	55.19%	55.98%	60.57%	55.31%	49.82%
1987	249,239		354,980	119,514	235,466	94.47%	227.76%	184.10%	160.99%	115.69%	99.50%	58.77%	59.39%	63.43%	58.29%
1988	193,583		497,454	146,452	351,002	181.32%	132.44%	216.19%	183.55%	164.53%	124.80%	109.51%	66.86%	67.22%	70.70%
1989	169,113		753,487	170,878	582,609	344.51%	257.41%	191.05%	239.12%	207.22%	188.33%	148.56%	132.19%	82.01%	81.97%
1990	143,770		1,000,396	177,284	823,112	572.52%	449.28%	346.86%	263.62%	283.08%	247.80%	227.16%	184.27%	165.58%	103.75%
1991	87,872		683,749	100,947	582,802	663.24%	606.93%	496.19%	393.64%	305.25%	311.44%	274.22%	252.53%	207.71%	187.62%
1992	711,569		103,508	311,292	(207,784)	-29.20%	46.91%	127.03%	160.09%	163.24%	152.22%	183.17%	171.09%	162.31%	140.46%
1993	231,185		404,483	281,046	123,437	53.39%	-8.95%	48.36%	112.53%	141.73%	146.72%	139.43%	169.03%	159.38%	152.05%
1994	459,243		375,526	373,995	1,531	0.33%	18.10%	-5.91%	33.56%	80.99%	105.71%	113.04%	110.98%	139.00%	133.15%
1995	416,978		204,081	423,835	(219,754)	-52.70%	-24.91%	-8.56%	-16.63%	14.70%	53.81%	75.95%	84.40%	85.35%	112.33%
1996	489,131		308,154	243,738	64,416	13.17%	-17.14%	-11.27%	-1.90%	-10.32%	14.38%	45.98%	64.62%	72.40%	74.15%
1997	781,592		997,904	466,262	531,642	68.02%	46.91%	22.30%	17.60%	21.08%	9.50%	27.58%	51.17%	65.38%	71.47%
1998	2,027,225		795,153	1,218,497	(423,344)	-20.88%	3.86%	5.24%	-1.27%	-1.09%	1.77%	-2.54%	8.70%	23.86%	33.69%
1999	930,274		1,274,243	438,875	835,368	89.80%	13.93%	25.24%	23.84%	16.97%	15.47%	17.12%	11.67%	21.00%	33.63%
2000	289,043		270,031	334,971	(64,940)	-22.47%	63.19%	10.69%	21.81%	20.88%	14.66%	13.44%	15.08%	10.11%	19.04%
2001	-		-	3,212	(3,212)	NA	-23.58%	62.92%	10.59%	21.73%	20.81%	14.60%	13.38%	15.03%	10.06%
2002	12,905		-	5,879	(5,879)	-45.56%	-70.45%	-24.52%	61.79%	10.37%	21.52%	20.62%	14.44%	13.24%	14.89%
2003	162,498		17,469	377,435	(359,966)	-221.52%	-208.57%	-210.41%	-93.44%	28.78%	-0.64%	12.12%	12.23%	6.93%	6.39%
2004	2,241			(1,739)	1,739	77.61%	-217.45%	-204.96%	-206.77%	-92.62%	28.86%	-0.59%	12.16%	12.26%	6.97%
2005	412,293		31,152	399,304	(368,152)	-89.29%	-88.39%	-125.88%	-124.13%	-124.67%	-91.06%	1.93%	-10.12%	3.10%	4.07%
2006	259,110		1,912	145,405	(143,492)	-55.38%	-76.21%	-75.69%	-104.03%	-103.15%	-103.52%	-82.94%	-5.25%	-12.99%	0.00%
2007	1,628,805	**	137,389	1,732,775	(1,595,386)	-97.95%	-92.11%	-91.60%	-91.44%	-100.01%	-99.73%	-99.86%	-91.77%	-46.09%	-37.16%
2008	1,099,496	**	191,085	2,265,061	(2,073,976)	-188.63%	-134.49%	-127.63%	-122.98%	-122.85%	-127.35%	-127.05%	-127.14%	-119.32%	-78.76%
2009	1,265,628		266,673	2,742,996	(2,476,323)	-195.66%	-192.39%	-153.88%	-147.87%	-142.70%	-142.59%	-145.25%	-144.98%	-145.05%	-138.14%
2010	1,555,659		106,822	2,089,498	(1,982,676)	-127.45%	-158.05%	-166.62%	-146.47%	-142.40%	-138.88%	-138.81%	-140.91%	-140.72%	-140.77%
2011	3,743,214		124,122	1,466,900	(1,342,778)	-35.87%	-62.76%	-88.38%	-102.76%	-101.92%	-100.66%	-100.19%	-100.15%	-102.09%	-102.02%
2012	2,168,890		312,346	1,707,632	(1,395,286)	-64.33%	-46.31%	-63.21%	-82.41%	-94.29%	-94.81%	-93.93%	-93.78%	-93.75%	-95.43%
2013	1,667,730.00		368,255	5,261,059	(4,892,804)	-293.38%	-163.90%	-100.67%	-105.23%	-116.24%	-123.16%	-120.03%	-118.78%	-117.90%	-117.87%
2014	180,243.00		78,812	1,201,242	(1,122,430)	-622.73%	-325.50%	-184.49%	-112.80%	-115.25%	-124.86%	-130.87%	-126.84%	-125.47%	-124.41%
2015	3,955,680.00		366,954	2,377,568	(2,010,614)	-50.83%	-75.75%	-138.29%	-118.17%	-91.88%	-96.05%	-104.72%	-110.62%	-109.42%	-108.62%
2016	811,686.00		40,463	179,993	(139,530)	-17.19%	-45.10%	-66.14%	-123.43%	-108.84%	-87.04%	-91.50%	-100.09%	-106.01%	-105.28%

** Includes retirements not posted until 2012 removal cost posted 2007and 2008

NA - Not applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Electric Plant
Transmission Overhead Conductors & Devices
Account 356
1950-2016

Transaction Year	Transactional History Retirements		Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1950	66,825		51,664	18,824	32,840	49.14%									
1951	84,714		33,273	21,542	11,731	13.85%	29.41%								
1952	93,134		60,409	32,050	28,359	30.45%	22.54%	29.81%							
1953	348,127		168,272	43,587	124,685	35.82%	34.68%	31.33%	33.34%						
1954	130,287		177,443	55,960	121,483	93.24%	51.46%	48.03%	43.62%	44.13%					
1955	99,963		53,912	12,266	41,646	41.66%	70.85%	49.76%	47.08%	43.36%	43.83%				
1956	192,894		187,331	51,025	136,306	70.66%	60.76%	70.76%	54.99%	52.35%	48.91%	48.92%			
1957	175,856		120,104	39,717	80,387	45.71%	58.76%	55.12%	63.41%	53.27%	51.22%	48.41%	48.45%		
1958	139,213		67,143	33,274	33,869	24.33%	36.26%	49.33%	48.07%	56.04%	49.56%	48.05%	45.76%	45.93%	
1959	267,860		147,854	46,604	101,250	37.80%	33.19%	36.97%	45.35%	44.93%	51.18%	47.23%	46.15%	44.37%	44.57%
1960	155,789		106,235	26,450	79,785	51.21%	42.73%	38.18%	39.97%	46.33%	45.88%	51.19%	47.64%	46.64%	45.00%
1961	103,733		70,900	31,932	38,968	37.57%	45.76%	41.72%	38.08%	39.68%	45.45%	45.12%	50.07%	47.00%	46.09%
1962	256,965		133,567	75,527	58,040	22.59%	26.89%	34.23%	35.45%	33.77%	35.68%	40.90%	40.96%	45.43%	43.64%
1963	118,219		64,060	35,581	28,479	24.09%	23.06%	26.20%	32.34%	33.96%	32.67%	34.56%	39.49%	39.64%	43.89%
1964	183,379		71,468	53,360	18,108	9.87%	15.45%	18.73%	21.68%	27.31%	29.89%	29.26%	31.33%	36.09%	36.42%
1965	213,562		104,613	60,847	43,766	20.49%	15.59%	17.54%	19.22%	21.39%	25.90%	28.35%	27.96%	29.89%	34.24%
1966	295,258		151,009	83,481	67,528	22.87%	21.87%	18.69%	19.48%	20.23%	21.76%	25.22%	27.33%	27.09%	28.81%
1967	188,886		92,577	48,030	44,547	23.58%	23.15%	22.34%	19.74%	20.26%	20.73%	22.02%	25.02%	26.94%	26.75%
1968	92,881		46,343	655	45,688	49.19%	32.02%	27.34%	25.49%	22.55%	22.72%	22.69%	23.75%	26.41%	28.04%
1969	85,761		55,659	33,591	22,068	25.73%	37.93%	30.56%	27.13%	25.51%	22.81%	22.94%	22.87%	23.86%	26.38%
1970	266,406		151,399	81,777	69,622	26.13%	26.04%	30.87%	28.70%	26.85%	25.66%	23.48%	23.53%	23.38%	24.20%
1971	494,579		189,987	136,339	53,648	10.85%	16.20%	17.16%	20.33%	20.87%	21.29%	21.18%	20.05%	20.29%	20.56%
1972	264,526		93,323	81,191	12,132	4.59%	8.67%	13.20%	14.17%	16.87%	17.78%	18.67%	18.88%	18.08%	18.41%
1973	179,397		116,504	103,292	13,212	7.36%	5.71%	8.42%	12.33%	13.22%	15.64%	16.59%	17.59%	17.88%	17.24%
1974	196,988		146,743	29,911	116,832	59.31%	34.55%	22.18%	17.25%	18.93%	19.33%	21.08%	21.35%	21.57%	21.47%
1975	134,395		240,271	105,041	135,230	100.62%	76.06%	51.94%	35.78%	26.07%	26.08%	26.06%	27.31%	26.94%	26.40%
1976	106,926		145,175	62,401	82,774	77.41%	90.34%	76.39%	56.35%	40.83%	30.06%	29.42%	29.24%	30.26%	29.63%
1977	611,357		494,298	175,552	318,746	52.14%	55.90%	62.95%	62.27%	54.25%	45.46%	36.85%	35.58%	35.22%	35.75%
1978	343,077		364,284	152,650	211,634	61.69%	55.57%	57.77%	62.59%	62.12%	55.87%	48.49%	40.50%	39.03%	38.60%
1979	74,994		266,280	64,971	201,309	268.43%	98.77%	71.08%	71.67%	74.73%	72.66%	65.55%	57.12%	47.61%	45.47%
1980	93,579		84,918	85,311	(393)	-0.42%	119.19%	80.63%	65.12%	66.19%	69.58%	68.28%	62.01%	54.43%	45.81%
1981	1,689,484		247,910	30,473	217,437	12.87%	12.17%	22.52%	28.62%	33.73%	35.33%	38.21%	39.48%	37.80%	35.43%
1982	139,903		758,104	927,671	(169,567)	-121.20%	2.62%	2.47%	12.45%	19.67%	26.39%	28.17%	31.22%	32.85%	31.57%
1983	328,391		120,578	241,973	(121,395)	-36.97%	-62.13%	-3.41%	-3.28%	5.48%	12.70%	20.05%	21.86%	24.87%	26.69%
1984	170,389		27,135	124,969	(97,834)	-57.42%	-43.95%	-60.87%	-7.36%	-7.09%	1.18%	8.49%	16.22%	18.06%	21.07%
1985	191,637		238,772	160,619	78,153	40.78%	-5.44%	-20.43%	-37.41%	-3.70%	-3.58%	4.01%	10.53%	17.52%	19.22%
1986	623,823		561,713	222,874	338,839	54.32%	51.14%	32.37%	15.05%	1.94%	7.81%	7.58%	13.48%	18.01%	22.90%
1987	389,119		215,415	154,512	60,903	15.65%	39.46%	39.67%	27.64%	15.19%	4.83%	8.68%	8.44%	13.71%	17.78%
1988	243,975		325,768	163,428	162,340	66.54%	35.26%	44.72%	44.20%	33.50%	21.62%	12.05%	12.41%	12.10%	16.98%
1989	413,472		397,933	367,640	30,293	7.33%	29.30%	24.23%	35.46%	36.01%	28.18%	19.12%	11.27%	11.91%	11.64%
1990	162,316		196,148	197,065	(917)	-0.56%	5.10%	23.39%	20.90%	32.27%	33.08%	26.05%	17.85%	10.54%	11.45%
1991	86,293		485,828	83,157	402,671	466.63%	161.60%	65.26%	65.60%	50.59%	51.80%	50.80%	42.72%	32.69%	24.86%
1992	1,222,511		292,579	476,128	(183,549)	-15.01%	16.74%	14.83%	13.19%	19.30%	18.74%	25.80%	26.66%	22.57%	17.47%
1993	288,459		221,104	359,990	(138,886)	-48.15%	-21.34%	5.02%	4.51%	5.04%	11.25%	11.86%	19.58%	20.70%	17.19%
1994	411,416		118,412	395,767	(277,355)	-67.41%	-59.47%	-31.20%	-9.81%	-9.12%	-6.49%	-0.19%	1.72%	10.27%	11.72%
1995	917,726		335,547	518,325	(182,778)	-19.92%	-34.62%	-37.03%	-27.55%	-12.98%	-12.33%	-10.01%	-5.02%	-3.08%	4.45%
1996	1,007,759		367,203	675,241	(308,038)	-30.57%	-25.49%	-32.87%	-34.55%	-28.34%	-17.49%	-16.82%	-14.60%	-10.44%	-8.46%
1997	859,056		808,761	494,959	313,802	36.53%	0.31%	-6.36%	-14.22%	-17.03%	-16.50%	-7.81%	-7.57%	-6.42%	-3.25%
1998	1,165,034		498,655	801,651	(302,996)	-26.01%	0.53%	-9.80%	-12.15%	-17.37%	-19.28%	-18.39%	-11.36%	-11.08%	-9.91%
1999	701,725		877,112	529,973	347,139	49.47%	2.36%	13.13%	1.34%	-2.86%	-8.10%	-10.26%	-11.15%	-4.95%	-4.85%
2000	243,948		263,013	209,472	53,541	21.95%	42.37%	4.63%	13.86%	2.60%	-1.62%	-6.72%	-8.86%	-9.96%	-4.00%
2001	-		-	-	0	NA	21.95%	42.37%	4.63%	13.86%	2.60%	-1.62%	-6.72%	-8.86%	-9.96%
2002	5,128		-	5,403	(5,403)	-105.37%	-105.37%	19.33%	41.57%	4.36%	13.65%	2.46%	-1.73%	-6.82%	-8.95%
2003	220,143		30,977	234,143	(203,167)	-92.29%	-92.59%	-92.59%	-33.04%	16.41%	-4.75%	6.35%	-2.50%	-5.62%	-10.22%
2004	-		-	137,278	(137,278)	NA	-154.65%	-153.53%	-153.53%	-62.30%	4.68%	-10.62%	2.05%	-5.77%	-8.30%
2005	429,863		12,429	646,727	(634,298)	-147.56%	-179.49%	-149.96%	-149.61%	-149.61%	-103.06%	-36.20%	-31.91%	-15.69%	-18.92%
2006	288,470		-	309,266	(309,266)	-107.21%	-131.35%	-150.47%	-136.82%	-136.65%	-136.65%	-104.07%	-47.04%	-39.02%	-22.43%
2007	1,593,569	**	221,414	1,896,807	(1,675,393)	-105.13%	-105.45%	-113.28%	-119.22%	-116.88%	-116.85%	-116.85%	-104.68%	-73.62%	-61.69%
2008	1,389,790	**	341,108	1,389,569	(1,048,461)	-75.44%	-91.30%	-92.70%	-99.07%	-102.78%	-102.19%	-102.20%	-102.20%	-94.94%	-74.14%
2009	2,037,880			376,190	1,075,084	(698,894)	-34.30%	-50.98%	-68.17%	-70.29%	-76.07%	-78.47%	-78.98%	-79.00%	-79.00%	-75.03%
2010	4,956,065			130,964	958,324	(827,359)	-16.69%	-21.82%	-30.71%	-42.60%	-44.41%	-48.56%	-49.84%	-50.70%	-50.72%	-50.72%
2011	6,369,157			307,363	507,005	(199,642)	-3.13%	-9.07%	-12.92%	-18.81%	-27.22%	-28.61%	-31.60%	-32.41%	-33.17%	-33.19%
2012	733,460			38,688	330,222	(291,534)	-39.75%	-6.92%	-10.93%	-14.31%	-19.80%	-27.76%	-29.08%	-31.94%	-32.71%	-33.44%
2013	4,677,654.00			436,936	3,140,476	(2,703,540)	-57.80%	-55.35%	-27.12%	-24.03%	-25.15%	-28.61%	-34.22%	-35.17%	-37.32%	-37.93%
2014	591,007.00			103,338	1,190,684	(1,087,346)	-183.98%	-71.95%	-68.02%	-34.61%	-29.49%	-29.99%	-33.04%	-38.18%	-39.06%	-41.08%
2015	2,428,649.00			391,777	2,051,275	(1,659,498)	-68.33%	-90.97%	-70.81%	-68.11%	-40.15%	-34.26%	-34.27%	-36.73%	-41.13%	-41.89%
2016	435.00			62,207	197,930	(135,723)	-31200.69%	-73.91%	-95.45%	-72.57%	-69.71%	-41.06%	-34.95%	-34.89%	-37.32%	-41.68%

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Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1950	-	11	-	11	NA									
1951	-	-	-	0	NA	NA								
1952	-	-	-	0	NA	NA	NA							
1953	-	302	51	251	NA	NA	NA	NA						
1954	-	-	-	0	NA	NA	NA	NA	NA					
1955	-	-	-	0	NA	NA	NA	NA	NA	NA				
1956	-	-	-	0	NA	NA	NA	NA	NA	NA	NA			
1957	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA		
1958	-	882	1,363	(481)	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1959	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1960	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1961	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1962	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1963	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1964	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1965	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1966	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1967	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1968	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1969	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1970	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1971	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1972	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1973	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1974	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1975	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977	236	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1978	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1979	-	78,366	-	78,366	NA	NA	33205.93%	33205.93%	33205.93%	33205.93%	33205.93%	33205.93%	33205.93%	33205.93%
1980	46,030	123,082	7,690	115,392	250.69%	420.94%	420.94%	418.79%	418.79%	418.79%	418.79%	418.79%	418.79%	418.79%
1981	-	494,201	-	494,201	NA	1324.34%	1494.59%	1494.59%	1486.96%	1486.96%	1486.96%	1486.96%	1486.96%	1486.96%
1982	-	(68)	-	(68)	NA	NA	1324.19%	1494.44%	1494.44%	1486.82%	1486.82%	1486.82%	1486.82%	1486.82%
1983	117,534	118,874	3,186	115,688	98.43%	98.37%	518.85%	443.38%	491.29%	491.29%	490.59%	490.59%	490.59%	490.59%
1984	-	(7,504)	-	(7,504)	NA	92.04%	91.99%	512.46%	438.79%	486.71%	486.71%	486.00%	486.00%	486.00%
1985	9,155	(44,834)	3,000	(47,834)	-522.49%	-604.46%	47.64%	47.58%	437.67%	387.84%	433.21%	433.21%	432.62%	432.62%
1986	16,478	(80,601)	5,820	(86,421)	-524.46%	-523.76%	-553.03%	-18.21%	-18.26%	326.93%	308.38%	349.80%	349.80%	349.37%
1987	-	-	-	0	NA	-524.46%	-523.76%	-553.03%	-18.21%	-18.26%	326.93%	308.38%	349.80%	349.80%
1988	-	-	-	0	NA	NA	-524.46%	-523.76%	-553.03%	-18.21%	-18.26%	326.93%	308.38%	349.80%
1989	-	-	-	0	NA	NA	NA	-524.46%	-523.76%	-553.03%	-18.21%	-18.26%	326.93%	308.38%
1990	-	-	-	0	NA	NA	NA	NA	-524.46%	-523.76%	-553.03%	-18.21%	-18.26%	326.93%
1991	-	-	-	0	NA	NA	NA	NA	NA	-524.46%	-523.76%	-553.03%	-18.21%	-18.26%
1992	-	-	-	0	NA	NA	NA	NA	NA	NA	-524.46%	-523.76%	-553.03%	-18.21%
1993	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	-524.46%	-523.76%	-553.03%
1994	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	-524.46%	-523.76%
1995	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	-524.46%
1996	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1997	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1998	105,702	1	4,183	(4,182)	-3.96%	-3.96%	-3.96%	-3.96%	-3.96%	-3.96%	-3.96%	-3.96%	-3.96%	-3.96%
1999	-	-	-	0	NA	-3.96%	-3.96%	-3.96%	-3.96%	-3.96%	-3.96%	-3.96%	-3.96%	-3.96%
2000	-	-	-	0	NA	NA	-3.96%	-3.96%	-3.96%	-3.96%	-3.96%	-3.96%	-3.96%	-3.96%
2001	-	-	-	0	NA	NA	NA	-3.96%	-3.96%	-3.96%	-3.96%	-3.96%	-3.96%	-3.96%
2002	-	-	-	0	NA	NA	NA	NA	-3.96%	-3.96%	-3.96%	-3.96%	-3.96%	-3.96%
2003	-	-	-	0	NA	NA	NA	NA	NA	-3.96%	-3.96%	-3.96%	-3.96%	-3.96%
2004	-	-	-	0	NA	NA	NA	NA	NA	NA	-3.96%	-3.96%	-3.96%	-3.96%
2005	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	-3.96%	-3.96%	-3.96%
2006	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	-3.96%	-3.96%
2007	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	-3.96%
2008	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2009	14,529	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2010	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2011	-	-	-	0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2012	-	-	-	0	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2013	-	-	-	0	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2014	-	-	-	0	NA	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%
2015	-	-	16,825	(16,825)	NA	NA	NA	NA	NA	NA	-115.80%	-115.80%	-115.80%	-115.80%
2016	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	-115.80%	-115.80%	-115.80%

NA - Not applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Electric Plant
Transmission Underground Conductor & Devices
Account 358
1950-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1950	-	3	12	(9)	NA									
1951	-	-	-	0	NA	NA								
1952	-	1,588	401	1,187	NA	NA	NA							
1953	-	-	(2)	2	NA	NA	NA	NA						
1954	-	1	-	1	NA	NA	NA	NA	NA					
1955	-	-	-	0	NA	NA	NA	NA	NA	NA				
1956	-	-	-	0	NA	NA	NA	NA	NA	NA	NA			
1957	-	528	155	373	NA	NA	NA	NA	NA	NA	NA	NA		
1958	-	1,887	3,293	(1,406)	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1959	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1960	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1961	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1962	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1963	-	7	31	(24)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1964	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1965	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1966	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1967	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1968	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1969	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1970	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1971	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1972	235	-	31	(31)	-13.19%	-13.19%	-13.19%	-13.19%	-13.19%	-13.19%	-13.19%	-13.19%	-13.19%	-23.40%
1973	-	-	-	0	NA	-13.19%	-13.19%	-13.19%	-13.19%	-13.19%	-13.19%	-13.19%	-13.19%	-13.19%
1974	194	124	122	2	1.03%	1.03%	-6.76%	-6.76%	-6.76%	-6.76%	-6.76%	-6.76%	-6.76%	-6.76%
1975	-	-	-	0	NA	1.03%	1.03%	-6.76%	-6.76%	-6.76%	-6.76%	-6.76%	-6.76%	-6.76%
1976	-	256	-	256	NA	NA	132.99%	132.99%	52.91%	52.91%	52.91%	52.91%	52.91%	52.91%
1977	9,333	64	254	(190)	-2.04%	0.71%	0.71%	0.71%	0.71%	0.38%	0.38%	0.38%	0.38%	0.38%
1978	-	-	-	0	NA	-2.04%	0.71%	0.71%	0.71%	0.71%	0.38%	0.38%	0.38%	0.38%
1979	-	78,366	-	78,366	NA	NA	837.63%	840.37%	840.37%	823.28%	823.28%	803.14%	803.14%	803.14%
1980	29,359	129,405	4,905	124,500	424.06%	690.98%	690.98%	523.82%	524.48%	524.48%	521.87%	521.87%	518.65%	518.65%
1981	-	494,201	-	494,201	NA	2107.36%	2374.29%	2374.29%	1801.09%	1801.75%	1801.75%	1792.77%	1792.77%	1781.92%
1982	-	(71)	-	(71)	NA	NA	2107.12%	2374.05%	2374.05%	1800.90%	1801.57%	1801.57%	1792.58%	1792.58%
1983	109,217	118,874	3,186	115,688	105.92%	105.86%	558.35%	529.90%	586.45%	586.45%	549.32%	549.49%	549.49%	548.77%
1984	-	670,436	-	670,436	NA	719.78%	719.72%	1172.21%	1013.71%	1070.26%	1070.26%	1002.60%	1002.77%	1002.77%
1985	-	(54,902)	-	(54,902)	NA	NA	669.51%	669.45%	1121.94%	974.09%	1030.64%	1030.64%	965.48%	965.65%
1986	22,182	896,968	19,888	877,080	3954.02%	3706.51%	6728.94%	1223.98%	1223.93%	1600.04%	1385.27%	1434.02%	1434.02%	1355.22%
1987	-	-	-	0	NA	3954.02%	3706.51%	6728.94%	1223.98%	1223.93%	1600.04%	1385.27%	1434.02%	1434.02%
1988	-	-	-	0	NA	NA	3954.02%	3706.51%	6728.94%	1223.98%	1223.93%	1600.04%	1385.27%	1434.02%
1989	-	-	-	0	NA	NA	NA	3954.02%	3706.51%	6728.94%	1223.98%	1223.93%	1600.04%	1385.27%
1990	-	-	-	0	NA	NA	NA	NA	3954.02%	3706.51%	6728.94%	1223.98%	1223.93%	1600.04%
1991	-	-	-	0	NA	NA	NA	NA	NA	3954.02%	3706.51%	6728.94%	1223.98%	1223.93%
1992	-	-	-	0	NA	NA	NA	NA	NA	NA	3954.02%	3706.51%	6728.94%	1223.98%
1993	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	3954.02%	3706.51%	6728.94%
1994	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	3954.02%	3706.51%
1995	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	3954.02%
1996	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1997	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1998	640,008	72,657	99,359	(26,702)	-4.17%	-4.17%	-4.17%	-4.17%	-4.17%	-4.17%	-4.17%	-4.17%	-4.17%	-4.17%
1999	-	-	-	0	NA	-4.17%	-4.17%	-4.17%	-4.17%	-4.17%	-4.17%	-4.17%	-4.17%	-4.17%
2000	-	-	-	0	NA	NA	-4.17%	-4.17%	-4.17%	-4.17%	-4.17%	-4.17%	-4.17%	-4.17%
2001	-	-	-	0	NA	NA	NA	-4.17%	-4.17%	-4.17%	-4.17%	-4.17%	-4.17%	-4.17%
2002	-	-	-	0	NA	NA	NA	NA	-4.17%	-4.17%	-4.17%	-4.17%	-4.17%	-4.17%
2003	-	-	-	0	NA	NA	NA	NA	NA	-4.17%	-4.17%	-4.17%	-4.17%	-4.17%
2004	-	-	-	0	NA	NA	NA	NA	NA	NA	-4.17%	-4.17%	-4.17%	-4.17%
2005	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	-4.17%	-4.17%	-4.17%
2006	-	-	521	(521)	NA	NA	NA	NA	NA	NA	NA	NA	-4.25%	-4.25%
2007	-	-	(10,495)	10,495	NA	NA	NA	NA	NA	NA	NA	NA	NA	-2.61%
2008	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2009	393,655	-	58,795	(58,795)	-14.94%	-14.94%	-12.27%	-12.40%	-12.40%	-12.40%	-12.40%	-12.40%	-12.40%	-12.40%
2010	-	-	-	0	NA	-14.94%	-14.94%	-12.27%	-12.40%	-12.40%	-12.40%	-12.40%	-12.40%	-12.40%
2011	-	-	-	0	NA	NA	-14.94%	-14.94%	-12.27%	-12.40%	-12.40%	-12.40%	-12.40%	-12.40%
2012	-	-	-	0	NA	NA	NA	-14.94%	-14.94%	-12.27%	-12.40%	-12.40%	-12.40%	-12.40%
2013	0.00	0	-	0	NA	NA	NA	NA	-14.94%	-14.94%	-12.27%	-12.40%	-12.40%	-12.40%
2014	12,708.00	0	16,820	(16,820)	-132.36%	-132.36%	-132.36%	-132.36%	-132.36%	-18.61%	-18.61%	-16.03%	-16.15%	-16.15%
2015	0.00	0	-	0	NA	-132.36%	-132.36%	-132.36%	-132.36%	-132.36%	-18.61%	-18.61%	-16.03%	-16.15%
2016		0		0	NA	NA	-132.36%	-132.36%	-132.36%	-132.36%	-132.36%	-18.61%	-18.61%	-16.03%

NA - Not applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Electric Plant
Distribution Structures & Improvements
Account 361
1950-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1950	4,668	1,727	805	922	19.75%									
1951	15,211	1,144	1,317	(173)	-1.14%	3.77%								
1952	4,097	334	1,128	(794)	-19.38%	-5.01%	-0.19%							
1953	4,717	1,146	987	159	3.37%	-7.20%	-3.36%	0.40%						
1954	8,964	392	520	(128)	-1.43%	0.23%	-4.29%	-2.84%	-0.04%					
1955	10,152	1,415	1,094	321	3.16%	1.01%	1.48%	-1.58%	-1.43%	0.64%				
1956	16,258	3,047	8,223	(5,176)	-31.84%	-18.38%	-14.09%	-12.03%	-12.71%	-9.75%	-7.60%			
1957	24,758	2,062	10,512	(8,450)	-34.13%	-33.22%	-26.00%	-22.34%	-20.47%	-20.40%	-16.92%	-14.99%		
1958	17,385	1,911	3,197	(1,286)	-7.40%	-23.10%	-25.53%	-21.28%	-18.99%	-17.71%	-17.79%	-15.29%	-13.75%	
1959	40,574	6,694	3,832	2,862	7.05%	2.72%	-8.31%	-12.17%	-10.75%	-10.04%	-9.53%	-9.84%	-8.91%	-8.00%
1960	33,009	4,751	12,367	(7,616)	-23.07%	-6.46%	-6.64%	-12.52%	-14.90%	-13.61%	-12.89%	-12.40%	-12.57%	-11.58%
1961	50,827	4,555	4,758	(203)	-0.40%	-9.33%	-3.98%	-4.40%	-8.82%	-10.87%	-10.13%	-9.74%	-9.44%	-9.64%
1962	43,137	2,904	20,442	(17,538)	-40.66%	-18.88%	-19.97%	-13.43%	-12.86%	-15.37%	-16.56%	-15.71%	-15.19%	-14.83%
1963	23,349	5,100	11,302	(6,202)	-26.56%	-35.71%	-20.41%	-20.99%	-15.03%	-14.40%	-16.49%	-17.49%	-16.68%	-16.18%
1964	44,172	2,864	16,446	(13,582)	-30.75%	-29.30%	-33.73%	-23.24%	-23.21%	-17.99%	-17.26%	-18.76%	-19.49%	-18.73%
1965	93,971	6,463	17,707	(11,244)	-11.97%	-17.97%	-19.21%	-23.73%	-19.09%	-19.55%	-16.27%	-15.82%	-17.04%	-17.66%
1966	44,516	14,397	24,947	(10,550)	-23.70%	-15.74%	-19.37%	-20.18%	-23.73%	-19.77%	-20.10%	-17.15%	-16.72%	-17.76%
1967	47,082	5,000	7,962	(2,962)	-6.29%	-14.75%	-13.34%	-16.69%	-17.60%	-20.96%	-17.95%	-18.39%	-15.94%	-15.60%
1968	100,728	24,978	10,696	14,282	14.18%	7.66%	0.40%	-3.66%	-7.28%	-8.55%	-12.04%	-10.72%	-11.57%	-10.12%
1969	45,723	34,090	15,429	18,661	40.81%	22.49%	15.49%	8.16%	2.47%	-1.43%	-2.90%	-6.58%	-5.94%	-7.02%
1970	79,325	28,343	14,637	13,706	17.28%	25.88%	20.66%	16.01%	10.44%	5.32%	1.82%	0.44%	-2.96%	-2.73%
1971	90,785	46,189	25,069	21,120	23.26%	20.47%	24.78%	21.41%	17.82%	13.29%	8.57%	5.39%	4.08%	0.93%
1972	79,179	12,811	11,132	1,679	2.12%	13.41%	14.64%	18.70%	17.55%	15.01%	11.48%	7.69%	4.97%	3.84%
1973	79,903	56	20,568	(20,512)	-25.67%	-11.84%	0.92%	4.86%	9.24%	10.29%	8.80%	6.24%	3.66%	1.50%
1974	98,153	10,602	18,608	(8,006)	-8.16%	-16.02%	-10.43%	-1.64%	1.87%	5.63%	7.13%	6.12%	4.12%	2.13%
1975	8,604	1,440	3,841	(2,401)	-27.91%	-9.75%	-16.56%	-11.00%	-2.28%	1.28%	5.03%	6.62%	5.65%	3.71%
1976	61,580	22,903	5,657	17,246	28.01%	21.15%	4.06%	-5.51%	-3.66%	2.18%	4.59%	7.64%	8.66%	7.64%
1977	35,275	4,109	15,065	(10,956)	-31.06%	6.49%	3.69%	-2.02%	-8.69%	-6.33%	-0.40%	2.23%	5.28%	6.60%
1978	13,789	1,635	2,687	(1,052)	-7.63%	-24.47%	4.73%	2.38%	-2.38%	-8.64%	-6.38%	-0.62%	1.98%	4.98%
1979	37,260	9,821	1,533	8,288	22.24%	14.17%	-4.31%	9.15%	7.11%	1.22%	-5.20%	-3.80%	1.07%	3.27%
1980	29,557	29,763	14,763	15,000	50.75%	34.85%	27.59%	9.73%	16.07%	14.04%	6.38%	-0.66%	-0.16%	3.82%
1981	55,983	(27,853)	28,361	(56,214)	-100.41%	-48.18%	-26.81%	-24.88%	-26.15%	-11.86%	-12.43%	-11.20%	-13.95%	-11.40%
1982	85,347	(838)	18,922	(19,760)	-23.15%	-53.76%	-35.68%	-25.31%	-24.21%	-25.15%	-14.88%	-15.23%	-13.60%	-15.50%
1983	66,282	4,622	19,315	(14,693)	-22.17%	-22.72%	-43.67%	-31.90%	-24.55%	-23.74%	-24.54%	-16.14%	-16.39%	-14.75%
1984	213,038	17,717	8,025	9,692	4.55%	-1.79%	-6.79%	-19.25%	-14.65%	-11.83%	-11.72%	-12.99%	-8.77%	-9.04%
1985	128,773	4,941	31,917	(26,976)	-20.95%	-5.06%	-7.84%	-10.48%	-19.65%	-16.05%	-13.74%	-13.60%	-14.53%	-10.93%
1986	106,345	23,029	5,751	17,278	16.25%	-4.12%	0.00%	-2.86%	-5.75%	-13.83%	-11.04%	-9.33%	-9.29%	-10.29%
1987	85,442	(9)	11,251	(11,260)	-13.18%	3.14%	-6.54%	-2.11%	-4.33%	-6.67%	-13.75%	-11.28%	-9.73%	-9.70%
1988	34,499	-	-	0	0.00%	-9.39%	2.66%	-5.90%	-1.98%	-4.09%	-6.35%	-13.14%	-10.80%	-9.33%
1989	59,494	5,347	1,552	3,795	6.38%	4.04%	-4.16%	3.43%	-4.14%	-1.19%	-3.19%	-5.38%	-11.75%	-9.61%
1990	158,940	10,747	44,037	(33,290)	-20.95%	-13.50%	-11.66%	-12.04%	-5.28%	-8.80%	-5.18%	-6.50%	-8.02%	-13.22%
1991	88,511	1,530	17,057	(15,527)	-17.54%	-19.73%	-14.67%	-13.19%	-13.18%	-7.31%	-9.97%	-6.43%	-7.54%	-8.84%
1992	6,597	2,833	36,184	(33,351)	-505.55%	-51.39%	-32.34%	-25.00%	-22.52%	-20.68%	-13.40%	-14.86%	-10.17%	-11.01%
1993	191,769	912	131,495	(130,583)	-68.09%	-82.64%	-62.56%	-47.72%	-41.35%	-38.71%	-35.22%	-27.74%	-26.72%	-20.52%
1994	59,748	(1,076)	51,894	(52,970)	-88.66%	-72.98%	-84.03%	-67.06%	-52.56%	-46.35%	-43.69%	-39.88%	-32.34%	-30.74%
1995	565,442	848	183,548	(182,700)	-32.31%	-37.70%	-44.83%	-48.52%	-45.52%	-41.87%	-39.33%	-38.17%	-36.46%	-32.33%
1996	145,351	16,460	798,066	(781,606)	-537.74%	-135.67%	-132.02%	-119.28%	-121.91%	-113.18%	-101.12%	-96.11%	-93.58%	-88.66%
1997	16,802	-	108,736	(108,736)	-647.16%	-549.08%	-147.48%	-143.01%	-128.34%	-130.86%	-121.53%	-108.56%	-103.27%	-100.59%
1998	72,654	(543)	9,690	(10,233)	-14.08%	-132.99%	-383.54%	-135.37%	-132.12%	-120.45%	-122.85%	-114.72%	-103.31%	-98.53%
1999	185,783	95	65,656	(65,561)	-35.29%	-29.33%	-67.04%	-229.71%	-116.51%	-114.92%	-107.66%	-109.77%	-103.65%	-94.84%
2000	130,869	1,531	117,556	(116,025)	-88.66%	-57.35%	-49.27%	-74.01%	-196.24%	-113.25%	-112.00%	-105.85%	-107.76%	-102.31%
2001	-	-	571	(571)	NA	-89.09%	-57.53%	-49.42%	-74.15%	-196.34%	-113.30%	-112.05%	-105.89%	-107.81%
2002	-	-	-	0	NA	NA	-89.09%	-57.53%	-49.42%	-74.15%	-196.34%	-113.30%	-112.05%	-105.89%
2003	1,313	-	379	(379)	-28.88%	-28.88%	-72.37%	-88.50%	-57.41%	-49.35%	-74.00%	-195.94%	-113.20%	-111.95%
2004	387,578	-	25,206	(25,206)	-6.50%	-6.58%	-6.58%	-6.73%	-27.36%	-29.44%	-28.01%	-41.10%	-117.86%	-85.74%
2005	26,913	-	-	0	0.00%	-6.08%	-6.15%	-6.15%	-6.29%	-26.01%	-28.36%	-27.07%	-39.75%	-114.58%
2006	36,406	-	3,203	(3,203)	-8.80%	-5.06%	-6.30%	-6.37%	-6.37%	-6.49%	-24.93%	-27.44%	-26.28%	-38.44%
2007	31	-	7,907	(7,907)	-25687.46%	-30.49%	-17.54%	-8.05%	-8.11%	-8.11%	-8.24%	-26.29%	-28.46%	-27.22%
2008	36,835	-	16,808	(16,808)	-45.63%	-67.04%	-38.10%	-27.87%	-10.89%	-10.94%	-10.94%	-11.06%	-27.44%	-29.25%
2009	407,177	532	571,354	(570,823)	-140.19%	-132.35%	-134.12%	-124.62%	-118.01%	-69.72%	-69.66%	-69.66%	-69.72%	-72.14%
2010	289,559	-	210,579	(210,579)	-72.72%	-112.15%	-108.81%	-109.88%	-105.11%	-101.56%	-70.45%	-70.41%	-70.41%	-70.46%
2011	6,315	-	6,899	(6,899)	-109.24%	-73.50%	-112.13%	-108.82%	-109.88%	-105.14%	-101.62%	-70.66%	-70.61%	-70.61%
2012	140,986	2,485	384,028	(381,543)	-270.62%	-263.71%	-137.12%	-138.60%	-134.71%	-135.61%	-130.57%	-126.85%	-91.83%	-91.77%
2013	90,141.00	72,376	39,055	33,321	36.97%	-150.66%	-149.56%	-107.34%	-121.66%	-118.78%	-119.59%	-115.58%	-112.58%	-83.66%
2014	12,249.00	46	40,402	(40,356)	-329.46%	-6.87%	-159.66%	-158.39%	-112.39%	-124.35%	-121.40%	-122.20%	-118.15%	-115.11%
2015	138,814.00	21,132	383,011	(361,879)	-260.69%	-266.27%	-152.95%	-196.36%	-194.94%	-142.75%	-141.79%	-138.63%	-139.33%	-135.23%
2016	0.00	2	166	(164)	NA	-260.81%	-266.38%	-153.01%	-196.40%	-194.98%	-142.77%	-141.80%	-138.65%	-139.35%

NA - Not applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Electric Plant
Distribution Station Equipment
Account 362
1950-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1950	580,406	98,972	39,339	59,633	10.27%									
1951	486,275	68,206	36,237	31,969	6.57%	8.59%								
1952	408,213	106,440	27,175	79,265	19.42%	12.44%	11.59%							
1953	325,425	58,464	28,508	29,956	9.21%	14.89%	11.57%	11.15%						
1954	758,059	136,474	76,754	59,720	7.88%	8.28%	11.33%	10.16%	10.18%					
1955	497,109	114,311	56,995	57,316	11.53%	9.32%	9.30%	11.38%	10.43%	10.40%				
1956	413,464	189,776	41,358	148,418	35.90%	22.59%	15.91%	14.81%	15.60%	14.08%	13.44%			
1957	571,297	228,543	47,832	180,711	31.63%	33.42%	26.08%	19.92%	18.56%	18.68%	16.98%	16.01%		
1958	546,956	219,648	41,221	178,427	32.62%	32.12%	33.14%	27.84%	22.41%	21.03%	20.84%	19.11%	17.99%	
1959	955,632	286,162	69,482	216,680	22.67%	26.30%	27.77%	29.12%	26.19%	22.48%	21.42%	21.23%	19.80%	18.80%
1960	701,697	139,834	85,687	54,147	7.72%	16.34%	20.38%	22.70%	24.41%	22.67%	20.15%	19.40%	19.40%	18.30%
1961	611,125	203,606	48,278	155,328	25.42%	15.96%	18.79%	21.47%	23.19%	24.57%	23.06%	20.78%	20.08%	20.04%
1962	899,760	297,357	60,156	237,201	26.36%	25.98%	20.19%	20.94%	22.66%	23.85%	24.91%	23.63%	21.63%	20.98%
1963	726,973	291,149	46,228	244,921	33.69%	29.64%	28.48%	23.53%	23.32%	24.46%	25.28%	26.09%	24.87%	22.94%
1964	1,294,375	414,183	32,012	382,171	29.53%	31.02%	29.59%	28.87%	25.36%	24.87%	25.61%	26.15%	26.75%	25.70%
1965	935,518	399,358	66,813	332,545	35.55%	32.05%	32.45%	31.03%	30.27%	27.20%	26.50%	27.00%	27.36%	27.83%
1966	1,568,935	542,844	96,442	446,402	28.45%	31.10%	30.57%	31.07%	30.29%	29.79%	27.49%	26.90%	27.28%	27.56%
1967	855,704	297,807	58,020	239,787	28.02%	28.30%	30.32%	30.10%	30.58%	29.98%	29.57%	27.55%	27.01%	27.35%
1968	1,119,777	295,104	134,278	160,826	14.36%	20.28%	23.90%	26.33%	27.05%	27.79%	27.62%	27.45%	25.86%	25.54%
1969	2,116,252	342,102	126,493	215,609	10.19%	11.63%	15.06%	18.77%	21.15%	22.52%	23.47%	23.74%	23.84%	22.80%
1970	2,168,522	638,268	168,947	469,321	21.64%	15.99%	15.65%	17.34%	19.57%	21.27%	22.33%	23.10%	23.35%	23.45%
1971	1,947,078	501,021	179,219	321,802	16.53%	19.22%	16.15%	15.88%	17.15%	18.96%	20.41%	21.39%	22.09%	22.38%
1972	1,037,677	82,653	68,222	14,431	1.39%	11.27%	15.63%	14.05%	14.09%	15.38%	17.28%	18.73%	19.80%	20.53%
1973	718,039	374,958	108,811	266,147	37.07%	15.98%	16.27%	18.25%	16.12%	15.90%	16.94%	18.51%	19.79%	20.70%
1974	1,490,198	380,904	111,875	269,029	18.05%	24.24%	16.93%	16.78%	18.21%	16.42%	16.20%	17.09%	18.46%	19.60%
1975	1,738,144	614,293	162,415	451,878	26.00%	22.33%	25.01%	20.09%	19.09%	19.70%	17.91%	17.58%	18.26%	19.34%
1976	1,044,340	273,597	95,218	178,379	17.08%	22.65%	21.05%	23.35%	19.57%	18.83%	19.43%	17.83%	17.54%	18.17%
1977	1,647,038	562,726	253,421	309,305	18.78%	18.12%	21.21%	20.42%	22.22%	19.40%	18.82%	19.34%	17.95%	17.68%
1978	1,171,751	252,240	151,658	100,582	8.58%	14.54%	15.23%	18.57%	18.46%	20.17%	17.97%	17.71%	18.37%	17.22%
1979	2,167,258	604,763	189,746	415,017	19.15%	15.44%	16.54%	16.64%	18.73%	18.62%	19.95%	18.20%	17.95%	18.48%
1980	1,269,797	245,045	228,892	16,153	1.27%	12.54%	11.54%	13.44%	13.96%	16.28%	16.53%	17.84%	16.45%	16.46%
1981	847,117	390,650	114,912	275,738	32.55%	13.79%	16.50%	14.80%	15.72%	15.90%	17.67%	17.72%	18.87%	17.49%
1982	608,661	(168,164)	168,392	(336,556)	-55.29%	-4.18%	-1.64%	7.57%	7.77%	10.12%	10.95%	13.44%	14.01%	15.32%
1983	2,412,801	1,327,966	226,651	1,101,315	45.64%	25.31%	26.90%	20.56%	20.14%	18.55%	18.58%	18.44%	19.46%	19.32%
1984	1,795,506	(323,231)	196,978	(520,209)	-28.97%	13.81%	5.08%	9.19%	7.74%	10.45%	10.24%	11.42%	11.88%	13.55%
1985	2,110,292	633,564	533,137	100,427	4.76%	-10.75%	10.79%	4.98%	7.98%	7.04%	9.38%	9.31%	10.42%	10.88%
1986	1,118,393	304,196	228,745	75,451	6.75%	5.45%	-6.85%	10.18%	5.23%	7.83%	7.01%	9.14%	9.09%	10.15%
1987	1,754,370	1,094,746	236,977	857,769	48.89%	32.49%	20.74%	7.57%	17.57%	13.04%	14.59%	13.18%	14.09%	13.67%
1988	1,246,796	398,055	260,943	137,112	11.00%	33.15%	25.98%	18.79%	8.11%	16.78%	12.81%	14.22%	12.97%	13.84%
1989	1,549,267	(1,062,065)	255,034	(1,317,099)	-85.01%	-42.20%	-7.08%	-4.35%	-1.88%	-6.96%	3.63%	0.78%	2.78%	2.65%
1990	1,527,584	587,721	437,398	150,323	9.84%	-37.92%	-23.81%	-2.83%	-1.34%	0.04%	-4.65%	4.33%	1.76%	3.50%
1991	991,458	57,079	274,416	(217,337)	-21.92%	-2.66%	-34.02%	-23.46%	-5.51%	-3.83%	-2.07%	-6.07%	2.54%	0.21%
1992	2,093,341	176,967	371,143	(194,176)	-9.28%	-13.34%	-5.66%	-25.61%	-19.45%	-6.37%	-4.94%	-3.29%	-6.54%	1.05%
1993	2,850,572	11,209	484,649	(473,440)	-16.61%	-13.50%	-14.91%	-9.84%	-22.77%	-18.66%	-8.80%	-7.47%	-5.78%	-8.22%
1994	1,870,353	122,530	241,578	(119,048)	-6.37%	-12.55%	-11.54%	-12.86%	-9.15%	-19.95%	-16.77%	-8.47%	-7.34%	-5.84%
1995	5,159,212	287,613	945,396	(657,783)	-12.75%	-11.05%	-12.65%	-12.06%	-12.82%	-10.43%	-17.63%	-15.57%	-9.63%	-8.72%
1996	1,700,872	68,785	431,278	(362,493)	-21.31%	-14.87%	-13.05%	-13.93%	-13.21%	-13.80%	-11.57%	-17.99%	-16.08%	-10.59%
1997	2,402,522	144,366	365,288	(220,922)	-9.20%	-14.22%	-13.40%	-12.22%	-13.11%	-12.61%	-13.15%	-11.27%	-16.94%	-15.31%
1998	2,123,681	(4,117)	329,891	(334,008)	-15.73%	-12.26%	-14.73%	-13.83%	-12.78%	-13.46%	-12.98%	-13.44%	-11.72%	-16.82%
1999	2,140,164	499,705	335,508	164,197	7.67%	-3.98%	-5.86%	-9.00%	-10.43%	-9.94%	-10.98%	-10.80%	-11.32%	-9.91%
2000	5,933,577	48,117	1,176,442	(1,128,325)	-19.02%	-11.94%	-12.73%	-12.06%	-13.16%	-13.05%	-12.46%	-12.95%	-12.66%	-13.00%
2001	7,644	(26,011)	56,991	(83,002)	-1085.90%	-20.39%	-12.96%	-13.53%	-12.71%	-13.73%	-13.47%	-12.85%	-13.29%	-12.97%
2002	444,385	(890)	(890)	0	0.00%	-18.36%	-18.97%	-12.28%	-12.97%	-12.27%	-13.32%	-13.17%	-12.59%	-13.05%
2003	611,133	(209)	402,144	(402,353)	-65.84%	-38.12%	-45.65%	-23.06%	-15.86%	-15.84%	-14.67%	-15.41%	-14.74%	-14.04%
2004	1,918,984	153,620	389,606	(235,986)	-12.30%	-25.23%	-21.46%	-24.19%	-20.75%	-15.24%	-15.32%	-14.38%	-15.06%	-14.53%
2005	518,771	11,528	216,410	(204,882)	-39.49%	-18.08%	-27.66%	-24.14%	-26.46%	-21.78%	-16.33%	-16.24%	-15.19%	-15.77%
2006	2,176,283	-	257,631	(257,631)	-11.84%	-17.16%	-15.14%	-21.07%	-19.42%	-20.85%	-19.91%	-15.62%	-15.63%	-14.79%
2007	3,664,102	221,414	1,316,458	(1,095,043)	-29.89%	-23.16%	-24.49%	-21.67%	-24.70%	-23.53%	-24.40%	-22.31%	-18.62%	-18.31%
2008	3,455,741	341,108	719,927	(378,819)	-10.96%	-20.70%	-18.63%	-19.73%	-18.51%	-20.86%	-20.13%	-20.77%	-20.21%	-17.35%
2009	2,042,577	376,190	586,428	(210,238)	-10.29%	-10.71%	-18.38%	-17.12%	-18.10%	-17.29%	-19.36%	-18.78%	-19.33%	-19.24%
2010	3,222,362	130,964	2,165,848	(2,034,884)	-63.15%	-42.64%	-30.09%	-30.03%	-27.31%	-27.73%	-25.99%	-27.37%	-26.70%	-27.14%
2011	1,686,463	307,363	332,428	(25,066)	-1.49%	-41.96%	-32.66%	-25.45%	-26.61%	-24.63%	-25.09%	-23.78%	-25.11%	-24.54%
2012	2,226,359	184,444	917,217	(732,773)	-32.91%	-19.37%	-39.14%	-32.72%	-26.77%	-27.47%	-25.63%	-26.01%	-24.75%	-25.92%
2013	4,063,163.00	2,214,954	1,851,534	363,420	8.94%	-5.87%	-4.95%	-21.69%	-19.93%	-18.08%	-20.20%	-19.39%	-19.85%	-19.27%
2014	600,765.00	11,364	1,184,771	(1,173,407)	-195.32%	-17.37%	-22.39%	-18.28%	-30.53%	-27.55%	-24.23%	-25.22%	-23.96%	-24.30%
2015	3,618,822.00	153,570	1,513,650	(1,360,080)	-37.58%	-60.04%	-26.20%	-27.62%	-24.01%	-32.19%	-29.63%	-26.54%	-27.04%	-25.80%
2016	1,441,427.00	13,126	309,405	(296,279)	-20.55%	-32.73%	-49.99%	-25.36%	-26.77%	-23.64%	-31.19%	-28.94%	-26.16%	-26.68%

NA - Not applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Electric Plant
Distribution Poles, Towers & Fixtures
Account 364
1950-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1950	362,810	138,721	157,389	(18,668)	-5.15%									
1951	390,340	167,709	171,357	(3,648)	-0.93%	-2.96%								
1952	469,069	193,928	203,469	(9,541)	-2.03%	-1.53%	-2.61%							
1953	471,325	201,761	211,768	(10,007)	-2.12%	-2.08%	-1.74%	-2.47%						
1954	546,267	194,142	227,302	(33,160)	-6.07%	-4.24%	-3.55%	-3.00%	-3.35%					
1955	453,354	166,190	207,220	(41,030)	-9.05%	-7.42%	-5.72%	-4.83%	-4.18%	-4.31%				
1956	560,734	211,800	270,036	(58,236)	-10.39%	-9.79%	-8.49%	-7.01%	-6.08%	-5.38%	-5.36%			
1957	665,054	225,191	321,788	(96,597)	-14.52%	-12.63%	-11.66%	-10.29%	-8.86%	-7.85%	-7.09%	-6.91%		
1958	585,324	184,524	316,709	(132,185)	-22.58%	-18.30%	-15.85%	-14.49%	-12.85%	-11.31%	-10.15%	-9.28%	-8.95%	
1959	599,575	205,710	308,655	(102,945)	-17.17%	-19.84%	-17.93%	-16.18%	-15.05%	-13.61%	-12.22%	-11.12%	-10.28%	-9.91%
1960	598,706	239,012	321,716	(82,704)	-13.81%	-15.49%	-17.82%	-16.92%	-15.71%	-14.83%	-13.64%	-12.43%	-11.44%	-10.68%
1961	567,584	143,220	315,362	(172,142)	-30.33%	-21.85%	-20.26%	-20.84%	-19.45%	-18.03%	-17.02%	-15.71%	-14.44%	-13.39%
1962	792,510	228,021	419,175	(191,154)	-24.12%	-26.71%	-22.77%	-21.46%	-21.67%	-20.42%	-19.13%	-18.18%	-16.95%	-15.75%
1963	690,456	189,208	371,385	(182,177)	-26.39%	-25.17%	-26.60%	-23.71%	-22.50%	-22.52%	-21.33%	-20.12%	-19.21%	-18.03%
1964	756,756	183,617	383,014	(199,397)	-26.35%	-26.37%	-25.57%	-26.53%	-24.30%	-23.23%	-23.15%	-22.06%	-20.93%	-20.07%
1965	804,409	169,470	424,453	(254,983)	-31.70%	-29.11%	-28.27%	-27.19%	-27.68%	-25.71%	-24.65%	-24.42%	-23.34%	-22.24%
1966	847,782	273,769	474,266	(200,497)	-23.65%	-27.57%	-27.19%	-27.01%	-26.42%	-26.92%	-25.37%	-24.50%	-24.32%	-23.37%
1967	805,477	233,692	536,116	(302,424)	-37.55%	-30.42%	-30.84%	-29.78%	-29.18%	-28.33%	-28.54%	-27.04%	-26.12%	-25.83%
1968	1,075,082	304,729	630,209	(325,480)	-30.27%	-33.39%	-30.36%	-30.67%	-29.91%	-29.42%	-28.69%	-28.84%	-27.54%	-26.72%
1969	1,031,876	327,687	692,795	(365,108)	-35.38%	-32.78%	-34.10%	-31.74%	-31.73%	-30.97%	-30.44%	-29.70%	-29.75%	-28.56%
1970	1,099,317	457,528	720,404	(262,876)	-23.91%	-29.47%	-29.74%	-31.31%	-29.97%	-30.22%	-29.76%	-29.43%	-28.90%	-28.99%
1971	789,082	316,327	579,299	(262,972)	-33.33%	-27.85%	-30.51%	-30.45%	-31.64%	-30.44%	-30.60%	-30.15%	-29.82%	-29.30%
1972	851,141	390,947	514,057	(123,110)	-14.46%	-23.54%	-23.69%	-26.89%	-27.64%	-29.05%	-28.35%	-28.72%	-28.49%	-28.33%
1973	786,997	357,350	442,644	(85,294)	-10.84%	-12.72%	-19.42%	-20.82%	-24.12%	-25.29%	-26.83%	-26.46%	-26.98%	-26.92%
1974	868,610	722,096	471,309	250,787	28.87%	10.00%	1.69%	-6.69%	-11.00%	-15.64%	-18.06%	-20.20%	-20.56%	-21.56%
1975	669,661	466,247	484,869	(18,622)	-2.78%	15.09%	6.32%	0.75%	-6.03%	-9.91%	-14.22%	-16.63%	-18.74%	-19.21%
1976	781,496	639,065	669,345	(30,280)	-3.87%	-3.37%	8.70%	3.75%	-0.16%	-5.68%	-9.11%	-13.05%	-15.38%	-17.42%
1977	855,685	608,648	808,910	(200,262)	-23.40%	-14.08%	-10.80%	0.05%	-2.11%	-4.30%	-8.38%	-10.93%	-14.19%	-16.16%
1978	806,509	598,244	957,979	(359,735)	-44.60%	-33.69%	-24.16%	-19.56%	-8.99%	-9.30%	-10.08%	-12.94%	-14.55%	-17.07%
1979	994,133	915,964	1,142,986	(227,022)	-22.84%	-32.59%	-29.63%	-23.77%	-20.35%	-11.76%	-11.63%	-12.00%	-14.27%	-15.52%
1980	997,429	1,077,699	1,134,786	(57,087)	-5.72%	-14.27%	-23.01%	-23.10%	-19.71%	-17.49%	-10.75%	-10.76%	-11.18%	-13.26%
1981	995,763	850,505	1,142,620	(292,115)	-29.34%	-17.52%	-19.29%	-24.67%	-24.44%	-21.48%	-19.43%	-13.41%	-13.15%	-13.28%
1982	859,241	750,335	904,844	(154,509)	-17.98%	-24.08%	-17.66%	-19.00%	-23.44%	-23.43%	-21.00%	-19.25%	-13.91%	-13.63%
1983	722,959	553,596	833,553	(279,957)	-38.72%	-27.46%	-28.18%	-21.92%	-22.12%	-25.49%	-25.20%	-22.83%	-21.08%	-16.01%
1984	811,245	634,607	990,768	(356,161)	-43.90%	-41.46%	-33.03%	-31.95%	-25.98%	-25.40%	-27.91%	-27.36%	-25.01%	-23.26%
1985	869,691	862,825	1,068,316	(205,491)	-23.63%	-33.41%	-35.01%	-30.53%	-30.25%	-25.59%	-25.16%	-27.38%	-26.95%	-24.87%
1986	761,199	721,560	1,019,111	(297,551)	-39.09%	-30.84%	-35.18%	-35.99%	-32.15%	-31.59%	-27.30%	-26.67%	-28.52%	-28.01%
1987	940,055	438,215	1,115,316	(677,101)	-72.03%	-57.29%	-45.90%	-45.42%	-44.24%	-39.70%	-37.97%	-33.34%	-32.03%	-33.19%
1988	782,576	593,197	928,440	(335,243)	-42.84%	-58.77%	-52.74%	-45.19%	-44.94%	-44.02%	-40.13%	-38.53%	-34.30%	-33.00%
1989	840,122	537,074	1,005,727	(468,653)	-55.78%	-49.54%	-57.79%	-53.51%	-47.31%	-46.76%	-45.74%	-42.12%	-40.44%	-36.41%
1990	954,826	382,133	1,115,170	(733,037)	-76.77%	-66.95%	-59.63%	-62.94%	-58.70%	-52.77%	-51.57%	-50.18%	-46.51%	-44.51%
1991	952,268	316,848	1,178,838	(861,990)	-90.52%	-83.64%	-75.12%	-67.96%	-68.82%	-64.49%	-58.67%	-56.93%	-55.21%	-51.44%
1992	920,840	273,420	1,548,982	(1,275,562)	-138.52%	-114.12%	-101.51%	-91.04%	-82.56%	-80.72%	-75.57%	-69.14%	-66.53%	-64.18%
1993	886,974	273,526	1,457,836	(1,184,310)	-133.52%	-136.07%	-120.35%	-109.15%	-99.31%	-91.03%	-88.18%	-82.87%	-76.36%	-73.34%
1994	735,765	273,404	1,202,388	(928,984)	-126.26%	-130.23%	-133.23%	-121.60%	-111.98%	-103.06%	-95.30%	-92.18%	-86.98%	-80.61%
1995	1,053,000	332,152	1,386,330	(1,054,178)	-100.11%	-110.87%	-118.38%	-123.54%	-116.62%	-109.71%	-102.57%	-96.01%	-93.21%	-88.55%
1996	1,330,016	450,572	1,468,879	(1,018,307)	-76.56%	-86.97%	-96.24%	-104.49%	-110.85%	-107.56%	-103.26%	-98.06%	-92.95%	-90.86%
1997	1,267,093	382,023	1,529,412	(1,147,389)	-90.55%	-83.39%	-88.21%	-94.60%	-101.14%	-106.70%	-104.54%	-101.27%	-97.00%	-92.64%
1998	1,659,671	538,137	1,847,881	(1,309,744)	-78.92%	-83.95%	-81.64%	-85.31%	-90.29%	-95.82%	-100.83%	-99.71%	-97.47%	-94.17%
1999	1,909,168	1,175,239	2,373,833	(1,198,594)	-62.78%	-70.28%	-75.60%	-75.80%	-79.35%	-83.69%	-88.69%	-93.39%	-93.13%	-91.79%
2000	1,918,722	545,808	2,086,404	(1,540,596)	-80.29%	-71.56%	-73.78%	-76.93%	-76.87%	-79.55%	-83.03%	-87.19%	-91.24%	-91.18%
2001	1,332,653	172,764	1,799,297	(1,626,533)	-122.05%	-97.41%	-84.60%	-83.22%	-84.36%	-83.26%	-84.96%	-87.67%	-91.03%	-94.39%
2002	739,364	55,756.79	795,800	(740,044)	-100.09%	-114.22%	-97.91%	-86.54%	-84.87%	-85.68%	-84.49%	-85.96%	-88.44%	-91.55%
2003	640,353	-	463,689	(463,689)	-72.41%	-87.24%	-104.35%	-94.38%	-85.16%	-83.89%	-84.78%	-83.77%	-85.22%	-87.62%
2004	923,703	-	282,566	(282,566)	-30.59%	-47.71%	-64.53%	-85.61%	-83.77%	-78.40%	-78.50%	-79.97%	-79.58%	-81.27%
2005	876,456	-	488,383	(488,383)	-55.72%	-42.83%	-50.59%	-62.10%	-79.80%	-79.95%	-76.02%	-76.50%	-78.08%	-77.92%
2006	1,328,528	5,788.00	647,767	(641,979)	-48.32%	-51.26%	-45.16%	-49.79%	-58.04%	-72.64%	-74.54%	-72.21%	-73.20%	-74.94%
2007	832,466	-	4,027,184.12	(4,027,184)	-483.77%	-216.07%	-169.80%	-137.34%	-128.30%	-124.40%	-123.93%	-114.18%	-104.84%	-101.30%
2008	984,341	-	1,819,603.36	(1,819,603)	-184.85%	-321.82%	-206.30%	-173.48%	-146.79%	-138.27%	-133.80%	-131.76%	-121.45%	-111.70%
2009	661,009	-	1,827,129.46	(1,827,129)	-276.42%	-221.64%	-309.70%	-218.47%	-188.01%	-162.08%	-152.89%	-147.30%	-143.25%	-131.45%
2010	912,450	-	1,538,628.63	(1,538,629)	-168.63%	-213.91%	-202.73%	-271.74%	-208.84%	-184.85%	-162.99%	-154.89%	-149.76%	-145.76%
2011	1,690,352	-	2,664,541.08	(2,664,541)	-157.63%	-161.49%	-184.76%	-184.78%	-233.77%	-195.33%	-178.54%	-161.89%	-155.42%	-151.15%
2012	937,758	1,459,534	2,842,830	(1,383,296)	-147.51%	-154.02%	-157.78%	-176.45%	-178.04%	-220.33%	-189.23%	-175.00%	-160.42%	-154.66%
2013	906,698.00	1,067,618	2,798,945	(1,731,327)	-190.95%	-168.86%	-163.49%	-164.55%	-179.02%	-179.96%	-216.48%	-189.42%	-176.58%	-163.17%
2014	1,114,666.00	1,113,335	2,774,147	(1,660,812)	-149.00%	-167.81%	-161.38%	-160.02%	-161.43%	-173.64%	-175.17%	-207.13%	-184.61%	-173.58%
2015	1,455,614.00	663,949	3,394,032	(2,730,083)	-187.56%	-170.83%	-176.08%	-170.01%	-166.58%	-166.85%	-176.28%	-177.26%	-204.13%	-185.00%
2016	600,771.00	679,237	5,983,222	(5,303,985)	-882.86%	-390.69%	-305.73%	-280.21%	-255.40%	-230.75%	-223.31%	-227.55%	-223.02%	-244.52%

NA - Not applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Electric Plant
Distribution Overhead Conductors & Devices
Account 365
1950-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1950	311,231	188,324	74,502	113,822	36.57%									
1951	321,364	190,799	81,674	109,125	33.96%	35.24%								
1952	390,977	245,915	97,882	148,033	37.86%	36.10%	36.24%							
1953	376,791	295,560	105,941	189,619	50.32%	43.98%	41.02%	40.03%						
1954	396,215	338,733	110,064	228,669	57.71%	54.11%	48.65%	45.47%	43.93%					
1955	425,512	351,830	93,288	258,542	60.76%	59.29%	56.47%	51.89%	48.88%	47.15%				
1956	491,978	369,139	118,549	250,590	50.94%	55.49%	56.16%	54.86%	51.67%	49.30%	47.84%			
1957	684,494	393,508	138,560	254,948	37.25%	42.97%	47.70%	49.68%	49.78%	48.10%	46.63%	45.71%		
1958	615,131	369,685	136,084	233,601	37.98%	37.59%	41.26%	45.00%	46.93%	47.35%	46.26%	45.19%	44.52%	
1959	563,107	397,873	137,600	260,273	46.22%	41.92%	40.20%	42.44%	45.25%	46.80%	47.18%	46.25%	45.33%	44.73%
1960	605,124	371,815	150,747	221,068	36.53%	41.20%	40.09%	39.30%	41.23%	43.69%	45.16%	45.63%	44.96%	44.23%
1961	612,283	344,925	155,362	189,563	30.96%	33.73%	37.68%	37.76%	37.64%	39.47%	41.74%	43.18%	43.74%	43.30%
1962	913,571	479,590	221,981	257,609	28.20%	29.31%	31.36%	34.46%	35.12%	35.48%	37.18%	39.22%	40.60%	41.25%
1963	777,890	371,578	195,240	176,338	22.67%	25.66%	27.07%	29.03%	31.82%	32.75%	33.39%	35.03%	36.96%	38.31%
1964	790,038	374,700	205,126	169,574	21.46%	22.06%	24.32%	25.63%	27.42%	29.90%	30.92%	31.70%	33.26%	35.07%
1965	1,086,662	442,064	273,496	168,568	15.51%	18.02%	19.38%	21.64%	23.00%	24.71%	26.98%	28.11%	29.05%	30.56%
1966	1,181,692	526,799	229,649	297,150	25.15%	20.53%	20.77%	21.16%	22.51%	23.48%	24.80%	26.65%	27.62%	28.46%
1967	1,131,512	462,766	264,397	198,369	17.53%	21.42%	19.53%	19.90%	20.33%	21.55%	22.44%	23.64%	25.30%	26.24%
1968	1,364,210	588,198	306,146	282,052	20.68%	19.25%	21.14%	19.86%	20.09%	20.41%	21.39%	22.13%	23.16%	24.60%
1969	1,533,663	608,005	330,668	277,337	18.08%	19.30%	18.81%	20.24%	19.43%	19.65%	19.95%	20.81%	21.47%	22.38%
1970	1,540,399	676,390	344,155	332,235	21.57%	19.83%	20.09%	19.57%	20.55%	19.85%	20.00%	20.22%	20.92%	21.49%
1971	1,115,794	432,839	241,627	191,212	17.14%	19.71%	19.11%	19.50%	19.16%	20.06%	19.51%	19.67%	19.89%	20.55%
1972	1,148,405	511,359	277,138	234,221	20.40%	18.79%	19.91%	19.39%	19.65%	19.34%	20.10%	19.61%	19.75%	19.94%
1973	1,094,044	551,011	272,272	278,739	25.48%	22.87%	20.97%	21.16%	20.42%	20.47%	20.10%	20.69%	20.18%	20.27%
1974	1,186,378	982,553	296,225	686,328	57.85%	42.32%	34.98%	30.60%	28.31%	26.25%	25.41%	24.52%	24.59%	23.79%
1975	1,001,179	727,041	334,658	392,383	39.19%	49.31%	41.37%	35.93%	32.15%	29.85%	27.76%	26.79%	25.85%	25.78%
1976	1,139,105	746,008	404,527	341,481	29.98%	34.29%	42.69%	38.43%	34.71%	31.78%	29.87%	28.01%	27.11%	26.23%
1977	1,052,882	727,239	531,781	195,458	18.56%	24.50%	29.10%	36.89%	34.61%	32.14%	29.98%	28.58%	27.09%	26.38%
1978	1,036,168	617,860	529,372	88,488	8.54%	13.59%	19.37%	24.07%	31.47%	30.46%	28.95%	27.45%	26.57%	25.47%
1979	1,217,414	1,089,903	581,581	508,322	41.75%	26.48%	23.96%	25.50%	28.02%	33.35%	32.24%	30.71%	29.19%	28.17%
1980	1,206,570	1,215,879	812,525	403,354	33.43%	37.61%	28.91%	26.49%	27.20%	29.00%	33.37%	32.40%	31.03%	29.65%
1981	1,348,144	813,255	1,023,266	(210,011)	-15.58%	7.57%	18.60%	16.43%	16.82%	18.96%	21.49%	26.18%	26.11%	25.54%
1982	1,184,273	891,439	861,742	29,697	2.51%	-7.12%	5.97%	14.76%	13.68%	14.41%	16.58%	19.04%	23.48%	23.67%
1983	983,821	705,168	719,722	(14,554)	-1.48%	0.70%	-5.54%	4.41%	12.07%	11.54%	12.46%	14.64%	17.06%	21.32%
1984	1,142,514	1,223,869	923,090	300,779	26.33%	13.46%	9.54%	2.27%	8.68%	14.37%	13.62%	14.19%	15.93%	17.99%
1985	1,287,338	1,219,214	1,018,726	200,488	15.57%	20.63%	14.26%	11.23%	5.15%	9.92%	14.55%	13.89%	14.36%	15.89%
1986	1,006,210	1,104,204	886,423	217,781	21.64%	18.24%	20.93%	15.94%	13.10%	7.54%	11.37%	15.31%	14.64%	15.00%
1987	1,271,033	874,009	991,850	(117,841)	-9.27%	4.39%	8.43%	12.77%	10.31%	8.96%	4.94%	8.59%	12.38%	12.04%
1988	1,102,260	1,250,157	893,030	357,127	32.40%	10.08%	13.52%	14.09%	16.50%	13.89%	12.20%	8.19%	11.08%	14.26%
1989	1,364,652	814,344	1,001,622	(187,278)	-13.72%	6.89%	1.39%	5.69%	7.80%	10.75%	9.27%	8.42%	5.39%	8.23%
1990	1,518,591	763,122	968,484	(205,362)	-13.52%	-13.62%	-0.89%	-2.92%	1.03%	3.51%	6.51%	5.70%	5.35%	3.04%
1991	1,373,240	516,756	1,100,444	(583,688)	-42.50%	-27.29%	-22.94%	-11.55%	-11.12%	-6.80%	-3.57%	-0.18%	-0.29%	-0.02%
1992	2,644,759	478,960	1,670,950	(1,191,990)	-45.07%	-44.19%	-35.78%	-31.42%	-22.63%	-20.80%	-16.65%	-13.06%	-9.52%	-8.94%
1993	2,405,576	323,269	1,490,514	(1,167,245)	-48.52%	-46.71%	-45.81%	-39.64%	-35.84%	-28.61%	-26.51%	-22.69%	-19.16%	-15.73%
1994	1,906,308	382,459	1,138,160	(755,701)	-39.64%	-44.60%	-44.78%	-44.40%	-39.64%	-36.49%	-30.32%	-28.35%	-24.90%	-21.62%
1995	1,999,112	736,309	1,327,071	(590,762)	-29.55%	-34.48%	-39.83%	-41.38%	-41.53%	-37.94%	-35.44%	-30.21%	-28.51%	-25.46%
1996	2,458,589	603,448	1,311,527	(708,079)	-28.80%	-29.14%	-32.28%	-36.74%	-38.67%	-39.08%	-36.37%	-34.40%	-30.01%	-28.55%
1997	2,231,917	560,259	1,303,589	(743,330)	-33.30%	-30.94%	-30.53%	-32.55%	-36.04%	-37.79%	-38.22%	-35.95%	-34.26%	-30.39%
1998	2,976,280	751,165	1,692,351	(941,186)	-31.62%	-32.34%	-31.21%	-30.86%	-32.31%	-35.10%	-36.69%	-37.13%	-35.29%	-33.88%
1999	3,519,349	1,165,780	2,105,564	(939,784)	-26.70%	-28.96%	-30.07%	-29.79%	-29.75%	-31.00%	-33.41%	-34.94%	-35.43%	-33.98%
2000	3,583,144	599,171	1,853,315	(1,254,144)	-35.00%	-30.89%	-31.11%	-31.50%	-31.05%	-30.88%	-31.77%	-33.68%	-34.95%	-35.36%
2001	2,245,747	186,080	1,521,713	(1,335,634)	-59.47%	-44.43%	-37.76%	-36.28%	-35.82%	-34.81%	-34.25%	-34.74%	-36.17%	-37.07%
2002	267,023	$6,396.46	1,177,045	(1,170,649)	-438.41%	-99.74%	-61.69%	-48.88%	-44.80%	-43.07%	-41.04%	-39.85%	-39.83%	-40.72%
2003	1,321,734	$70,481.49	8,623	61,859	4.68%	-69.79%	-63.75%	-49.86%	-42.41%	-40.10%	-39.16%	-37.79%	-36.99%	-37.22%
2004	2,180,897	$515,567.28	372,909	142,658	6.54%	5.84%	-25.63%	-38.26%	-37.05%	-34.27%	-33.78%	-33.72%	-33.14%	-32.83%
2005	3,285,767	$490,005.10	1,348,786	(858,781)	-26.14%	-13.10%	-9.64%	-25.87%	-33.98%	-34.26%	-32.64%	-32.49%	-32.57%	-32.18%
2006	3,588,071	$578,188.59	1,216,234	(638,045)	-17.78%	-21.78%	-14.96%	-12.45%	-23.14%	-29.47%	-30.67%	-29.97%	-30.19%	-30.46%
2007	6,258,148	681,882.43	3,036,373.43	(2,354,491)	-37.62%	-30.39%	-29.33%	-24.22%	-21.92%	-28.50%	-32.14%	-32.59%	-31.80%	-31.78%
2008	6,843,323	1,074,260.89	1,662,865.20	(588,604)	-8.60%	-22.46%	-21.46%	-22.23%	-19.40%	-18.04%	-22.77%	-25.94%	-27.04%	-27.00%
2009	4,581,574	435,034.28	1,876,982.35	(1,441,948)	-31.47%	-17.77%	-24.80%	-23.61%	-23.95%	-21.46%	-20.23%	-24.18%	-26.77%	-27.63%
2010	5,179,417	571,162.57	1,512,856.92	(941,694)	-18.18%	-24.42%	-17.90%	-23.30%	-22.55%	-22.95%	-20.93%	-19.91%	-23.25%	-25.52%
2011	9,863,938	778,236.49	2,802,065.45	(2,023,829)	-20.52%	-19.71%	-22.46%	-18.88%	-22.46%	-22.00%	-22.34%	-20.83%	-20.05%	-22.63%
2012	7,598,664	593,007	3,088,170	(2,495,162)	-32.84%	-25.88%	-24.12%	-25.36%	-21.99%	-24.42%	-23.87%	-24.03%	-22.68%	-21.97%
2013	7,305,864.41	1,637,565	3,265,206	(1,627,641)	-22.28%	-27.66%	-24.82%	-23.67%	-24.70%	-22.04%	-24.09%	-23.65%	-23.80%	-22.63%
2014	8,867,420.47	2,002,597	5,200,285	(3,197,688)	-36.06%	-29.84%	-30.79%	-27.78%	-26.50%	-27.02%	-24.52%	-25.97%	-25.48%	-25.51%
2015	6,966,420.18	300,048	3,003,725	(2,703,677)	-38.81%	-37.27%	-32.54%	-32.61%	-29.67%	-28.37%	-28.66%	-26.26%	-27.38%	-26.86%
2016	2,840,964.44	218,763	5,047,648	(4,828,885)	-169.97%	-76.81%	-57.46%	-47.57%	-44.23%	-38.85%	-36.65%	-36.20%	-33.06%	-33.49%

NA - Not applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Electric Plant
Distribution Underground Conduit
Account 366
1950-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1950	12,207	1,647	1,354	293	2.40%									
1951	10,409	870	683	187	1.80%	2.12%								
1952	19,407	1,945	2,080	(135)	-0.70%	0.17%	0.82%							
1953	8,226	3,019	1,514	1,505	18.30%	4.96%	4.09%	3.68%						
1954	5,417	640	499	141	2.60%	12.06%	4.57%	3.91%	3.58%					
1955	6,073	492	1,779	(1,287)	-21.19%	-9.97%	1.82%	0.57%	0.83%	1.14%				
1956	27,113	3,770	6,185	(2,415)	-8.91%	-11.16%	-9.22%	-4.39%	-3.31%	-2.61%	-1.93%			
1957	22,217	6,215	4,801	1,414	6.36%	-2.03%	-4.13%	-3.53%	-0.93%	-0.88%	-0.60%	-0.27%		
1958	33,073	3,984	5,085	(1,101)	-3.33%	0.57%	-2.55%	-3.83%	-3.46%	-1.71%	-1.55%	-1.28%	-0.97%	
1959	46,508	2,679	7,852	(5,173)	-11.12%	-7.88%	-4.77%	-5.64%	-6.34%	-6.00%	-4.65%	-4.20%	-3.85%	-3.45%
1960	9,760	2,516	2,278	238	2.44%	-8.77%	-6.76%	-4.14%	-5.07%	-5.75%	-5.45%	-4.22%	-3.83%	-3.52%
1961	18,699	2,882	2,991	(109)	-0.58%	0.45%	-6.73%	-5.69%	-3.63%	-4.54%	-5.16%	-4.91%	-3.83%	-3.52%
1962	71,602	4,325	9,478	(5,153)	-7.20%	-5.83%	-5.02%	-6.96%	-6.29%	-4.90%	-5.37%	-5.78%	-5.59%	-4.80%
1963	28,679	2,092	10,094	(8,002)	-27.90%	-13.12%	-11.15%	-10.12%	-10.38%	-9.26%	-7.76%	-7.88%	-8.19%	-7.97%
1964	64,509	2,062	10,198	(8,136)	-12.61%	-17.32%	-12.92%	-11.66%	-10.95%	-10.98%	-10.06%	-8.82%	-8.83%	-9.06%
1965	107,616	5,297	25,282	(19,985)	-18.57%	-16.34%	-17.99%	-15.15%	-14.22%	-13.68%	-13.33%	-12.46%	-11.43%	-11.27%
1966	97,080	3,169	12,141	(8,972)	-9.24%	-14.15%	-13.78%	-15.14%	-13.60%	-12.97%	-12.59%	-12.44%	-11.81%	-11.00%
1967	100,758	2,186	14,937	(12,751)	-12.66%	-10.98%	-13.65%	-13.47%	-14.51%	-13.40%	-12.91%	-12.61%	-12.48%	-11.96%
1968	153,763	1,264	16,202	(14,938)	-9.71%	-10.88%	-10.43%	-12.34%	-12.37%	-13.18%	-12.49%	-12.14%	-11.93%	-11.87%
1969	47,362	2,231	11,081	(8,850)	-18.69%	-11.83%	-12.10%	-11.41%	-12.93%	-12.89%	-13.61%	-12.93%	-12.59%	-12.38%
1970	115,293	27,677	12,374	15,303	13.27%	3.97%	-2.68%	-5.09%	-5.87%	-8.07%	-8.50%	-9.28%	-9.09%	-8.89%
1971	28,305	107,839	4,197	103,642	366.16%	82.83%	57.65%	27.60%	18.50%	13.53%	8.22%	6.34%	5.02%	3.95%
1972	94,916	58,557	6,053	52,504	55.32%	126.72%	71.88%	56.88%	33.59%	24.96%	19.76%	14.22%	12.08%	10.71%
1973	74,941	4,053	4,667	(614)	-0.82%	30.55%	78.49%	54.50%	44.89%	28.58%	21.82%	17.59%	12.85%	10.99%
1974	62,399	100,932	5,912	95,020	152.28%	68.74%	63.25%	96.16%	70.73%	60.73%	41.95%	33.84%	28.44%	22.71%
1975	47,348	59,204	6,160	53,044	112.03%	134.91%	79.84%	71.51%	98.60%	75.35%	65.89%	47.27%	38.94%	33.25%
1976	65,310	7,541	13,377	(5,836)	-8.94%	41.90%	81.25%	56.65%	56.28%	79.78%	64.09%	56.77%	41.95%	34.99%
1977	94,788	(147,647)	12,009	(159,656)	-168.43%	-103.37%	-54.21%	-6.46%	-5.23%	7.84%	29.51%	26.30%	22.92%	16.52%
1978	81,337	93,985	27,880	66,105	81.27%	-53.12%	-41.17%	-16.05%	13.86%	11.28%	19.30%	37.17%	33.03%	29.59%
1979	51,770	252,268	17,178	235,090	454.10%	226.28%	62.11%	46.28%	55.42%	70.42%	59.25%	58.60%	73.08%	63.46%
1980	87,626	263,113	35,992	227,121	259.19%	331.58%	239.35%	116.84%	95.27%	97.12%	104.14%	90.23%	85.21%	96.76%
1981	153,243	285,943	48,113	237,830	155.20%	193.03%	239.22%	204.87%	129.38%	112.47%	112.43%	116.29%	104.08%	98.39%
1982	70,298	68,384	67,679	705	1.00%	106.71%	149.65%	193.08%	172.61%	112.64%	99.50%	100.41%	104.94%	94.90%
1983	87,920	136,677	48,879	87,798	99.86%	55.94%	104.77%	138.68%	174.90%	160.59%	110.85%	99.55%	100.35%	104.39%
1984	89,831	58,144	37,340	20,804	23.16%	61.10%	44.07%	86.50%	117.45%	149.69%	140.74%	99.86%	90.77%	91.99%
1985	125,149	428,363	43,028	385,335	307.90%	188.92%	163.07%	132.54%	139.14%	156.27%	179.43%	168.74%	130.78%	120.72%
1986	98,818	446,485	51,961	394,524	399.24%	348.20%	255.15%	221.17%	188.38%	180.24%	189.95%	207.83%	195.67%	158.98%
1987	156,712	774,890	102,067	672,823	429.34%	417.70%	381.60%	313.17%	279.58%	248.44%	230.16%	233.09%	245.51%	232.19%
1988	136,359	472,096	57,192	414,904	304.27%	371.15%	378.23%	361.21%	311.17%	284.43%	258.39%	241.17%	242.74%	253.08%
1989	230,601	342,776	134,559	208,217	90.29%	169.81%	247.47%	271.57%	277.65%	250.35%	236.05%	219.46%	210.89%	214.31%
1990	1,253,640	544,563	106,837	437,726	34.92%	43.52%	65.46%	97.54%	113.44%	125.60%	121.20%	120.33%	116.61%	119.07%
1991	265,292	283,435	124,229	159,206	60.01%	39.30%	46.02%	64.69%	92.67%	106.82%	117.92%	114.31%	113.79%	110.63%
1992	679,154	257,592	189,751	67,841	9.99%	24.04%	30.24%	35.94%	50.21%	72.04%	83.50%	93.04%	90.97%	91.22%
1993	236,075	22,618	126,605	(103,987)	-44.05%	-3.95%	10.42%	23.04%	28.86%	42.27%	62.77%	73.65%	82.86%	81.23%
1994	207,963	355,249	97,881	257,368	123.76%	34.54%	19.70%	27.40%	30.97%	35.73%	47.90%	66.78%	76.84%	85.37%
1995	157,297	176,532	124,802	51,730	32.89%	84.62%	34.11%	21.32%	27.96%	31.07%	35.58%	47.15%	65.18%	74.82%
1996	75,286	43,887	114,390	(70,503)	-93.65%	-8.07%	54.16%	19.89%	14.93%	22.31%	27.81%	32.45%	43.88%	61.66%
1997	178,315	832,358	75,488	756,870	424.46%	270.65%	179.63%	160.85%	104.27%	62.53%	62.16%	50.97%	53.74%	63.72%
1998	409,975	270,319	123,277	147,042	35.87%	153.65%	125.59%	107.83%	111.05%	82.10%	56.91%	57.28%	49.19%	51.75%
1999	534,118	169,728	115,914	53,814	10.08%	21.28%	85.33%	74.08%	69.30%	76.54%	60.72%	46.82%	48.09%	43.96%
2000	265,029	130,300	77,995	52,305	19.74%	13.28%	20.94%	72.80%	64.23%	61.19%	68.31%	55.46%	44.20%	45.59%
2001	138,922	17,074	63,950	(46,876)	-33.74%	1.34%	6.32%	15.30%	63.10%	55.73%	53.69%	61.10%	49.83%	40.44%
2002	46,710	1,180	54,777	(53,597)	-114.74%	-54.12%	-10.69%	0.57%	10.95%	57.82%	50.90%	49.33%	57.02%	46.41%
2003	210,418	-	2,981	(2,981)	-1.42%	-22.00%	-26.12%	-7.74%	0.22%	9.33%	50.83%	44.98%	44.04%	51.49%
2004	82,296	-	93,947	(93,947)	-114.16%	-33.11%	-44.35%	-41.27%	-19.52%	-7.15%	3.30%	43.55%	38.23%	37.83%
2005	368,295	-	463,130	(463,130)	-125.75%	-123.63%	-84.73%	-86.71%	-78.02%	-54.71%	-33.69%	-19.82%	15.64%	12.08%
2006	749,130	-	150,174	(150,174)	-20.05%	-54.89%	-58.95%	-50.37%	-52.43%	-50.80%	-40.76%	-29.42%	-19.88%	6.68%
2007	216,824	0.00	544,491.27	(544,491)	-251.12%	-71.91%	-86.77%	-88.37%	-77.12%	-78.17%	-74.77%	-62.71%	-47.83%	-36.47%
2008	174,689	0.00	120,236.12	(120,236)	-68.83%	-169.78%	-71.44%	-84.70%	-86.22%	-76.32%	-77.29%	-74.24%	-63.19%	-49.14%
2009	116,985	0.00	197,695.85	(197,696)	-168.99%	-109.00%	-169.60%	-80.52%	-90.76%	-91.89%	-81.97%	-82.75%	-79.51%	-68.41%
2010	3,903,611	0.00	117,180.54	(117,181)	-3.00%	-7.83%	-10.37%	-22.20%	-21.89%	-28.81%	-30.06%	-29.02%	-29.71%	-29.80%
2011	253,494	0.00	706,087.49	(706,087)	-278.54%	-19.80%	-23.89%	-25.65%	-36.13%	-33.91%	-39.75%	-40.80%	-39.43%	-40.01%
2012	416,672	103,903	432,654	(328,750)	-78.90%	-154.42%	-25.19%	-28.77%	-30.21%	-39.64%	-37.12%	-42.39%	-43.33%	-41.97%
2013	218,642.00	141,133	957,849	(816,716)	-373.54%	-180.30%	-208.32%	-41.08%	-44.13%	-44.98%	-53.41%	-49.28%	-53.67%	-54.43%
2014	167,675.00	37,893	890,788	(852,894)	-508.66%	-432.19%	-248.87%	-255.99%	-56.89%	-59.47%	-59.78%	-67.37%	-61.67%	-65.25%
2015	401,496.00	120,987	694,992	(574,004)	-142.97%	-250.70%	-284.79%	-213.57%	-224.86%	-63.33%	-65.59%	-65.69%	-72.54%	-66.60%
2016	136,937.00	140,373	1,273,473	(1,133,100)	-827.46%	-317.05%	-362.55%	-365.15%	-276.23%	-276.60%	-82.36%	-84.17%	-83.70%	-89.75%

NA - Not applicable

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Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1950	93,490	50,082	15,872	34,210	36.59%									
1951	63,913	50,965	10,902	40,063	62.68%	47.19%								
1952	183,359	130,411	26,746	103,665	56.54%	58.13%	52.22%							
1953	142,748	84,917	15,659	69,258	48.52%	53.03%	54.61%	51.13%						
1954	139,539	109,656	21,235	88,421	63.37%	55.86%	56.13%	56.92%	53.87%					
1955	59,026	37,807	9,315	28,492	48.27%	58.88%	54.55%	55.24%	56.05%	53.38%				
1956	114,496	95,809	27,870	67,939	59.34%	55.57%	59.05%	55.75%	55.98%	56.58%	54.24%			
1957	200,828	130,961	35,067	95,894	47.75%	51.96%	51.38%	54.63%	53.30%	54.01%	54.62%	52.93%		
1958	163,745	102,672	30,846	71,826	43.86%	46.00%	49.19%	49.09%	52.03%	51.42%	52.35%	52.97%	51.65%	
1959	111,972	42,772	20,593	22,179	19.81%	34.09%	39.85%	43.62%	44.05%	47.46%	47.62%	49.09%	49.82%	48.85%
1960	140,008	101,055	22,854	78,201	55.85%	39.84%	41.42%	43.48%	45.97%	46.14%	48.72%	48.70%	49.84%	50.46%
1961	89,736	40,290	17,472	22,818	25.43%	43.97%	36.05%	38.58%	41.19%	43.72%	44.03%	46.67%	46.90%	48.21%
1962	262,727	89,462	29,894	59,568	22.67%	23.37%	32.61%	30.24%	33.14%	36.17%	38.62%	39.12%	41.76%	42.43%
1963	221,768	104,079	30,371	73,708	33.24%	27.51%	27.18%	32.80%	31.04%	33.16%	35.62%	37.70%	38.16%	40.50%
1964	212,267	91,610	36,742	54,868	25.85%	29.62%	27.00%	26.82%	31.21%	29.98%	31.87%	34.14%	36.05%	36.50%
1965	420,593	218,442	60,327	158,115	37.59%	33.65%	33.55%	30.99%	30.58%	33.20%	32.18%	33.35%	34.94%	36.38%
1966	506,932	342,511	75,339	267,172	52.70%	45.85%	42.13%	40.68%	37.77%	37.12%	38.53%	37.47%	37.96%	38.80%
1967	233,695	158,930	33,859	125,071	53.52%	52.96%	47.39%	44.06%	42.56%	39.75%	39.09%	40.21%	39.17%	39.50%
1968	521,097	346,413	65,328	281,085	53.94%	53.81%	53.37%	49.42%	46.78%	45.36%	42.86%	42.22%	42.95%	42.00%
1969	199,084	43,031	43,959	(928)	-0.47%	38.90%	42.48%	46.03%	44.14%	42.29%	41.42%	39.51%	39.04%	39.88%
1970	379,618	278,850	43,497	235,353	62.00%	40.51%	46.87%	48.04%	49.32%	47.14%	45.31%	44.32%	42.40%	41.90%
1971	215,316	200,327	45,394	154,933	71.96%	65.60%	49.04%	50.98%	51.36%	51.69%	49.30%	47.45%	46.36%	44.40%
1972	322,236	292,825	44,356	248,469	77.11%	75.04%	69.64%	57.14%	56.12%	55.80%	55.14%	52.50%	50.62%	49.43%
1973	271,263	132,931	35,840	97,091	35.79%	58.22%	61.88%	61.92%	52.97%	53.23%	53.26%	53.16%	51.02%	49.40%
1974	501,105	821,661	70,639	751,022	149.87%	109.81%	100.18%	95.54%	88.00%	78.68%	73.33%	71.58%	68.54%	64.90%
1975	357,319	257,860	63,168	194,692	54.49%	110.17%	92.31%	88.94%	86.74%	82.15%	74.83%	70.90%	69.54%	67.11%
1976	470,001	322,925	93,103	229,822	48.90%	51.31%	88.49%	79.55%	79.14%	78.42%	75.94%	70.34%	67.70%	66.75%
1977	739,923	451,934	146,640	305,294	41.26%	44.23%	46.57%	71.59%	67.44%	68.61%	68.86%	68.06%	64.12%	62.78%
1978	638,793	546,069	124,182	421,887	66.04%	52.74%	51.77%	52.21%	70.29%	67.14%	68.12%	68.35%	67.73%	64.42%
1979	672,919	638,122	147,498	490,624	72.91%	69.57%	59.36%	57.41%	57.05%	70.81%	68.21%	68.93%	69.08%	68.49%
1980	888,210	759,053	194,068	564,985	63.61%	67.62%	67.16%	60.64%	59.02%	58.59%	69.31%	67.31%	67.96%	68.13%
1981	1,019,372	1,181,797	219,113	962,684	94.44%	80.08%	78.21%	75.80%	69.34%	67.17%	66.23%	74.15%	72.28%	72.55%
1982	757,411	986,943	202,108	784,835	103.62%	98.35%	86.77%	83.98%	81.10%	74.85%	72.50%	71.34%	77.85%	76.04%
1983	835,466	583,706	185,935	397,771	47.61%	74.24%	82.12%	77.43%	76.70%	75.28%	70.75%	69.04%	68.23%	74.17%
1984	1,292,634	684,497	344,377	340,120	26.31%	34.67%	52.77%	63.65%	63.64%	64.78%	64.91%	62.36%	61.49%	61.17%
1985	1,513,861	980,441	251,807	728,634	48.13%	38.08%	40.27%	51.17%	59.31%	59.92%	61.17%	61.58%	59.78%	59.20%
1986	1,455,156	1,947,266	262,666	1,684,600	115.77%	81.28%	64.61%	61.82%	67.23%	71.26%	70.39%	70.59%	70.27%	68.08%
1987	2,004,356	1,925,561	222,726	1,702,835	84.96%	97.92%	82.76%	71.12%	68.35%	71.75%	74.36%	73.38%	73.35%	72.93%
1988	1,919,447	1,454,247	349,073	1,105,174	57.58%	71.56%	83.52%	75.75%	67.94%	66.06%	68.97%	71.37%	70.78%	70.90%
1989	2,647,807	2,020,800	342,965	1,677,835	63.37%	60.93%	68.26%	76.87%	72.31%	66.82%	65.45%	67.77%	69.80%	69.41%
1990	2,499,163	2,617,246	301,019	2,316,227	92.68%	77.60%	72.16%	74.99%	80.63%	76.54%	71.67%	70.25%	71.95%	73.38%
1991	2,299,456	934,202	362,628	571,574	24.86%	60.18%	61.31%	60.55%	64.85%	70.63%	68.25%	64.78%	63.91%	65.66%
1992	3,833,100	1,551,960	513,259	1,038,701	27.10%	26.26%	45.49%	49.69%	50.83%	55.33%	60.61%	59.57%	57.36%	56.96%
1993	3,281,693	1,203,248	402,337	800,911	24.41%	25.86%	25.61%	39.68%	43.99%	45.57%	49.84%	54.65%	54.19%	52.61%
1994	2,349,744	605,218	266,802	338,416	14.40%	20.23%	23.01%	23.37%	35.52%	39.88%	41.68%	45.84%	50.41%	50.26%
1995	2,680,366	1,490,184	269,941	1,220,243	45.53%	30.99%	28.39%	27.98%	27.48%	37.10%	40.65%	42.16%	45.81%	49.89%
1996	2,735,038	1,791,988	343,383	1,448,605	52.96%	49.28%	38.73%	34.47%	32.57%	31.54%	39.31%	42.16%	43.38%	46.55%
1997	3,142,168	1,115,533	438,616	676,917	21.54%	36.17%	39.10%	33.78%	31.61%	30.65%	29.99%	36.86%	39.62%	40.87%
1998	5,347,677	1,336,742	434,643	902,099	16.87%	18.60%	26.97%	30.55%	28.21%	27.57%	27.50%	27.26%	33.06%	35.67%
1999	5,617,672	1,676,053	513,006	1,163,047	20.70%	18.83%	19.44%	24.88%	27.72%	26.29%	26.04%	26.18%	26.08%	31.01%
2000	5,265,406	885,172	384,847	500,325	9.50%	15.28%	15.81%	16.74%	21.22%	23.85%	23.03%	23.18%	23.62%	23.69%
2001	5,171,356	79,102	548,632	(469,530)	-9.08%	0.30%	7.44%	9.79%	11.30%	15.47%	18.16%	17.89%	18.49%	19.33%
2002	3,761,758	90,112	272,122	(182,010)	-4.84%	-7.29%	-1.07%	5.11%	7.61%	9.15%	13.01%	15.60%	15.52%	16.26%
2003	1,478,221	78,826	6,220	72,607	4.91%	-2.09%	-5.56%	-0.50%	5.09%	7.46%	8.94%	12.64%	15.15%	15.10%
2004	2,482,444	586,853	190,980	395,873	15.95%	11.83%	3.71%	-1.42%	1.75%	6.23%	8.18%	9.48%	12.88%	15.20%
2005	4,275,419	637,591	1,669,831	(1,032,240)	-24.14%	-9.42%	-6.85%	-6.22%	-7.08%	-3.19%	1.60%	4.04%	5.55%	8.85%
2006	2,307,106	371,771	519,822	(148,050)	-6.42%	-17.93%	-8.65%	-6.75%	-6.25%	-7.00%	-3.49%	0.99%	3.37%	4.84%
2007	1,825,678	308,130	1,246,596	(938,466)	-51.40%	-26.29%	-25.20%	-15.82%	-13.34%	-11.36%	-10.81%	-6.78%	-1.98%	0.70%
2008	2,991,702	469,636	541,188	(71,552)	-2.39%	-20.97%	-16.25%	-19.21%	-12.93%	-11.21%	-9.96%	-9.77%	-6.34%	-2.02%
2009	3,401,648	322,997	624,811	(301,814)	-8.87%	-5.84%	-15.96%	-13.87%	-16.84%	-12.13%	-10.79%	-9.79%	-9.66%	-6.60%
2010	3,636,044	400,966	440,597	(39,630)	-1.09%	-4.85%	-4.12%	-11.40%	-10.59%	-13.73%	-10.21%	-9.21%	-8.58%	-8.66%
2011	4,905,454	387,026	310,599	76,428	1.56%	0.43%	-2.22%	-2.25%	-7.61%	-7.46%	-10.52%	-7.97%	-7.28%	-6.98%
2012	3,247,752	83,129	854,151	(771,023)	-23.74%	-8.52%	-6.23%	-6.82%	-6.09%	-10.23%	-9.83%	-12.13%	-9.74%	-9.03%
2013	3,526,934.14	46,991	775,578	(728,587)	-20.66%	-22.14%	-12.18%	-9.55%	-9.43%	-8.46%	-11.79%	-11.31%	-13.13%	-10.92%
2014	4,342,169.08	12,589	778,974	(766,384)	-17.65%	-19.00%	-20.38%	-13.67%	-11.34%	-10.98%	-9.99%	-12.70%	-12.22%	-13.70%
2015	4,186,323.80	297,233	893,960	(596,727)	-14.25%	-15.98%	-17.35%	-18.71%	-13.79%	-11.85%	-11.48%	-10.58%	-12.90%	-12.47%
2016	2,301,387.61	332,010	5,469,141	(5,137,131)	-223.22%	-88.38%	-60.02%	-50.35%	-45.44%	-35.20%	-30.46%	-27.97%	-25.62%	-26.99%

NA - Not applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Electric Plant
Distribution Line Transformers Amortized
Account 368
2000-2016

Transaction Year	Transactional History Retirements		Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	3,157,312		463,967	39,476	424,491	13.44%									
2001	29,650		85,129	14,809	70,320	237.17%	15.53%								
2002	2,025		-	45	(45)	-2.22%	221.86%	15.51%							
2003	64,060		-	(1,881)	1,881	2.94%	2.78%	75.37%	15.27%						
2004	331,003		75,526	238,090	(162,564)	-49.11%	-40.67%	-40.48%	-21.19%	9.32%					
2005	187,211		142,430	236,717	(94,287)	-50.36%	-49.56%	-43.79%	-43.64%	-30.08%	6.36%				
2006	46,568,279		441,331	285,212	156,119	0.34%	0.13%	-0.21%	-0.21%	-0.21%	-0.06%	0.79%			
2007	3,215,229		1,057,852	2,444,464	(1,386,612)	-43.13%	-2.47%	-2.65%	-2.96%	-2.95%	-2.95%	-2.81%	-1.85%		
2008	3,984,588		(17,746)	131,949	(149,695)	-3.76%	-21.34%	-2.57%	-2.73%	-3.02%	-3.01%	-3.01%	-2.88%	-1.98%	
2009	5,751,237	*	-	-	0	0.00%	-1.54%	-11.86%	-2.32%	-2.47%	-2.73%	-2.72%	-2.72%	-2.60%	-1.80%
2010	13,890,058	*	53,848	1,351,824	(1,297,977)	-9.34%	-6.61%	-6.13%	-10.56%	-3.65%	-3.77%	-3.97%	-3.96%	-3.96%	-3.87%
2011	6,846,074	*	-	1,297	(1,297)	-0.02%	-6.27%	-4.91%	-4.76%	-8.42%	-3.34%	-3.45%	-3.64%	-3.63%	-3.63%
2012			3,161		3,161	NA	0.03%	-6.25%	-4.89%	-4.74%	-8.41%	-3.33%	-3.44%	-3.63%	-3.63%
2013	7,923,285.00		77,228	1,963,283	(1,886,055)	-23.80%	-23.76%	-12.76%	-11.10%	-9.25%	-8.68%	-11.34%	-5.17%	-5.27%	-5.43%
2014	6,044,707.00			633,047	(633,047)	-10.47%	-18.03%	-18.01%	-12.09%	-10.99%	-9.43%	-8.92%	-11.23%	-5.51%	-5.60%
2015	6,266,381.00			626,212	(626,212)	-9.99%	-10.23%	-15.54%	-15.53%	-11.61%	-10.84%	-9.51%	-9.05%	-11.09%	-5.79%
2016	9,847,177.00			154	(154)	0.00%	-3.89%	-5.68%	-10.46%	-10.45%	-8.51%	-8.74%	-7.85%	-7.58%	-9.37%

* Includes 2012 Pro Forma Ret

Xcel Energy Electric Plant
Distribution Line Capacitors Amortized
Account 368
2000-2016

Transaction Year	Transactional History Retirements		Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	152,100		(2,012)	4,585	(6,597)	-4.34%									
2001	115,175		2,576	4,000	(1,424)	-1.24%	-3.00%								
2002	45,274		584	15,705	(15,121)	-33.40%	-10.31%	-7.40%							
2003	97,702		-	143	(143)	-0.15%	-10.68%	-6.46%	-5.68%						
2004	101,497		-	14,090	(14,090)	-13.88%	-7.15%	-12.01%	-8.56%	-7.30%					
2005	114,920		-	28,728	(28,728)	-25.00%	-19.79%	-13.68%	-16.16%	-12.54%	-10.55%				
2006	335,227		-	77,590	(77,590)	-23.15%	-23.62%	-21.83%	-18.57%	-19.53%	-16.93%	-14.94%			
2007	1,659,713		-	120,936	(120,936)	-7.29%	-9.95%	-10.77%	-10.91%	-10.46%	-10.90%	-10.45%	-10.09%		
2008	190,808		-	19,204	(19,204)	-10.06%	-7.57%	-9.96%	-10.71%	-10.85%	-10.43%	-10.84%	-10.42%	-10.09%	
2009	148,111		9,193	55,287	(46,093)	-31.12%	-19.27%	-9.32%	-11.30%	-11.95%	-12.02%	-11.59%	-11.95%	-11.51%	-11.14%
2010	127,405		33,100	14,377	18,723	14.70%	-9.93%	-9.99%	-7.88%	-9.96%	-10.63%	-10.75%	-10.38%	-10.75%	-10.38%
2011	119,973	*	-	67,746	(67,746)	-56.47%	-19.82%	-24.05%	-19.50%	-10.47%	-12.12%	-12.67%	-12.71%	-12.29%	-12.61%
2012	142,786	*	18,107	25,230	(7,123)	-4.99%	-28.49%	-14.39%	-18.99%	-16.66%	-10.15%	-11.75%	-12.28%	-12.34%	-11.95%
2013	110,393.92		23	48,373	(48,350)	-43.80%	-21.91%	-33.02%	-20.88%	-23.22%	-20.23%	-11.63%	-12.99%	-13.46%	-13.48%
2014	2,489,478.16		41,111	45,088	(3,978)	-0.16%	-2.01%	-2.17%	-4.44%	-3.63%	-4.93%	-5.22%	-5.91%	-6.99%	-7.37%
2015	410,776.66		-7	51,544	(51,551)	-12.55%	-1.91%	-3.45%	-3.52%	-5.46%	-4.71%	-5.81%	-6.03%	-6.41%	-7.39%
2016	71,203.39		158	24,029	(23,870)	-33.52%	-15.65%	-2.67%	-4.15%	-4.18%	-6.06%	-5.30%	-6.35%	-6.54%	-6.77%

* Includes 2012 Pro Forma Ret

NA - Not applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Electric Plant
Distribution Services - Overhead
Account 369
1955-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1955	78,289	44,068	41,401	2,667	3.41%									
1956	98,392	60,182	52,330	7,852	7.98%	5.95%								
1957	116,813	53,514	63,107	(9,593)	-8.21%	-0.81%	0.32%							
1958	141,761	39,972	76,539	(36,567)	-25.79%	-17.85%	-10.73%	-8.19%						
1959	128,718	43,153	78,309	(35,156)	-27.31%	-26.52%	-21.00%	-15.13%	-12.55%					
1960	138,190	50,235	82,908	(32,673)	-23.64%	-25.41%	-25.55%	-21.69%	-17.01%	-14.74%				
1961	128,003	44,446	83,535	(39,089)	-30.54%	-26.96%	-27.07%	-26.74%	-23.42%	-19.32%	-17.17%			
1962	150,353	61,503	100,337	(38,834)	-25.83%	-27.99%	-26.55%	-26.73%	-26.54%	-23.87%	-20.40%	-18.50%		
1963	136,839	49,547	90,344	(40,797)	-29.81%	-27.73%	-28.59%	-27.36%	-27.35%	-27.08%	-24.74%	-21.64%	-19.89%	-19.89%
1964	129,314	53,320	95,879	(42,559)	-32.91%	-31.32%	-29.34%	-29.62%	-28.41%	-28.24%	-27.87%	-25.73%	-22.89%	-21.24%
1965	155,344	53,216	96,462	(43,246)	-27.84%	-30.14%	-30.04%	-28.93%	-29.22%	-28.30%	-28.17%	-27.87%	-25.99%	-23.47%
1966	147,049	77,054	113,521	(36,467)	-24.80%	-26.36%	-28.32%	-28.68%	-28.09%	-28.46%	-27.78%	-27.73%	-27.51%	-25.87%
1967	173,647	70,291	141,052	(70,761)	-40.75%	-33.44%	-31.61%	-31.89%	-31.51%	-30.55%	-30.55%	-29.72%	-29.48%	-29.12%
1968	159,731	77,731	145,742	(68,011)	-42.58%	-41.63%	-36.48%	-34.37%	-34.12%	-33.47%	-32.38%	-32.18%	-31.28%	-30.93%
1969	179,189	79,641	176,224	(96,583)	-53.90%	-48.56%	-45.92%	-41.21%	-38.66%	-37.87%	-36.85%	-35.51%	-35.04%	-33.99%
1970	185,653	83,915	173,043	(89,128)	-48.01%	-50.90%	-48.37%	-46.47%	-42.70%	-40.39%	-39.54%	-38.49%	-37.14%	-36.60%
1971	190,904	58,777	186,492	(127,715)	-66.90%	-57.59%	-56.40%	-53.31%	-50.86%	-47.16%	-44.64%	-43.49%	-42.21%	-40.68%
1972	204,596	62,581	196,611	(134,030)	-65.51%	-66.18%	-60.38%	-58.85%	-56.02%	-53.60%	-50.19%	-47.70%	-46.45%	-45.08%
1973	214,283	76,809	182,391	(105,582)	-49.27%	-57.20%	-60.24%	-57.38%	-56.74%	-54.75%	-52.89%	-50.05%	-47.91%	-46.79%
1974	240,907	85,789	185,355	(99,566)	-41.33%	-45.07%	-51.41%	-54.88%	-53.65%	-53.69%	-52.40%	-51.09%	-48.81%	-47.05%
1975	245,205	93,618	204,763	(111,145)	-45.33%	-43.35%	-45.16%	-49.76%	-52.75%	-52.06%	-52.29%	-51.33%	-50.30%	-48.37%
1976	290,507	70,301	192,046	(121,745)	-41.91%	-43.47%	-42.81%	-44.21%	-47.85%	-50.47%	-50.18%	-50.56%	-49.90%	-49.13%
1977	333,693	74,177	202,641	(128,464)	-38.50%	-40.08%	-41.56%	-41.51%	-42.77%	-45.81%	-48.15%	-48.14%	-48.63%	-48.20%
1978	359,362	54,690	326,604	(271,914)	-75.67%	-57.77%	-53.08%	-51.54%	-49.86%	-49.79%	-51.49%	-52.91%	-52.50%	-52.61%
1979	413,293	87,998	479,709	(391,711)	-94.78%	-85.89%	-71.59%	-65.42%	-62.42%	-59.72%	-58.65%	-59.26%	-59.85%	-59.03%
1980	404,209	142,608	550,526	(407,918)	-100.92%	-97.81%	-91.05%	-79.44%	-73.39%	-70.02%	-67.00%	-65.48%	-65.49%	-65.58%
1981	401,709	466,315	531,504	(65,189)	-16.23%	-58.70%	-70.93%	-72.01%	-66.16%	-62.96%	-61.20%	-59.42%	-58.67%	-59.12%
1982	375,243	141,582	394,170	(252,588)	-67.31%	-40.90%	-61.44%	-70.08%	-71.11%	-66.35%	-63.60%	-62.01%	-60.38%	-59.66%
1983	341,936	158,070	282,496	(124,426)	-36.39%	-52.57%	-39.52%	-55.82%	-64.13%	-65.94%	-62.45%	-60.41%	-59.24%	-57.98%
1984	318,512	305,507	349,803	(44,296)	-13.91%	-25.55%	-40.68%	-33.85%	-48.57%	-57.04%	-59.60%	-57.21%	-55.84%	-55.10%
1985	374,154	206,022	447,537	(241,515)	-64.55%	-41.26%	-39.65%	-47.01%	-40.19%	-51.27%	-58.11%	-60.22%	-58.04%	-56.74%
1986	287,274	174,066	382,817	(208,751)	-72.67%	-68.07%	-50.47%	-46.83%	-51.36%	-44.63%	-53.72%	-59.54%	-61.31%	-59.20%
1987	311,152	167,006	369,964	(202,958)	-65.23%	-68.80%	-67.16%	-54.03%	-50.33%	-53.51%	-47.29%	-54.99%	-60.09%	-61.65%
1988	303,333	218,902	360,992	(142,090)	-46.84%	-56.15%	-61.41%	-62.33%	-52.66%	-49.79%	-52.63%	-47.24%	-54.20%	-58.95%
1989	317,185	108,619	357,208	(248,589)	-78.37%	-62.96%	-63.72%	-65.83%	-65.53%	-56.93%	-53.81%	-55.74%	-50.50%	-56.43%
1990	363,158	276,239	337,830	(61,591)	-16.96%	-45.59%	-45.98%	-50.60%	-54.61%	-56.51%	-50.55%	-48.70%	-51.03%	-46.91%
1991	330,587	229,707	331,833	(102,126)	-30.89%	-23.60%	-40.78%	-42.18%	-46.59%	-50.51%	-52.81%	-48.05%	-46.70%	-49.03%
1992	339,603	47,509	409,498	(361,989)	-106.59%	-69.25%	-50.87%	-57.33%	-55.41%	-56.96%	-58.97%	-59.76%	-54.80%	-52.89%
1993	322,985	14,027	365,822	(351,795)	-108.92%	-107.73%	-82.15%	-64.70%	-67.29%	-64.15%	-64.30%	-65.23%	-65.14%	-60.15%
1994	300,586	25,875	345,031	(319,156)	-106.18%	-107.60%	-107.24%	-87.73%	-72.22%	-73.21%	-69.70%	-69.16%	-69.51%	-68.94%
1995	300,617	34,172	337,189	(303,017)	-100.80%	-103.49%	-105.39%	-105.71%	-90.20%	-76.61%	-76.86%	-73.32%	-72.45%	-72.47%
1996	435,457	38,479	349,321	(310,842)	-71.38%	-83.40%	-90.00%	-94.50%	-96.91%	-86.16%	-75.66%	-75.98%	-73.04%	-72.31%
1997	249,074	54,203	258,592	(204,389)	-82.06%	-75.27%	-83.06%	-88.46%	-92.57%	-95.01%	-85.71%	-76.26%	-76.49%	-73.73%
1998	524,311	79,562	419,657	(340,095)	-64.87%	-70.40%	-70.76%	-76.74%	-81.63%	-85.76%	-88.62%	-81.81%	-74.38%	-74.74%
1999	388,976	52,904	345,228	(292,324)	-75.15%	-69.25%	-71.99%	-71.83%	-76.41%	-80.48%	-84.12%	-86.79%	-81.00%	-74.46%
2000	461,222	27,061	357,227	(330,166)	-71.59%	-73.22%	-70.03%	-71.88%	-71.77%	-75.47%	-78.94%	-82.19%	-84.68%	-79.81%
2001	354,711	13,184	426,128	(412,944)	-116.42%	-91.07%	-85.93%	-79.55%	-79.86%	-78.33%	-80.82%	-83.35%	-85.82%	-87.74%
2002	249,468	19,893	259,969	(240,075)	-96.23%	-108.08%	-92.28%	-87.70%	-81.65%	-81.70%	-80.01%	-82.12%	-84.33%	-86.55%
2003	-	-	45,729	(45,729)	NA	-114.57%	-115.65%	-96.58%	-90.85%	-83.96%	-83.75%	-81.73%	-83.66%	-85.73%
2004	52,804	-	124,165	(124,165)	-235.14%	-321.75%	-135.63%	-125.26%	-103.12%	-95.90%	-87.89%	-87.25%	-84.71%	-86.31%
2005	144,545	-	285,411	(285,411)	-197.46%	-207.54%	-230.71%	-155.63%	-138.28%	-113.92%	-104.79%	-95.17%	-93.82%	-90.41%
2006	979,421	-	375,647	(375,647)	-38.35%	-58.81%	-66.73%	-70.61%	-75.09%	-83.32%	-80.91%	-80.06%	-77.53%	-77.87%
2007	81,302	-	1,336,427	(1,336,427)	-1643.77%	-161.41%	-165.73%	-168.64%	-172.28%	-159.69%	-151.45%	-135.60%	-126.93%	-116.88%
2008	1,633,914	-	617,067	(617,067)	-37.77%	-113.89%	-86.44%	-92.09%	-94.70%	-96.28%	-96.28%	-98.32%	-95.21%	-93.41%
2009	36,807	-	669,233	(669,233)	-1818.20%	-76.99%	-149.70%	-109.77%	-114.18%	-116.36%	-117.92%	-116.22%	-116.24%	-111.08%
2010	773,153	-	557,916	(557,916)	-72.16%	-151.51%	-75.46%	-125.96%	-101.47%	-105.28%	-107.13%	-108.36%	-107.60%	-108.33%
2011	909,949	-	574,424	(574,424)	-63.13%	-67.28%	-104.75%	-72.12%	-109.31%	-93.57%	-96.86%	-98.45%	-99.44%	-99.27%
2012	371,600	3,002	643,882	(640,880)	-172.47%	-94.83%	-86.30%	-116.78%	-82.13%	-115.48%	-99.70%	-102.56%	-103.97%	-104.88%
2013	528,693.00	4,172	604,319	(600,147)	-113.52%	-137.85%	-100.29%	-91.87%	-116.12%	-86.03%	-115.24%	-101.07%	-103.62%	-104.88%
2014	142,101.00	8,385	410,583	(402,198)	-283.04%	-149.43%	-157.64%	-113.59%	-101.84%	-124.71%	-92.39%	-120.56%	-105.81%	-108.17%
2015	181,650.00	2,958	669,866	(666,908)	-367.14%	-330.22%	-195.82%	-188.73%	-135.17%	-118.41%	-139.67%	-103.30%	-130.18%	-114.23%
2016	598,408.00	2,346	666,118	(663,772)	-110.92%	-170.59%	-187.92%	-160.80%	-163.18%	-129.86%	-117.14%	-134.81%	-104.18%	-127.99%

NA - Not applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Electric Plant
Distribution Services - Underground
Account 369
1955-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1955	15,561	-	-	0	0.00%									
1956	21,535	-	-	0	0.00%	0.00%								
1957	33,188	-	-	0	0.00%	0.00%	0.00%							
1958	35,437	-	-	0	0.00%	0.00%	0.00%	0.00%						
1959	39,164	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%					
1960	29,921	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%				
1961	37,698	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
1962	78,921	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
1963	63,080	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
1964	59,551	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1965	38,834	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1966	42,790	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1967	32,324	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1968	28,758	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1969	36,639	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1970	20,722	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1971	51,365	7,629	9,816	(2,187)	-4.26%	-3.03%	-2.01%	-1.59%	-1.29%	-1.03%	-0.87%	-0.70%	-0.58%	-0.48%
1972	21,618	6,241	4,505	1,736	8.03%	-0.62%	-0.48%	-0.35%	-0.28%	-0.24%	-0.19%	-0.17%	-0.14%	-0.11%
1973	12,215	1,842	5,016	(3,174)	-25.98%	-4.25%	-4.25%	-3.42%	-2.54%	-2.12%	-1.78%	-1.47%	-1.27%	-1.05%
1974	59,025	37,755	10,328	27,427	46.47%	34.04%	27.99%	16.50%	14.43%	11.81%	10.33%	9.06%	7.79%	6.91%
1975	37,490	14,128	6,717	7,411	19.77%	36.10%	29.12%	25.62%	17.18%	15.42%	13.06%	11.65%	10.40%	9.10%
1976	36,134	13,424	9,811	3,613	10.00%	14.97%	28.99%	24.35%	22.23%	15.99%	14.60%	12.65%	11.46%	10.36%
1977	42,703	9,697	9,683	14	0.03%	4.60%	9.49%	21.94%	18.82%	17.70%	13.37%	12.39%	10.96%	10.05%
1978	34,048	18,302	7,475	10,827	31.80%	14.12%	12.80%	14.54%	23.54%	20.81%	19.67%	15.50%	14.48%	12.98%
1979	52,347	12,078	9,932	2,146	4.10%	15.02%	10.06%	10.05%	11.84%	19.65%	17.62%	16.92%	13.78%	13.00%
1980	49,478	15,843	15,337	506	1.02%	2.60%	9.92%	7.56%	7.97%	9.72%	16.69%	15.08%	14.64%	12.19%
1981	98,858	15,858	18,490	(2,632)	-2.66%	-1.43%	0.01%	4.62%	3.91%	4.62%	6.23%	12.02%	10.93%	10.78%
1982	43,641	18,004	15,589	2,415	5.53%	-0.15%	0.15%	1.00%	4.76%	4.13%	4.73%	6.16%	11.40%	10.42%
1983	65,978	9,466	18,018	(8,552)	-12.96%	-5.60%	-4.21%	-3.20%	-1.97%	1.37%	1.22%	1.97%	3.42%	8.31%
1984	37,283	129,166	15,003	114,163	306.21%	102.28%	73.54%	42.88%	35.87%	31.08%	31.15%	28.02%	26.60%	26.09%
1985	65,036	169,810	21,408	148,402	228.18%	256.61%	150.93%	120.99%	81.66%	70.59%	62.15%	59.84%	54.62%	51.55%
1986	100,730	269,003	27,453	241,550	239.80%	235.24%	248.27%	184.21%	159.27%	120.37%	107.56%	97.01%	92.95%	86.23%
1987	38,717	154,076	19,941	134,135	346.45%	269.41%	256.30%	263.99%	204.62%	179.89%	139.81%	126.07%	114.50%	109.70%
1988	74,248	293,910	20,441	273,469	368.32%	360.82%	303.78%	286.14%	288.51%	236.44%	212.76%	172.16%	157.41%	144.59%
1989	169,392	59,375	21,720	37,655	22.23%	127.70%	157.69%	179.28%	186.38%	195.58%	170.63%	158.52%	135.56%	126.60%
1990	120,584	310,179	12,478	297,701	246.88%	115.65%	167.16%	184.38%	195.47%	199.21%	205.79%	184.31%	173.41%	152.04%
1991	131,823	271,154	8,896	262,258	198.95%	221.85%	141.68%	175.60%	187.97%	196.19%	199.16%	204.57%	186.71%	177.38%
1992	499,644	159,773	21,882	137,891	27.60%	63.37%	92.79%	79.82%	101.33%	110.51%	121.98%	127.74%	133.11%	125.72%
1993	255,702	127,189	13,467	113,722	44.47%	33.31%	57.92%	80.53%	72.14%	89.72%	97.42%	107.73%	113.11%	117.93%
1994	36,913	138,817	8,874	129,943	352.03%	83.27%	48.16%	69.67%	90.13%	80.65%	97.23%	104.50%	114.05%	119.02%
1995	83,862	168,189	15,740	152,449	181.79%	233.82%	105.22%	60.95%	79.00%	96.94%	87.19%	102.40%	109.10%	117.81%
1996	104,526	223,492	21,081	202,411	193.65%	188.37%	215.18%	124.43%	75.09%	89.77%	105.14%	95.12%	108.86%	114.93%
1997	79,911	333,743	25,611	308,132	385.59%	276.81%	247.11%	259.80%	161.64%	98.49%	109.60%	122.20%	110.78%	123.06%
1998	71,191	37,307	9,144	28,163	39.56%	222.56%	210.74%	203.59%	218.14%	147.89%	94.78%	105.65%	117.95%	107.52%
1999	90,394	81,695	13,289	68,406	75.68%	59.76%	167.58%	175.45%	176.69%	190.55%	138.86%	93.37%	103.65%	115.36%
2000	24,903	82,666	7,259	75,407	302.80%	124.73%	92.22%	180.22%	184.00%	183.60%	196.24%	144.32%	97.55%	107.25%
2001	43,576	567	6,891	(6,324)	-14.51%	100.88%	86.54%	72.00%	152.85%	163.13%	166.27%	179.08%	135.57%	93.77%
2002	250,811	0	2,994	(2,993)	-1.19%	-3.16%	20.70%	32.83%	33.83%	83.95%	101.19%	110.21%	121.56%	102.64%
2003	-	-	397	(397)	NA	-1.35%	-3.30%	20.57%	32.73%	33.74%	83.88%	101.13%	110.16%	121.51%
2004	19,082	-	29,045	(29,045)	-152.21%	-154.29%	-12.02%	-12.36%	10.83%	24.50%	26.65%	76.11%	94.06%	103.64%
2005	26,575	-	20,900	(20,900)	-78.64%	-109.39%	-110.26%	-17.99%	-17.54%	4.32%	18.48%	21.33%	69.33%	87.61%
2006	441,544	-	29,724	(29,724)	-6.73%	-10.81%	-16.35%	-16.43%	-11.25%	-11.44%	-1.73%	6.07%	8.53%	37.28%
2007	47,883	-	(16,799)	16,799	35.08%	-2.64%	-6.56%	-11.75%	-11.82%	-8.43%	-8.75%	0.33%	7.54%	9.78%
2008	192,597	-	50,960	(50,960)	-26.46%	-14.21%	-9.37%	-11.97%	-15.64%	-15.70%	-11.98%	-12.09%	-4.60%	1.78%
2009	94,303	-	22,993	(22,993)	-24.38%	-25.78%	-17.07%	-11.19%	-13.42%	-16.65%	-16.69%	-13.07%	-13.13%	-6.23%
2010	681,237	-	26,478	(26,478)	-3.89%	-6.38%	-10.37%	-8.23%	-7.78%	-9.05%	-10.86%	-10.89%	-9.50%	-9.62%
2011	2,711,802	-	40,934	(40,934)	-1.51%	-1.99%	-2.59%	-3.84%	-3.34%	-3.70%	-4.18%	-4.85%	-4.85%	-4.65%
2012	14,872	549	29,850	(29,301)	-197.02%	-2.58%	-2.84%	-3.42%	-4.62%	-4.11%	-4.39%	-4.86%	-5.52%	-5.53%
2013	52,766.00	6,274	32,865	(26,591)	-50.39%	-82.63%	-3.48%	-3.56%	-4.12%	-5.26%	-4.75%	-4.96%	-5.42%	-6.07%
2014	24,955.00	8,985	27,479	(18,494)	-74.11%	-58.01%	-80.34%	-4.11%	-4.07%	-4.60%	-5.72%	-5.21%	-5.37%	-5.82%
2015	39,837.00	1,352	26,438	(25,086)	-62.97%	-67.26%	-59.69%	-75.11%	-4.94%	-4.73%	-5.25%	-6.32%	-5.80%	-5.90%
2016	253,785.00	2,868	96,575	(93,707)	-36.92%	-40.46%	-43.09%	-44.13%	-50.02%	-7.56%	-6.90%	-7.32%	-8.23%	-7.72%

NA - Not applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Electric Plant
Distribution Meters
Account 370 Amortized
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	10,592,788	42,596	(30,318)	72,914	0.69%									
2001	3,182	85,129	14,809	70,320	2209.92%	1.35%								
2002		75,526	45	75,481	NA	4582.04%	2.06%							
2003		142,430	(1,881)	144,310	NA	NA	9117.24%	3.43%						
2004		441,331	238,090	203,240	NA	NA	NA	15504.41%	5.34%					
2005			236,717	(236,717)	NA	NA	NA	NA	8065.18%	3.11%				
2006	22,937,302		285,212	(285,212)	-1.24%	-2.28%	-1.39%	-0.76%	-0.43%	-0.12%	0.13%			
2007	2,666,205		789,129	(789,129)	-29.60%	-4.20%	-5.12%	-4.33%	-3.76%	-3.47%	-3.19%	-2.06%		
2008	3,503,616	-	-	0	0.00%	-12.79%	-3.69%	-4.50%	-3.81%	-3.31%	-3.05%	-2.81%	-1.88%	
2009	-	-	-	0	NA	0.00%	-12.79%	-3.69%	-4.50%	-3.81%	-3.31%	-3.05%	-2.81%	-1.88%
2010	-	2,583	493,066	(490,483)	NA	NA	-14.00%	-20.74%	-5.38%	-6.19%	-5.49%	-5.00%	-4.74%	-4.49%
2011	-	-	-	0	NA	NA	NA	-14.00%	-20.74%	-5.38%	-6.19%	-5.49%	-5.00%	-4.74%
2012	-	-	-	0	NA	NA	NA	NA	-14.00%	-20.74%	-5.38%	-6.19%	-5.49%	-5.00%
2013	0.00	18,007	587,691	(569,684)	NA	NA	NA	NA	NA	-30.26%	-29.97%	-7.33%	-8.15%	-7.45%
2014	5,067,823.04	7,983	249,747	(241,765)	-4.77%	-16.01%	-16.01%	-16.01%	-25.69%	-25.69%	-15.19%	-18.61%	-6.95%	-7.65%
2015	4,471,117.39	24,493	383,684	(359,190)	-8.03%	-6.30%	-12.27%	-12.27%	-12.27%	-17.41%	-17.41%	-12.74%	-15.60%	-7.08%
2016	5,082,204.03	2,373		2,373	0.05%	-3.74%	-4.09%	-7.99%	-7.99%	-7.99%	-11.34%	-11.34%	-9.15%	-11.77%

Xcel Energy Electric Plant
Distribution Meters - Old
Account 370 Amortized
2009-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %					
2009	4,990,401 *			0	0.00%							
2010	6,616,114 *	-	-	0	0.00%	0.00%						
2011	3,451,141 *	-	-	0	0.00%	0.00%	0.00%					
2012		-	-	0	NA	0.00%	0.00%	0.00%				
2013	1,949,431.00	0	-	0	0.00%	0.00%	0.00%	0.00%	0.00%			
2014	0.00	0	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%		
2015	0.00	0	-	0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	
2016		0		0	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%

* Includes Pro Forma 2012 Ret

NA - Not applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Electric Plant
Distribution Street Lighting & Signal Systems
Account 373
1955-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1955	45,282	13,024	8,558	4,466	9.86%									
1956	98,064	19,123	12,940	6,183	6.31%	7.43%								
1957	113,535	32,939	21,055	11,884	10.47%	8.54%	8.77%							
1958	97,968	28,008	19,741	8,267	8.44%	9.53%	8.51%	8.68%						
1959	104,720	15,232	19,566	(4,334)	-4.14%	1.94%	5.00%	5.31%	5.76%					
1960	112,863	21,037	26,653	(5,616)	-4.98%	-4.57%	-0.53%	2.38%	3.11%	3.64%				
1961	84,664	15,472	18,249	(2,777)	-3.28%	-4.25%	-4.21%	-1.11%	1.45%	2.22%	2.75%			
1962	108,867	18,231	24,511	(6,280)	-5.77%	-4.68%	-4.79%	-4.62%	-2.11%	0.18%	1.02%	1.54%		
1963	135,027	18,581	32,482	(13,901)	-10.29%	-8.27%	-6.99%	-6.47%	-6.03%	-3.83%	-1.68%	-0.77%	-0.23%	
1964	147,898	23,380	33,157	(9,777)	-6.61%	-8.37%	-7.65%	-6.87%	-6.51%	-6.15%	-4.35%	-2.49%	-1.63%	-1.13%
1965	198,411	24,400	40,946	(16,546)	-8.34%	-7.60%	-8.36%	-7.88%	-7.30%	-6.97%	-6.64%	-5.15%	-3.54%	-2.74%
1966	390,977	33,420	29,982	3,438	0.88%	-2.22%	-3.10%	-4.22%	-4.39%	-4.30%	-4.37%	-4.35%	-3.44%	-2.38%
1967	781,062	29,859	36,922	(7,063)	-0.90%	-0.31%	-1.47%	-1.97%	-2.65%	-2.84%	-2.86%	-2.99%	-3.04%	-2.52%
1968	832,357	36,970	39,968	(2,998)	-0.36%	-0.62%	-0.33%	-1.05%	-1.40%	-1.88%	-2.05%	-2.09%	-2.20%	-2.27%
1969	649,596	38,158	46,613	(8,455)	-1.30%	-0.77%	-0.82%	-0.57%	-1.11%	-1.38%	-1.76%	-1.90%	-1.93%	-2.03%
1970	582,796	39,239	48,774	(9,535)	-1.64%	-1.46%	-1.02%	-0.99%	-0.76%	-1.20%	-1.42%	-1.74%	-1.86%	-1.89%
1971	191,907	26,443	29,395	(2,952)	-1.54%	-1.61%	-1.47%	-1.06%	-1.02%	-0.80%	-1.22%	-1.43%	-1.73%	-1.84%
1972	153,187	29,621	27,405	2,216	1.45%	-0.21%	-1.11%	-1.19%	-0.90%	-0.90%	-0.71%	-1.11%	-1.32%	-1.61%
1973	139,929	30,069	24,328	5,741	4.10%	2.71%	1.03%	-0.42%	-0.76%	-0.63%	-0.69%	-0.53%	-0.92%	-1.13%
1974	210,094	97,205	33,006	64,199	30.56%	19.98%	14.34%	9.96%	4.67%	2.66%	1.75%	1.16%	1.13%	0.68%
1975	182,139	37,490	33,513	3,977	2.18%	17.38%	13.89%	11.11%	8.34%	4.36%	2.62%	1.77%	1.21%	1.18%
1976	234,657	55,269	48,488	6,781	2.89%	2.58%	11.96%	10.52%	9.01%	7.19%	4.16%	2.64%	1.86%	1.31%
1977	178,395	42,481	50,131	(7,650)	-4.29%	-0.21%	0.52%	8.36%	7.73%	6.85%	5.60%	3.35%	2.15%	1.53%
1978	198,377	61,339	58,076	3,263	1.64%	-1.16%	0.39%	0.80%	7.03%	6.67%	6.06%	5.08%	3.19%	2.12%
1979	177,221	57,713	66,899	(9,186)	-5.18%	-1.58%	-2.45%	-0.86%	-0.29%	5.20%	5.08%	4.70%	3.99%	2.53%
1980	176,462	58,673	68,525	(9,852)	-5.58%	-5.38%	-2.86%	-3.21%	-1.72%	-1.10%	3.80%	3.83%	3.60%	3.07%
1981	148,300	53,533	77,910	(24,377)	-16.44%	-10.54%	-8.65%	-5.73%	-5.44%	-3.68%	-2.86%	1.80%	2.00%	1.95%
1982	136,777	40,811	60,339	(19,528)	-14.28%	-15.40%	-11.65%	-9.85%	-7.13%	-6.63%	-4.84%	-3.95%	0.46%	0.75%
1983	118,008	31,606	52,320	(20,714)	-17.55%	-15.79%	-16.03%	-12.85%	-11.05%	-8.42%	-7.77%	-5.94%	-4.99%	-0.74%
1984	716,245	50,749	159,086	(108,337)	-15.13%	-15.47%	-15.30%	-15.45%	-14.11%	-13.03%	-11.29%	-10.62%	-9.10%	-8.19%
1985	1,387,873	34,400	259605	(225,205)	-16.23%	-15.85%	-15.94%	-15.85%	-15.88%	-15.20%	-14.58%	-13.53%	-13.02%	-11.95%
1986	1,035,741	33,923	200,721	(166,798)	-16.10%	-16.17%	-15.94%	-15.99%	-15.92%	-15.95%	-15.45%	-14.99%	-14.18%	-13.77%
1987	1,333,674	25,756	199,503	(173,747)	-13.03%	-14.37%	-15.06%	-15.07%	-15.13%	-15.11%	-15.15%	-14.81%	-14.49%	-13.90%
1988	683,151	19,557	112,551	(92,994)	-13.61%	-13.23%	-14.20%	-14.84%	-14.88%	-14.94%	-14.92%	-14.96%	-14.67%	-14.39%
1989	275,407	30,142	61,300	(31,158)	-11.31%	-12.95%	-13.00%	-13.96%	-14.63%	-14.69%	-14.76%	-14.74%	-14.79%	-14.52%
1990	137,365	25,917	42,208	(16,291)	-11.86%	-11.50%	-12.82%	-12.93%	-13.88%	-14.55%	-14.62%	-14.69%	-14.68%	-14.72%
1991	148,600	17,776	48,019	(30,243)	-20.35%	-16.27%	-13.84%	-13.71%	-13.36%	-14.15%	-14.72%	-14.77%	-14.83%	-14.82%
1992	133,996	34,465	49,760	(15,295)	-11.41%	-16.11%	-14.72%	-13.37%	-13.49%	-13.26%	-14.05%	-14.64%	-14.70%	-14.75%
1993	128,840	27,467	59,703	(32,236)	-25.02%	-18.08%	-18.90%	-17.14%	-15.19%	-14.48%	-13.80%	-14.41%	-14.89%	-14.92%
1994	165,798	71,286	53,578	17,708	10.68%	-4.93%	-6.96%	-10.41%	-10.69%	-10.86%	-11.98%	-12.45%	-13.38%	-14.11%
1995	138,413	(24,541)	53,423	(77,964)	-56.33%	-19.81%	-21.36%	-19.01%	-19.29%	-18.09%	-16.44%	-15.37%	-14.38%	-14.81%
1996	110,953	28,296	55,590	(27,294)	-24.60%	-42.21%	-21.09%	-22.02%	-19.92%	-20.00%	-18.84%	-17.17%	-15.90%	-14.73%
1997	97,668	53,905	70,996	(17,091)	-17.50%	-21.28%	-35.26%	-20.40%	-21.33%	-19.62%	-19.74%	-18.72%	-17.19%	-15.98%
1998	176,142	34,429	92,376	(57,947)	-32.90%	-27.41%	-26.60%	-34.46%	-23.60%	-23.82%	-22.08%	-21.84%	-20.74%	-19.02%
1999	200,837	6,915	13,148	(6,233)	-3.10%	-17.02%	-17.12%	-18.54%	-25.76%	-18.97%	-19.74%	-18.77%	-18.95%	-18.27%
2000	258,392	17,517	13,006	4,511	1.75%	-0.37%	-9.39%	-10.47%	-12.33%	-18.53%	-14.31%	-15.39%	-15.01%	-15.52%
2001	327,424	19,419	138,277	(118,858)	-36.30%	-19.52%	-15.33%	-18.54%	-18.45%	-19.03%	-22.97%	-19.19%	-19.66%	-19.02%
2002	364,343	-	257,437	(257,437)	-70.66%	-54.40%	-39.13%	-32.84%	-32.85%	-31.80%	-31.28%	-33.35%	-29.38%	-29.10%
2003	133,071	-	(845)	845	0.64%	-51.59%	-45.52%	-34.24%	-29.37%	-29.80%	-29.03%	-28.73%	-30.85%	-27.36%
2004	370,266	-	24,804	(24,804)	-6.70%	-4.76%	-32.43%	-33.49%	-27.23%	-24.30%	-25.13%	-24.74%	-24.73%	-26.74%
2005	234,515	-	58,178	(58,178)	-24.81%	-13.72%	-11.13%	-30.81%	-32.07%	-26.89%	-24.36%	-25.09%	-24.75%	-24.74%
2006	4,732,477	-	296,301	(296,301)	-6.26%	-7.14%	-7.11%	-6.92%	-10.90%	-12.25%	-11.68%	-11.42%	-11.98%	-12.06%
2007	454,489	-	969,243	(969,243)	-213.26%	-24.40%	-24.42%	-23.28%	-22.75%	-25.52%	-26.06%	-25.01%	-24.39%	-24.60%
2008	495,677	-	258,771	(258,771)	-52.21%	-129.24%	-26.82%	-26.74%	-25.56%	-25.02%	-27.47%	-27.88%	-26.84%	-26.21%
2009	577,607	-	363,620	(363,620)	-62.95%	-57.99%	-104.18%	-30.16%	-29.96%	-28.71%	-28.15%	-30.26%	-30.51%	-29.46%
2010	611,057	-	397,877	(397,877)	-65.11%	-64.06%	-60.57%	-93.02%	-33.27%	-32.99%	-31.68%	-31.12%	-32.93%	-33.06%
2011	600,195	-	570,644	(570,644)	-95.08%	-79.96%	-74.47%	-69.64%	-93.47%	-38.23%	-37.82%	-36.40%	-35.80%	-37.28%
2012	550,748	359,943	834,043	(474,100)	-86.08%	-90.77%	-81.87%	-77.20%	-72.83%	-92.23%	-41.52%	-41.04%	-39.57%	-38.96%
2013	807,528.00	218,771	617,051	(398,280)	-49.32%	-64.23%	-73.68%	-71.64%	-70.05%	-67.62%	-83.78%	-42.23%	-41.78%	-40.40%
2014	376,866.00	89,037	587,748	(498,711)	-132.33%	-75.73%	-79.02%	-83.15%	-79.41%	-76.71%	-73.69%	-87.87%	-45.92%	-45.39%
2015	652,821.00	114,164	350,716	(236,552)	-36.24%	-71.41%	-61.70%	-67.32%	-72.90%	-71.58%	-70.38%	-68.45%	-81.29%	-45.28%
2016	293,379.00	88,302	901,658	(813,356)	-277.24%	-110.96%	-117.05%	-91.38%	-90.29%	-91.17%	-87.08%	-83.96%	-80.79%	-91.90%

NA - Not applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Electric Plant
General Structures & Improvements
Account 390
1950-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1950	8,368	562	4,542	(3,980)	-47.56%									
1951	17,051	21	7,873	(7,852)	-46.05%	-46.55%								
1952	48,689	1,703	19,553	(17,850)	-36.66%	-39.10%	-40.05%							
1953	39,826	11,725	4,665	7,060	17.73%	-12.19%	-17.66%	-19.86%						
1954	170,321	21,151	16,302	4,849	2.85%	5.67%	-2.30%	-5.00%	-6.25%					
1955	15,097	1,360	20,247	(18,887)	-125.10%	-7.57%	-3.10%	-9.06%	-11.23%	-12.25%				
1956	19,329	2,974	2,005	969	5.01%	-52.05%	-6.38%	-2.46%	-8.14%	-10.22%	-11.20%			
1957	27,144	198	6,831	(6,633)	-24.44%	-12.19%	-39.87%	-8.50%	-4.65%	-9.52%	-11.36%	-12.24%		
1958	14,118	330	4,361	(4,031)	-28.55%	-25.84%	-16.00%	-37.76%	-9.65%	-5.83%	-10.32%	-12.05%	-12.88%	
1959	184,559	13,742	92,612	(78,870)	-42.73%	-41.73%	-39.65%	-36.13%	-41.29%	-23.83%	-20.31%	-21.84%	-22.61%	-23.00%
1960	38,326	5,016	4,632	384	1.00%	-35.21%	-34.82%	-33.75%	-31.11%	-35.86%	-21.80%	-18.71%	-20.27%	-21.04%
1961	3,018,865	801,784	239	801,545	26.55%	26.23%	22.30%	22.08%	21.70%	21.60%	20.93%	20.05%	20.02%	19.25%
1962	4,983	-	2,969	(2,969)	-59.58%	26.41%	26.09%	22.18%	21.96%	21.58%	21.48%	20.81%	19.94%	19.91%
1963	16,456	2,115	6,274	(4,159)	-25.27%	-33.25%	26.13%	25.82%	21.94%	21.72%	21.34%	21.25%	20.59%	19.73%
1964	58,623	1,219	5,201	(3,982)	-6.79%	-10.84%	-13.88%	25.51%	25.21%	21.43%	21.22%	20.85%	20.76%	20.11%
1965	138,600	10	840	(830)	-0.60%	-2.44%	-4.20%	-5.46%	24.39%	24.12%	20.55%	20.35%	20.00%	19.92%
1966	9,482	57	1,297	(1,240)	-13.08%	-1.40%	-2.93%	-4.58%	-5.78%	24.28%	24.01%	20.46%	20.26%	19.91%
1967	3,590	42	507	(465)	-12.95%	-13.04%	-1.67%	-3.10%	-4.71%	-5.89%	24.24%	23.97%	20.42%	20.23%
1968	38,389	-	16,611	(16,611)	-43.27%	-40.68%	-35.59%	-10.07%	-9.30%	-10.29%	-11.20%	23.45%	23.19%	19.73%
1969	4,894	28	10,469	(10,441)	-213.34%	-62.50%	-58.71%	-51.03%	-15.18%	-13.24%	-13.97%	-14.80%	23.10%	22.84%
1970	80,081	4	2,009	(2,005)	-2.50%	-14.65%	-23.55%	-23.25%	-22.55%	-11.49%	-10.66%	-11.35%	-12.03%	22.49%
1971	223,260	1,190	14,412	(13,222)	-5.92%	-5.02%	-8.33%	-12.20%	-12.21%	-12.23%	-8.99%	-8.76%	-9.24%	-9.67%
1972	9,972	92,338	2,730	89,608	898.60%	32.75%	23.74%	20.09%	13.27%	13.01%	12.34%	8.81%	7.20%	6.28%
1973	182,754	91,086	3,279	87,807	48.05%	92.06%	39.47%	32.69%	30.29%	25.06%	24.80%	24.15%	19.19%	17.16%
1974	19,416	(250)	2,019	(2,269)	-11.69%	42.31%	82.56%	37.19%	31.02%	28.72%	23.78%	23.54%	22.94%	18.35%
1975	48,158	1,141	4,161	(3,020)	-6.27%	-7.83%	32.96%	66.13%	32.86%	27.84%	25.76%	21.39%	21.19%	20.67%
1976	69,932	-	10,371	(10,371)	-14.83%	-11.34%	-11.39%	22.53%	48.98%	26.84%	23.13%	21.31%	17.65%	17.49%
1977	42,429	14,997	17,385	(2,388)	-5.63%	-11.36%	-9.83%	-10.03%	19.23%	42.76%	24.52%	21.32%	19.64%	16.28%
1978	186,485	75,155	3,055	72,100	38.66%	30.45%	19.86%	16.23%	14.75%	25.83%	41.40%	27.89%	25.07%	23.73%
1979	29,138	1,986	2,767	(781)	-2.68%	33.08%	26.71%	17.85%	14.77%	13.47%	24.39%	39.21%	26.80%	24.16%
1980	6,370	-	7,709	(7,709)	-121.02%	-23.91%	28.65%	23.15%	15.21%	12.50%	11.34%	22.81%	37.50%	25.65%
1981	173,834	111,604	18,817	92,787	53.38%	47.21%	40.27%	39.51%	35.14%	28.26%	25.28%	24.03%	29.82%	41.09%
1982	14,412	761	42,927	(42,166)	-292.58%	26.89%	22.05%	18.83%	27.84%	24.71%	19.42%	17.25%	16.30%	23.80%
1983	98,647	84,795	18,951	65,844	66.75%	20.94%	40.60%	37.08%	33.49%	35.39%	32.23%	26.93%	24.54%	23.52%
1984	54,190	-	156,565	(156,565)	-288.92%	-59.36%	-79.45%	-11.76%	-13.76%	-12.90%	4.18%	3.49%	1.59%	1.07%
1985	57,917	29,112	31,629	(2,517)	-4.35%	-141.90%	-44.24%	-60.14%	-10.68%	-12.41%	-11.76%	3.38%	2.80%	1.12%
1986	52,461	175	51,635	(51,460)	-98.09%	-48.90%	-127.94%	-54.97%	-67.31%	-20.84%	-22.23%	-21.06%	-4.52%	-4.59%
1987	143,639	19	24,340	(24,321)	-16.93%	-38.64%	-30.82%	-76.20%	-41.54%	-50.13%	-19.90%	-20.97%	-20.12%	-6.71%
1988	56,321	3,758	19,941	(16,183)	-28.73%	-20.26%	-36.43%	-30.44%	-68.87%	-39.99%	-47.61%	-20.66%	-21.63%	-20.83%
1989	88,645	-	8,541	(8,541)	-9.64%	-17.06%	-16.99%	-29.47%	-25.82%	-57.28%	-35.11%	-41.66%	-19.34%	-20.21%
1990	380,465	341,363	49,050	292,313	76.83%	60.49%	50.93%	36.36%	26.58%	24.29%	3.93%	10.57%	5.96%	13.31%
1991	97,856	(1,666)	27,014	(28,680)	-29.31%	55.12%	44.99%	38.33%	27.98%	19.91%	18.31%	0.43%	6.78%	2.65%
1992	28,292	8,252	562	7,690	27.18%	-16.64%	53.56%	44.15%	37.85%	27.95%	20.15%	18.58%	1.22%	7.33%
1993	3,657	500	139,211	(138,711)	-3793.03%	-410.09%	-123.03%	25.99%	20.72%	16.47%	10.46%	3.77%	3.25%	-13.18%
1994	27,352	(140)	1,474	(1,614)	-5.90%	-452.53%	-223.66%	-102.65%	24.37%	19.55%	15.57%	9.92%	3.47%	2.99%
1995	2,121,264	181,208	118,450	62,758	2.96%	2.85%	-3.60%	-3.20%	-4.33%	7.29%	6.74%	6.03%	4.91%	3.11%
1996	100,921	1,353,834	-	1,353,834	1341.48%	63.75%	62.90%	56.64%	56.28%	52.76%	56.08%	54.03%	52.43%	49.16%
1997	47,802	-	-	0	0.00%	910.31%	62.41%	61.59%	55.47%	55.12%	51.72%	55.12%	53.14%	51.58%
1998	436,461	(33,522)	-	(33,522)	-7.68%	-6.92%	225.62%	51.10%	50.53%	45.40%	45.21%	42.66%	46.67%	45.17%
1999	11,020	(5,000)	-	(5,000)	-45.37%	-8.61%	-7.78%	220.61%	50.71%	50.15%	45.03%	44.85%	42.33%	46.36%
2000	183,259	(89,376)	-	(89,376)	-48.77%	-48.58%	-20.28%	-18.85%	157.28%	44.43%	43.96%	39.17%	39.06%	36.87%
2001	7,625	-	19,756	(19,756)	-259.09%	-57.17%	-56.53%	-23.13%	-21.52%	153.25%	43.63%	43.17%	38.40%	38.29%
2002	-	-	-	0	NA	-259.09%	-57.17%	-56.53%	-23.13%	-21.52%	153.25%	43.63%	43.17%	38.40%
2003	-	-	-	0	NA	NA	-259.09%	-57.17%	-56.53%	-23.13%	-21.52%	153.25%	43.63%	43.17%
2004	-	-	-	0	NA	NA	NA	-259.09%	-57.17%	-56.53%	-23.13%	-21.52%	153.25%	43.63%
2005	13,252	-	-	0	0.00%	0.00%	0.00%	0.00%	-94.63%	-53.46%	-53.05%	-22.66%	-21.11%	150.71%
2006	75,451	-	37,835	(37,835)	-50.15%	-42.65%	-42.65%	-42.65%	-42.65%	-59.79%	-52.57%	-52.29%	-25.51%	-23.94%
2007	370,702	-	101,088	(101,088)	-27.27%	-31.14%	-30.24%	-30.24%	-30.24%	-30.24%	-33.98%	-38.15%	-38.27%	-26.11%
2008	108,034	-	14,085	(14,085)	-13.04%	-24.06%	-27.61%	-26.96%	-26.96%	-26.96%	-26.96%	-30.04%	-34.57%	-34.72%
2009	-	-	-	0	NA	-13.04%	-24.06%	-27.61%	-26.96%	-26.96%	-26.96%	-26.96%	-30.04%	-34.57%
2010	60,021	9,266	101	9,166	15.27%	15.27%	-2.93%	-19.68%	-23.42%	-22.92%	-22.92%	-22.92%	-22.92%	-25.76%
2011	226,373	-	276,268	(276,268)	-122.04%	-93.26%	-93.26%	-71.29%	-49.96%	-49.98%	-49.20%	-49.20%	-49.20%	-49.20%
2012	790,840	-	401,976	(401,976)	-50.83%	-66.68%	-62.11%	-62.11%	-57.64%	-50.40%	-50.39%	-49.98%	-49.98%	-49.98%
2013	3,173,978	-	275,876	(275,876)	-8.69%	-17.10%	-22.76%	-22.23%	-22.23%	-22.00%	-22.41%	-22.85%	-22.79%	-22.79%
2014	649,654	-	160,606	(160,606)	-24.72%	-11.42%	-18.17%	-23.03%	-22.56%	-22.56%	-22.35%	-22.69%	-23.07%	-23.02%
2015	1,474,613	127,990	160,947	(32,957)	-2.23%	-9.11%	-8.86%	-14.31%	-18.17%	-17.86%	-17.86%	-17.78%	-18.29%	-18.64%
2016	373,209	-	142,899	(142,899)	-38.29%	-9.52%	-13.47%	-10.80%	-15.70%	-19.30%	-18.99%	-18.99%	-18.89%	-19.32%

NA - Not applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Electric Plant
General Office Furniture & Equipment
Account 391
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-			0	NA	NA								
2002	-			0	NA	NA	NA							
2003	102,809			0	0.00%	0.00%	0.00%	0.00%						
2004	173,148			0	0.00%	0.00%	0.00%	0.00%	0.00%					
2005	878,542			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%				
2006	-			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
2007	6,886			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
2008	44,975			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
2009	-			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2010	-	-	-	0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2011	2,279,663	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2012	318,903	-	44,017	(44,017)	-13.80%	-1.69%	-1.69%	-1.69%	-1.67%	-1.66%	-1.66%	-1.25%	-1.19%	-1.16%
2013	69,718	-	448	(448)	-0.64%	-11.44%	-1.67%	-1.67%	-1.67%	-1.64%	-1.63%	-1.63%	-1.24%	-1.18%
2014	-	-	4,528	(4,528)	NA	-7.14%	-12.61%	-1.84%	-1.84%	-1.84%	-1.81%	-1.80%	-1.80%	-1.36%
2015	527,953	-	-	0	0.00%	-0.86%	-0.83%	-5.35%	-1.53%	-1.53%	-1.53%	-1.51%	-1.51%	-1.51%
2016	167,132	-	-	0	0.00%	0.00%	-0.65%	-0.65%	-4.52%	-1.46%	-1.46%	-1.46%	-1.44%	-1.43%

Xcel Energy Electric Plant
General Network Equipment
Account 391
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-			0	NA	NA								
2002	-			0	NA	NA	NA							
2003	16,391,725			0	0.00%	0.00%	0.00%	0.00%						
2004	3,665,195			0	0.00%	0.00%	0.00%	0.00%	0.00%					
2005	3,406,259			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%				
2006	1,371,227			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
2007	2,157,135			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
2008	317,956			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
2009	141,404			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2010	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2011	5,220,532	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2012	5,878,931	-	2,012	(2,012)	-0.03%	-0.02%	-0.02%	-0.02%	-0.02%	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%
2013	1,096,352	-	500	(500)	-0.05%	-0.04%	-0.02%	-0.02%	-0.02%	-0.02%	-0.02%	-0.02%	-0.01%	-0.01%
2014	2,792,103	-	-	0	0.00%	-0.01%	-0.03%	-0.02%	-0.02%	-0.02%	-0.02%	-0.01%	-0.01%	-0.01%
2015	174,104	-	54,922	(54,922)	-31.55%	-1.85%	-1.36%	-0.58%	-0.38%	-0.38%	-0.38%	-0.37%	-0.32%	-0.30%
2016	2,576,703	-	-	0	0.00%	-2.00%	-0.99%	-0.83%	-0.46%	-0.32%	-0.32%	-0.32%	-0.32%	-0.28%

NA - Not applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Electric Plant
General Transportation Equipment - Automobiles
Account 392
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-			0	NA	NA								
2002	-			0	NA	NA	NA							
2003	-			0	NA	NA	NA	NA						
2004	-			0	NA	NA	NA	NA	NA					
2005	-			0	NA	NA	NA	NA	NA	NA				
2006	-			0	NA	NA	NA	NA	NA	NA	NA			
2007	-			0	NA	NA	NA	NA	NA	NA	NA	NA		
2008	-			0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2009	-			0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2010	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2011	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2012				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2013				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2014				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2015	8,718	-		0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2016	-	55,724		55,724	NA	639.18%	639.18%	639.18%	639.18%	639.18%	639.18%	639.18%	639.18%	639.18%

Xcel Energy Electric Plant
General Transportation Equipment - Light Trucks
Account 392
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-			0	NA	NA								
2002	-			0	NA	NA	NA							
2003	-			0	NA	NA	NA	NA						
2004	288,226			0	0.00%	0.00%	0.00%	0.00%	0.00%					
2005	-			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%				
2006	37,508		(5,114)	5,114	13.63%	13.63%	1.57%	1.57%	1.57%	1.57%	1.57%			
2007	-			0	NA	13.63%	13.63%	1.57%	1.57%	1.57%	1.57%	1.57%		
2008	-			0	NA	NA	13.63%	13.63%	1.57%	1.57%	1.57%	1.57%	1.57%	
2009	-			0	NA	NA	NA	13.63%	13.63%	1.57%	1.57%	1.57%	1.57%	1.57%
2010	-	-	-	0	NA	NA	NA	NA	13.63%	13.63%	1.57%	1.57%	1.57%	1.57%
2011	-	-	-	0	NA	NA	NA	NA	NA	13.63%	13.63%	1.57%	1.57%	1.57%
2012				0	NA	NA	NA	NA	NA	NA	13.63%	13.63%	1.57%	1.57%
2013				0	NA	NA	NA	NA	NA	NA	NA	13.63%	13.63%	1.57%
2014				0	NA	NA	NA	NA	NA	NA	NA	NA	13.63%	13.63%
2015	57,114	16,243	(12,529)	28,772	50.38%	50.38%	50.38%	50.38%	50.38%	50.38%	50.38%	50.38%	50.38%	35.81%
2016	653,030	387,136	-	387,136	59.28%	58.57%	58.57%	58.57%	58.57%	58.57%	58.57%	58.57%	58.57%	58.57%

NA - Not applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Electric Plant
General Transportation Equipment - Trailers
Account 392
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-			0	NA	NA								
2002	-			0	NA	NA	NA							
2003	-			0	NA	NA	NA	NA						
2004	795,516			0	0.00%	0.00%	0.00%	0.00%	0.00%					
2005	10,448			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%				
2006	17,000		(2,948)	2,948	17.34%	10.74%	0.36%	0.36%	0.36%	0.36%	0.36%			
2007	-			0	NA	17.34%	10.74%	0.36%	0.36%	0.36%	0.36%	0.36%		
2008	-			0	NA	NA	17.34%	10.74%	0.36%	0.36%	0.36%	0.36%	0.36%	
2009	347,741		50	(50)	-0.01%	-0.01%	-0.01%	0.79%	0.77%	0.25%	0.25%	0.25%	0.25%	0.25%
2010	-	-	-	0	NA	-0.01%	-0.01%	-0.01%	0.79%	0.77%	0.25%	0.25%	0.25%	0.25%
2011	-	-	-	0	NA	NA	-0.01%	-0.01%	-0.01%	0.79%	0.77%	0.25%	0.25%	0.25%
2012				0	NA	NA	NA	-0.01%	-0.01%	-0.01%	0.79%	0.77%	0.25%	0.25%
2013				0	NA	NA	NA	NA	-0.01%	-0.01%	-0.01%	0.79%	0.77%	0.25%
2014				0	NA	NA	NA	NA	NA	-0.01%	-0.01%	-0.01%	0.79%	0.77%
2015	38,497	17,009	(25,923)	42,932	111.52%	111.52%	111.52%	111.52%	111.52%	111.52%	11.10%	11.10%	11.10%	11.37%
2016	30,514	407,078	-	407,078	1334.07%	652.08%	652.08%	652.08%	652.08%	652.08%	652.08%	107.97%	107.97%	107.97%

Xcel Energy Electric Plant
General Transportation Equipment - Heavy Trucks
Account 392
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-			0	NA	NA								
2002	-			0	NA	NA	NA							
2003	-			0	NA	NA	NA	NA						
2004	11,702,759			0	0.00%	0.00%	0.00%	0.00%	0.00%					
2005	-			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%				
2006	-			0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%			
2007	-			0	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%		
2008	-			0	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	
2009	-			0	NA	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%
2010	-	-	1,396	(1,396)	NA	NA	NA	NA	NA	NA	-0.01%	-0.01%	-0.01%	-0.01%
2011	-	-	1,318	(1,318)	NA	NA	NA	NA	NA	NA	NA	-0.02%	-0.02%	-0.02%
2012				0	NA	NA	NA	NA	NA	NA	NA	NA	-0.02%	-0.02%
2013				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	-0.02%
2014				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2015	-	45,063	(35,336)	80,399	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2016	-	1,589,313	-	1,589,313	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NA - Not applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Electric Plant
General Stores Equipment
Account 393
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-			0	NA	NA								
2002	2,370			0	0.00%	0.00%	0.00%							
2003	262,619			0	0.00%	0.00%	0.00%	0.00%						
2004	122,766			0	0.00%	0.00%	0.00%	0.00%	0.00%					
2005	-			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%				
2006	-			0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%			
2007	312,985			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
2008	-			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
2009	-			0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2010	-	-	-	0	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2011	707,060	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2012	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2013	261,474	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2014	66,914	-	(2,508)	2,508	3.75%	0.76%	0.76%	0.24%	0.24%	0.24%	0.24%	0.19%	0.19%	0.19%
2015	57,769	-	-	0	0.00%	2.01%	0.65%	0.65%	0.23%	0.23%	0.23%	0.23%	0.18%	0.18%
2016	75,371	-	-	0	0.00%	0.00%	1.25%	0.54%	0.54%	0.21%	0.21%	0.21%	0.21%	0.17%

Xcel Energy Electric Plant
General Tools, Shop & Garage Equipment
Account 394
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-			0	NA	NA								
2002	959,246			0	0.00%	0.00%	0.00%							
2003	592,001			0	0.00%	0.00%	0.00%	0.00%						
2004	1,441,978			0	0.00%	0.00%	0.00%	0.00%	0.00%					
2005	1,768,422			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%				
2006	20,819		(5)	5	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
2007	7,705,069			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
2008	2,283,581		1,050	(1,050)	-0.05%	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%	
2009	5,215,159		(0)	0	0.00%	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%
2010	-	-	-	0	NA	0.00%	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%
2011	2,914,764	-	11,284	(11,284)	-0.39%	-0.39%	-0.14%	-0.12%	-0.07%	-0.07%	-0.06%	-0.06%	-0.06%	-0.05%
2012	1,019,225	384	(5,648)	6,032	0.59%	-0.13%	-0.13%	-0.06%	-0.06%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%
2013	1,884,820		12,921	(12,921)	-0.69%	-0.24%	-0.31%	-0.31%	-0.16%	-0.14%	-0.09%	-0.09%	-0.08%	-0.08%
2014	919,705		18,037	(18,037)	-1.96%	-1.10%	-0.65%	-0.54%	-0.54%	-0.30%	-0.26%	-0.17%	-0.17%	-0.16%
2015	3,325,572			0	0.00%	-0.42%	-0.51%	-0.35%	-0.36%	-0.36%	-0.24%	-0.21%	-0.15%	-0.15%
2016	2,209,131			0	0.00%	0.00%	-0.28%	-0.37%	-0.27%	-0.30%	-0.30%	-0.21%	-0.19%	-0.14%

NA - Not applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Electric Plant
General Laboratory Equipment
Account 395
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-			0	NA	NA								
2002	2,490,202			0	0.00%	0.00%	0.00%							
2003	1,818,219			0	0.00%	0.00%	0.00%	0.00%						
2004	1,449,240			0	0.00%	0.00%	0.00%	0.00%	0.00%					
2005	236,767			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%				
2006	637,170			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
2007	566,020			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
2008	601,436			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
2009	372,410			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2010	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2011	1,341,983	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2012	157,716			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2013	308,567			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2014	892,983			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2015	283,177	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2016	474,723	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Xcel Energy Electric Plant
General Power Operated Equipment
Account 396
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-			0	NA	NA								
2002	-			0	NA	NA	NA							
2003	-			0	NA	NA	NA	NA						
2004	1,757,950			0	0.00%	0.00%	0.00%	0.00%	0.00%					
2005	-			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%				
2006	-			0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%			
2007	-			0	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%		
2008	3,419			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
2009	-			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2010	-	-	-	0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2011	-	-	-	0	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2012			6,805	(6,805)	NA	NA	NA	NA	-199.02%	-199.02%	-199.02%	-199.02%	-0.39%	-0.39%
2013				0	NA	NA	NA	NA	NA	-199.02%	-199.02%	-199.02%	-199.02%	-0.39%
2014				0	NA	NA	NA	NA	NA	NA	-199.02%	-199.02%	-199.02%	-199.02%
2015	52,719	65,252	(35,816)	101,068	191.71%	191.71%	191.71%	178.80%	178.80%	178.80%	178.80%	167.91%	167.91%	167.91%
2016	828,369	2,414,653		2,414,653	291.49%	285.52%	285.52%	285.52%	284.75%	284.75%	284.75%	284.75%	283.65%	283.65%

NA - Not applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Electric Plant
General Communication Equipment
Account 397
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	1,725			0	0.00%	0.00%								
2002	3,048,699			0	0.00%	0.00%	0.00%							
2003	4,493,608			0	0.00%	0.00%	0.00%	0.00%						
2004	-			0	NA	0.00%	0.00%	0.00%	0.00%					
2005	1,250,459			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%				
2006	1,034,055			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
2007	154,493			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
2008	307,626			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
2009	268,137			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2010	-		-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2011	1,333		6,635	(6,635)	-497.63%	-497.63%	-2.46%	-1.15%	-0.91%	-0.38%	-0.22%	-0.22%	-0.09%	-0.06%
2012	337,112		3,561	(3,561)	-1.06%	-3.01%	-3.01%	-1.68%	-1.12%	-0.95%	-0.48%	-0.30%	-0.30%	-0.13%
2013	119,530		455	(455)	-0.38%	-0.88%	-2.33%	-2.33%	-1.47%	-1.03%	-0.90%	-0.48%	-0.31%	-0.31%
2014	512,066			0	0.00%	-0.07%	-0.41%	-1.10%	-1.10%	-0.86%	-0.69%	-0.63%	-0.39%	-0.27%
2015	128,665			0	0.00%	0.00%	-0.06%	-0.37%	-0.97%	-0.97%	-0.78%	-0.64%	-0.58%	-0.37%
2016	59,926			0	0.00%	0.00%	0.00%	-0.06%	-0.35%	-0.92%	-0.92%	-0.75%	-0.61%	-0.56%

Xcel Energy Electric Plant
General Communication Equipment - AES
Account 397
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000				0	NA									
2001				0	NA	NA								
2002	495,151			0	0.00%	0.00%	0.00%							
2003	135,108			0	0.00%	0.00%	0.00%	0.00%						
2004	192,849			0	0.00%	0.00%	0.00%	0.00%	0.00%					
2005				0	NA	0.00%	0.00%	0.00%	0.00%	0.00%				
2006	466,761			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
2007	16,505			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
2008	-			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
2009	98,210			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2010	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2011	193,513	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2012	-			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2013	19,682			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2014	-			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2015	-	-	(35,336)	35,336	NA	NA	179.53%	179.53%	16.57%	16.57%	11.35%	11.35%	10.78%	4.45%
2016	147,907	-	-	0	0.00%	23.89%	23.89%	21.08%	21.08%	9.79%	9.79%	7.69%	7.69%	7.43%

NA - Not applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Electric Plant
General Communication Equipment - EMS
Account 397
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000				0	NA									
2001				0	NA	NA								
2002	495,151			0	0.00%	0.00%	0.00%							
2003	135,108			0	0.00%	0.00%	0.00%	0.00%						
2004	192,849			0	0.00%	0.00%	0.00%	0.00%	0.00%					
2005				0	NA	0.00%	0.00%	0.00%	0.00%	0.00%				
2006	466,761			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
2007	16,505			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
2008	-			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
2009	98,210			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2010	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2011	193,513	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2012	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2013	19,682	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2014	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2015	-	-	-	0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2016	147,907	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Xcel Energy Electric Plant
General Miscellaneous Equipment
Account 398
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-			0	NA	NA								
2002	265,784			0	0.00%	0.00%	0.00%							
2003	-			0	NA	0.00%	0.00%	0.00%						
2004	5,643			0	0.00%	0.00%	0.00%	0.00%	0.00%					
2005	27,038			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%				
2006	22,629			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
2007	4,327			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
2008	84,227			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
2009	58,129			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2010	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2011	-	-	-	0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2012	-	-	9,876	(9,876)	NA	NA	NA	-16.99%	-6.94%	-6.73%	-5.83%	-5.03%	-4.89%	-4.89%
2013	13,712	-	-	0	0.00%	-72.02%	-72.02%	-72.02%	-13.75%	-6.33%	-6.16%	-5.40%	-4.70%	-4.58%
2014	-	-	-	0	NA	0.00%	-72.02%	-72.02%	-72.02%	-13.75%	-6.33%	-6.16%	-5.40%	-4.70%
2015	11,893	-	(1)	1	0.01%	0.01%	0.00%	-38.57%	-38.57%	-38.57%	-11.79%	-5.88%	-5.73%	-5.07%
2016	142,970	-	-	0	0.00%	0.00%	0.00%	0.00%	-5.86%	-5.86%	-5.86%	-4.36%	-3.18%	-3.13%
				0	NA	0.00%	0.00%	0.00%	0.00%	-5.86%	-5.86%	-5.86%	-4.36%	-3.18%

NA - Not applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Gas Plant
Transmission Structures & Improvements
Account 366
1950-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1950	-	-	-	0	NA									
1951	-	-	-	0	NA	NA								
1952	-	-	-	0	NA	NA	NA							
1953	-	-	-	0	NA	NA	NA	NA						
1954	-	-	-	0	NA	NA	NA	NA	NA					
1955	-	-	-	0	NA	NA	NA	NA	NA	NA				
1956	-	-	-	0	NA	NA	NA	NA	NA	NA	NA			
1957	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1958	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1959	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1960	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1961	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1962	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1963	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1964	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1965	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1966	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1967	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1968	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1969	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1970	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1971	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1972	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1973	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1974	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1975	1,659	180	21	159	9.58%	9.58%	9.58%	9.58%	9.58%	9.58%	9.58%	9.58%	9.58%	9.58%
1976	-	-	-	0	NA	9.58%	9.58%	9.58%	9.58%	9.58%	9.58%	9.58%	9.58%	9.58%
1977	-	-	-	0	NA	NA	9.58%	9.58%	9.58%	9.58%	9.58%	9.58%	9.58%	9.58%
1978	6,622	-	-	0	0.00%	0.00%	0.00%	1.92%	1.92%	1.92%	1.92%	1.92%	1.92%	1.92%
1979	19,847	2,375	10,784	(8,409)	-42.37%	-31.77%	-31.77%	-31.77%	-29.33%	-29.33%	-29.33%	-29.33%	-29.33%	-29.33%
1980	149	-	2,010	(2,010)	-1348.99%	-52.11%	-39.14%	-39.14%	-39.14%	-36.28%	-36.28%	-36.28%	-36.28%	-36.28%
1981	-	-	-	0	NA	-1348.99%	-52.11%	-39.14%	-39.14%	-39.14%	-36.28%	-36.28%	-36.28%	-36.28%
1982	-	-	-	0	NA	NA	-1348.99%	-52.11%	-39.14%	-39.14%	-39.14%	-36.28%	-36.28%	-36.28%
1983	-	-	-	0	NA	NA	NA	-1348.99%	-52.11%	-39.14%	-39.14%	-39.14%	-36.28%	-36.28%
1984	-	-	-	0	NA	NA	NA	NA	-1348.99%	-52.11%	-39.14%	-39.14%	-39.14%	-36.28%
1985	-	-	73	(73)	NA	NA	NA	NA	NA	-1397.99%	-52.47%	-39.42%	-39.42%	-39.42%
1986	-	-	-	0	NA	NA	NA	NA	NA	NA	-1397.99%	-52.47%	-39.42%	-39.42%
1987	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	-1397.99%	-52.47%	-39.42%
1988	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	-1397.99%	-52.47%
1989	20,340	-	-	0	0.00%	0.00%	0.00%	0.00%	-0.36%	-0.36%	-0.36%	-0.36%	-0.36%	-10.17%
1990	-	13,140	-	13,140	NA	64.60%	64.60%	64.60%	64.60%	64.24%	64.24%	64.24%	64.24%	64.24%
1991	-	-	-	0	NA	NA	64.60%	64.60%	64.60%	64.60%	64.24%	64.24%	64.24%	64.24%
1992	2,145	-	2,101	(2,101)	-97.95%	-97.95%	514.64%	49.09%	49.09%	49.09%	49.09%	48.77%	48.77%	48.77%
1993	-	-	-	0	NA	-97.95%	-97.95%	514.64%	49.09%	49.09%	49.09%	49.09%	48.77%	48.77%
1994	-	-	-	0	NA	NA	-97.95%	-97.95%	514.64%	49.09%	49.09%	49.09%	49.09%	48.77%
1995	560	-	-	0	0.00%	0.00%	0.00%	-77.67%	-77.67%	408.10%	47.90%	47.90%	47.90%	47.90%
1996	-	-	-	0	NA	0.00%	0.00%	0.00%	-77.67%	-77.67%	408.10%	47.90%	47.90%	47.90%
1997	-	-	-	0	NA	NA	0.00%	0.00%	0.00%	-77.67%	-77.67%	408.10%	47.90%	47.90%
1998	5,402	-	264	(264)	-4.89%	-4.89%	-4.89%	-4.43%	-4.43%	-4.43%	-29.17%	-29.17%	132.91%	37.88%
1999	-	-	-	0	NA	-4.89%	-4.89%	-4.89%	-4.43%	-4.43%	-4.43%	-29.17%	-29.17%	132.91%
2000	-	(3,674)	-	(3,674)	NA	NA	-72.90%	-72.90%	-72.90%	-66.05%	-66.05%	-66.05%	-74.49%	-74.49%
2001	-	-	-	0	NA	NA	NA	-72.90%	-72.90%	-72.90%	-66.05%	-66.05%	-66.05%	-74.49%
2002	-	-	-	0	NA	NA	NA	NA	-72.90%	-72.90%	-72.90%	-66.05%	-66.05%	-66.05%
2003	1,757	-	-	0	0.00%	0.00%	0.00%	-209.16%	-209.16%	-55.01%	-55.01%	-55.01%	-51.02%	-51.02%
2004	-	-	-	0	NA	0.00%	0.00%	0.00%	-209.16%	-209.16%	-55.01%	-55.01%	-55.01%	-51.02%
2005	-	-	-	0	NA	NA	0.00%	0.00%	0.00%	-209.16%	-209.16%	-55.01%	-55.01%	-55.01%
2006	22,284	-	3,885	(3,885)	-17.43%	-17.43%	-17.43%	-16.16%	-16.16%	-16.16%	-31.44%	-31.44%	-26.57%	-26.57%
2007	11,909	-	-	0	0.00%	-11.36%	-11.36%	-11.36%	-10.81%	-10.81%	-10.81%	-21.03%	-21.03%	-18.92%
2008	-	-	-	0	NA	0.00%	-11.36%	-11.36%	-11.36%	-10.81%	-10.81%	-10.81%	-21.03%	-21.03%
2009	-	-	-	0	NA	NA	0.00%	-11.36%	-11.36%	-11.36%	-10.81%	-10.81%	-10.81%	-21.03%
2010	-	-	-	0	NA	NA	NA	0.00%	-11.36%	-11.36%	-10.81%	-10.81%	-10.81%	-10.81%
2011	-	-	-	0	NA	NA	NA	NA	0.00%	-11.36%	-11.36%	-11.36%	-10.81%	-10.81%
2012	-	-	-	0	NA	NA	NA	NA	NA	0.00%	-11.36%	-11.36%	-10.81%	-10.81%
2013	-	-	-	0	NA	NA	NA	NA	NA	NA	0.00%	-11.36%	-11.36%	-11.36%
2014	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	0.00%	-11.36%	-11.36%
2015	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	0.00%	-11.36%
2016	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00%

NA - Not Applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Gas Plant
Transmission Mains
Account 367
1950-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1950	-	-	-	0	NA									
1951	-	-	-	0	NA	NA								
1952	-	-	-	0	NA	NA	NA							
1953	-	-	-	0	NA	NA	NA	NA						
1954	-	-	-	0	NA	NA	NA	NA	NA					
1955	-	-	-	0	NA	NA	NA	NA	NA	NA				
1956	-	-	-	0	NA	NA	NA	NA	NA	NA	NA			
1957	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA		
1958	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1959	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1960	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1961	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1962	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1963	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1964	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1965	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1966	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1967	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1968	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1969	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1970	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1971	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1972	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1973	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1974	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1975	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1978	2,200	-	2,379	(2,379)	-108.14%	-108.14%	-108.14%	-108.14%	-108.14%	-108.14%	-108.14%	-108.14%	-108.14%	-108.14%
1979	9,171	6,759	-	6,759	73.70%	38.52%	38.52%	38.52%	38.52%	38.52%	38.52%	38.52%	38.52%	38.52%
1980	19,112	-	-	0	0.00%	23.90%	14.37%	14.37%	14.37%	14.37%	14.37%	14.37%	14.37%	14.37%
1981	95,035	540,123	-	540,123	568.34%	473.18%	443.47%	433.80%	433.80%	433.80%	433.80%	433.80%	433.80%	433.80%
1982	1,774	-	3,875	(3,875)	-218.43%	553.92%	462.60%	434.09%	424.71%	424.71%	424.71%	424.71%	424.71%	424.71%
1983	-	62,960	-	62,960	NA	3330.61%	618.96%	516.91%	484.42%	474.18%	474.18%	474.18%	474.18%	474.18%
1984	-	232,019	3,852	228,167	NA	NA	16192.33%	854.65%	713.74%	666.82%	653.42%	653.42%	653.42%	653.42%
1985	44,484	149,522	8,449	141,073	317.13%	830.05%	971.59%	925.95%	685.42%	603.75%	575.09%	566.34%	566.34%	566.34%
1986	-	21,041	7,139	13,902	NA	348.38%	861.30%	1002.84%	956.00%	695.26%	612.42%	583.28%	574.43%	574.43%
1987	2,488	309,491	1,243	308,248	12389.39%	12948.15%	986.17%	1471.92%	1605.96%	1539.56%	897.61%	792.30%	754.00%	743.11%
1988	-	570	-	570	NA	12412.30%	12971.06%	987.38%	1473.13%	1607.17%	1540.73%	898.01%	792.65%	754.33%
1989	-	-	-	0	NA	NA	12412.30%	12971.06%	987.38%	1473.13%	1607.17%	1540.73%	898.01%	792.65%
1990	-	-	3,799	(3,799)	NA	NA	NA	12259.61%	12818.37%	979.29%	1465.05%	1599.08%	1532.94%	895.37%
1991	182,624	192,281	40,932	151,349	82.87%	80.79%	80.79%	81.11%	246.54%	254.05%	266.27%	365.65%	393.07%	388.38%
1992	292,293	-	29,780	(29,780)	-10.19%	25.60%	24.80%	24.80%	24.92%	89.36%	92.27%	111.43%	155.15%	167.22%
1993	-	155,991	204	155,787	NA	43.11%	58.40%	57.60%	57.60%	57.72%	121.99%	124.90%	141.28%	185.00%
1994	425,292	-	36,927	(36,927)	-8.68%	27.95%	12.41%	26.71%	26.29%	26.29%	26.35%	60.42%	61.96%	73.95%
1995	-	(155,991)	3,540	(159,531)	NA	-46.19%	-9.56%	-9.82%	8.99%	8.56%	8.56%	8.63%	42.75%	44.29%
1996	-	347,925	12,909	335,016	NA	NA	32.58%	69.21%	36.87%	46.20%	45.78%	45.78%	45.84%	79.86%
1997	20,566	83,015	-	83,015	403.65%	2032.63%	1256.93%	49.70%	84.64%	47.09%	54.19%	53.77%	53.77%	53.84%
1998	-	-	-	0	NA	403.65%	2032.63%	1256.93%	49.70%	84.64%	47.09%	54.19%	53.77%	53.77%
1999	-	-	-	0	NA	NA	403.65%	2032.63%	1256.93%	49.70%	84.64%	47.09%	54.19%	53.77%
2000	9,809	(22,780)	(81,140)	58,360	594.96%	594.96%	594.96%	465.43%	1568.37%	1043.16%	61.43%	95.62%	54.27%	59.89%
2001	24,255	-	15,956	(15,956)	-65.78%	124.48%	124.48%	124.48%	229.58%	842.82%	550.80%	55.00%	87.47%	50.50%
2002	-	-	-	0	NA	-65.78%	124.48%	124.48%	124.48%	229.58%	842.82%	550.80%	55.00%	87.47%
2003	37,754	-	-	0	0.00%	0.00%	-25.73%	59.04%	59.04%	59.04%	135.76%	498.40%	325.71%	50.99%
2004	-	-	-	0	NA	0.00%	0.00%	-25.73%	59.04%	59.04%	59.04%	135.76%	498.40%	325.71%
2005	346,129	-	-	0	0.00%	0.00%	0.00%	0.00%	-3.91%	10.15%	10.15%	10.15%	28.60%	105.00%
2006	30,760	13,106	22,402	(9,296)	-30.22%	-2.47%	-2.47%	-2.24%	-2.24%	-5.75%	7.38%	7.38%	7.38%	24.75%
2007	118,421	52,698	7,628	45,070	38.06%	23.98%	7.22%	7.22%	6.71%	6.71%	3.56%	13.78%	13.78%	13.78%
2008	-	-	-	0	NA	38.06%	23.98%	7.22%	7.22%	6.71%	6.71%	3.56%	13.78%	13.78%
2009	-	-	-	0	NA	NA	38.06%	23.98%	7.22%	7.22%	6.71%	6.71%	3.56%	13.78%
2010	-	-	-	0	NA	NA	NA	38.06%	23.98%	7.22%	7.22%	6.71%	6.71%	3.56%
2011	670,110	-	228,915	(228,915)	-34.16%	-34.16%	-34.16%	-34.16%	-23.31%	-23.57%	-16.57%	-16.57%	-16.05%	-16.05%
2012	698			0	0.00%	-34.13%	-34.13%	-34.13%	-34.13%	-23.29%	-23.55%	-16.56%	-16.56%	-16.04%
2013	1,612			0	0.00%	0.00%	-34.04%	-34.04%	-34.04%	-34.04%	-23.25%	-23.51%	-16.54%	-16.54%
2014	1,523,206		1,420,195	(1,420,195)	-93.24%	-93.14%	-93.10%	-75.11%	-75.11%	-75.11%	-75.11%	-69.32%	-68.80%	-59.95%
2015	1,276		56,357	(56,357)	-4416.69%	-96.86%	-96.75%	-96.71%	-77.63%	-77.63%	-77.63%	-77.63%	-71.71%	-71.17%
2016	816,534		55,751	(55,751)	-6.83%	-13.71%	-65.45%	-65.41%	-65.39%	-58.45%	-58.45%	-58.45%	-58.45%	-54.80%

NA - Not Applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Gas Plant
Transmission Measure and Regulating Station Equipment
Account 369
1950-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1950	-	-	-	0	NA									
1951	-	-	-	0	NA	NA								
1952	-	-	-	0	NA	NA	NA							
1953	-	-	-	0	NA	NA	NA	NA						
1954	-	-	-	0	NA	NA	NA	NA	NA					
1955	-	-	-	0	NA	NA	NA	NA	NA	NA				
1956	-	-	-	0	NA	NA	NA	NA	NA	NA	NA			
1957	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA		
1958	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1959	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1960	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1961	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1962	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1963	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1964	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1965	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1966	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1967	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1968	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1969	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1970	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1971	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1972	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1973	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1974	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1975	5,418	635	73	562	10.37%	10.37%	10.37%	10.37%	10.37%	10.37%	10.37%	10.37%	10.37%	10.37%
1976	-	-	505	(505)	NA	1.05%	1.05%	1.05%	1.05%	1.05%	1.05%	1.05%	1.05%	1.05%
1977	3,885	-	-	0	0.00%	-13.00%	0.61%	0.61%	0.61%	0.61%	0.61%	0.61%	0.61%	0.61%
1978	33,212	674	352	322	0.97%	0.87%	-0.49%	0.89%	0.89%	0.89%	0.89%	0.89%	0.89%	0.89%
1979	101,335	17,943	20,118	(2,175)	-2.15%	-1.38%	-1.34%	-1.70%	-1.25%	-1.25%	-1.25%	-1.25%	-1.25%	-1.25%
1980	111,297	2,427	1,062	1,365	1.23%	-0.38%	-0.20%	-0.20%	-0.40%	-0.17%	-0.17%	-0.17%	-0.17%	-0.17%
1981	180,953	24,666	7,336	17,330	9.58%	6.40%	4.20%	3.95%	3.91%	3.79%	3.88%	3.88%	3.88%	3.88%
1982	31,495	-	1,486	(1,486)	-4.72%	7.46%	5.32%	3.54%	3.35%	3.32%	3.21%	3.30%	3.30%	3.30%
1983	3,775	(38)	1,670	(1,708)	-45.25%	-9.06%	6.54%	4.73%	3.11%	2.95%	2.93%	2.82%	2.91%	2.91%
1984	52,154	-	1,533	(1,533)	-2.94%	-5.79%	-5.41%	4.70%	3.68%	2.45%	2.36%	2.34%	2.24%	2.33%
1985	-	-	513	(513)	NA	-3.92%	-6.71%	-5.99%	4.50%	3.54%	2.35%	2.26%	2.24%	2.14%
1986	-	-	-	0	NA	NA	-3.92%	-6.71%	-5.99%	4.50%	3.54%	2.35%	2.26%	2.24%
1987	-	-	-	0	NA	NA	NA	-3.92%	-6.71%	-5.99%	4.50%	3.54%	2.35%	2.26%
1988	5,170	-	-	0	0.00%	0.00%	0.00%	-9.92%	-3.57%	-6.14%	-5.66%	4.42%	3.50%	2.32%
1989	107,274	-	-	0	0.00%	0.00%	0.00%	0.00%	-0.46%	-1.24%	-2.23%	-2.62%	3.17%	2.73%
1990	3,574	69,016	-	69,016	1931.06%	62.26%	59.49%	59.49%	59.49%	59.05%	39.82%	37.95%	31.35%	21.10%
1991	9,712	-	1,855	(1,855)	-19.10%	505.50%	55.71%	53.42%	53.42%	53.42%	53.01%	36.61%	34.90%	29.05%
1992	9,661	-	(580)	580	6.00%	-6.58%	295.21%	52.02%	50.03%	50.03%	50.03%	49.65%	35.03%	33.45%
1993	8,740	-	-	0	0.00%	3.15%	-4.54%	213.78%	48.75%	47.00%	47.00%	47.00%	46.64%	33.47%
1994	421,740	3,512	-	3,512	0.83%	0.82%	0.93%	0.50%	15.71%	12.71%	12.59%	12.59%	12.59%	12.50%
1995	14,488	-	1,266	(1,266)	-8.74%	0.51%	0.50%	0.62%	0.21%	14.96%	12.17%	12.06%	12.06%	12.06%
1996	1,829	-	-	0	0.00%	-7.76%	0.51%	0.50%	0.62%	0.21%	14.90%	12.13%	12.02%	12.02%
1997	129,294	5,260	-	5,260	4.07%	4.01%	2.74%	1.32%	1.30%	1.38%	1.05%	12.56%	10.65%	10.58%
1998	159,608	-	5,403	(5,403)	-3.39%	-0.05%	-0.05%	-0.46%	0.29%	0.29%	0.36%	0.11%	9.21%	8.07%
1999	13,276	-	3,147	(3,147)	-23.70%	-4.95%	-1.09%	-1.08%	-1.43%	-0.14%	-0.14%	-0.06%	-0.30%	8.64%
2000	10,740	(17,609)	34,025	(51,634)	-480.76%	-228.10%	-32.78%	-17.55%	-17.45%	-17.07%	-7.01%	-6.93%	-6.77%	-6.93%
2001	-	-	-	0	NA	-480.76%	-228.10%	-32.78%	-17.55%	-17.45%	-17.07%	-7.01%	-6.93%	-6.77%
2002	-	-	-	0	NA	NA	-480.76%	-228.10%	-32.78%	-17.55%	-17.45%	-17.07%	-7.01%	-6.93%
2003	2,275	-	-	0	0.00%	0.00%	0.00%	-396.72%	-208.36%	-32.37%	-17.43%	-17.32%	-16.95%	-6.99%
2004	-	-	-	0	NA	0.00%	0.00%	0.00%	-396.72%	-208.36%	-32.37%	-17.43%	-17.32%	-16.95%
2005	1,361	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	-359.16%	-198.11%	-32.14%	-17.35%	-17.25%
2006	130,031	-	71,892	(71,892)	-55.29%	-54.72%	-54.72%	-53.78%	-53.78%	-53.78%	-85.54%	-80.33%	-41.63%	-28.40%
2007	23,421	-	34,658	(34,658)	-147.98%	-69.44%	-68.82%	-68.82%	-67.83%	-67.83%	-67.83%	-94.25%	-89.08%	-48.94%
2008	-	-	-	0	NA	-147.98%	-69.44%	-68.82%	-68.82%	-67.83%	-67.83%	-67.83%	-94.25%	-89.08%
2009	131,357	-	3,056	(3,056)	-2.33%	-2.33%	-24.37%	-38.48%	-38.30%	-38.30%	-38.00%	-38.00%	-38.00%	-53.89%
2010	12,800	-	-	0	0.00%	-2.12%	-2.12%	-22.51%	-36.83%	-36.66%	-36.66%	-36.38%	-36.38%	-36.38%
2011	56,895	-	49,228	(49,228)	-86.52%	-70.63%	-26.01%	-26.01%	-38.73%	-44.80%	-44.63%	-44.63%	-44.35%	-44.35%
2012	96,990	-	-	0	0.00%	-31.99%	-29.53%	-17.54%	-17.54%	-27.05%	-35.18%	-35.07%	-35.07%	-34.90%
2013	28,111	-	155,827	(155,827)	-554.33%	-124.56%	-112.67%	-105.27%	-63.81%	-63.81%	-69.45%	-65.61%	-65.42%	-65.42%
2014	79,135	-	39,033	(39,033)	-49.32%	-181.69%	-95.41%	-93.47%	-89.11%	-60.98%	-60.98%	-65.73%	-63.30%	-63.15%
2015	8,377	-	-	0	0.00%	-44.60%	-168.53%	-91.65%	-90.57%	-86.46%	-59.74%	-59.74%	-64.47%	-62.37%
2016	47,153	-	-	0	0.00%	0.00%	-28.99%	-119.71%	-75.01%	-77.08%	-74.09%	-53.63%	-53.63%	-58.19%

NA - Not Applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Gas Plant
Distribution Structures & Improvements
Account 375
1950-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1950	-	100	2,048	(1,948)	NA									
1951	-	-	-	0	NA	NA								
1952	-	-	100	(100)	NA	NA	NA							
1953	-	-	21	(21)	NA	NA	NA	NA						
1954	-	-	-	0	NA	NA	NA	NA	NA					
1955	-	1	2	(1)	NA	NA	NA	NA	NA	NA				
1956	-	-	-	0	NA	NA	NA	NA	NA	NA	NA			
1957	-	184	683	(499)	NA	NA	NA	NA	NA	NA	NA	NA		
1958	-	-	43	(43)	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1959	-	325	860	(535)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1960	-	74	151	(77)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1961	-	250	147	103	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1962	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1963	-	10	115	(105)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1964	-	-	10	(10)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1965	-	-	315	(315)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1966	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1967	-	-	5	(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1968	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1969	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1970	-	-	165	(165)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1971	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1972	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1973	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1974	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1975	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976	-	250	-	250	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1978	-	400	-	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979	-	3,947	2,686	1,261	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1980	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1981	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1982	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1983	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1984	918	-	919	(919)	-100.11%	-100.11%	-100.11%	-100.11%	-100.11%	37.25%	80.83%	80.83%	108.06%	108.06%
1985	106	436	-	436	411.32%	-47.17%	-47.17%	-47.17%	-47.17%	-47.17%	75.98%	115.04%	115.04%	139.45%
1986	-	-	-	0	NA	411.32%	-47.17%	-47.17%	-47.17%	-47.17%	-47.17%	75.98%	115.04%	115.04%
1987	-	-	-	0	NA	NA	411.32%	-47.17%	-47.17%	-47.17%	-47.17%	-47.17%	75.98%	115.04%
1988	-	-	-	0	NA	NA	NA	411.32%	-47.17%	-47.17%	-47.17%	-47.17%	-47.17%	75.98%
1989	-	-	-	0	NA	NA	NA	NA	411.32%	-47.17%	-47.17%	-47.17%	-47.17%	-47.17%
1990	-	-	-	0	NA	NA	NA	NA	NA	411.32%	-47.17%	-47.17%	-47.17%	-47.17%
1991	435	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	80.59%	-33.10%	-33.10%	-33.10%
1992	8,491	-	117	(117)	-1.38%	-1.31%	-1.31%	-1.31%	-1.31%	-1.31%	-1.31%	3.53%	-6.03%	-6.03%
1993	-	-	-	0	NA	-1.38%	-1.31%	-1.31%	-1.31%	-1.31%	-1.31%	-1.31%	3.53%	-6.03%
1994	3,680	-	365	(365)	-9.92%	-9.92%	-3.96%	-3.82%	-3.82%	-3.82%	-3.82%	-3.82%	-3.82%	-0.36%
1995	-	-	-	0	NA	-9.92%	-9.92%	-3.96%	-3.82%	-3.82%	-3.82%	-3.82%	-3.82%	-3.82%
1996	411	-	-	0	0.00%	0.00%	-8.92%	-8.92%	-3.83%	-3.70%	-3.70%	-3.70%	-3.70%	-3.70%
1997	-	-	-	0	NA	0.00%	0.00%	-8.92%	-8.92%	-3.83%	-3.70%	-3.70%	-3.70%	-3.70%
1998	-	-	-	0	NA	NA	0.00%	0.00%	-8.92%	-8.92%	-3.83%	-3.70%	-3.70%	-3.70%
1999	-	-	-	0	NA	NA	NA	0.00%	0.00%	-8.92%	-8.92%	-3.83%	-3.70%	-3.70%
2000	1,187	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-6.92%	-6.92%	-3.50%	-3.39%
2001	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-6.92%	-6.92%	-3.50%
2002	-	-	-	0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-6.92%	-6.92%
2003	-	-	-	0	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-6.92%
2004	-	-	-	0	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2005	-	-	-	0	NA	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%
2006	4,392	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2007	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2008	-	-	-	0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2009	-	-	-	0	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2010	-	-	-	0	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2011	-	-	-	0	NA	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%
2012	4,534	-	2,878	(2,878)	-63.47%	-63.47%	-63.47%	-63.47%	-63.47%	-63.47%	-32.24%	-32.24%	-32.24%	-32.24%
2013	-	-	-	0	NA	-63.47%	-63.47%	-63.47%	-63.47%	-63.47%	-63.47%	-32.24%	-32.24%	-32.24%
2014	-	-	-	0	NA	NA	-63.47%	-63.47%	-63.47%	-63.47%	-63.47%	-63.47%	-32.24%	-32.24%
2015	-	-	-	0	NA	NA	NA	-63.47%	-63.47%	-63.47%	-63.47%	-63.47%	-63.47%	-32.24%
2016	-	-	-	0	NA	NA	NA	NA	-63.47%	-63.47%	-63.47%	-63.47%	-63.47%	-63.47%

NA - Not Applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy
Distribution Mains - Metallic
Account 376
1950-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1950	6,143	752	2,320	(1,568)	-25.52%									
1951	3,621	372	1,165	(793)	-21.90%	-24.18%								
1952	10,066	1,230	3,142	(1,912)	-18.99%	-19.76%	-21.55%							
1953	18,739	501	2,747	(2,246)	-11.99%	-14.43%	-15.27%	-16.90%						
1954	13,390	247	2,407	(2,160)	-16.13%	-13.71%	-14.97%	-15.52%	-16.70%					
1955	25,668	680	2,375	(1,695)	-6.60%	-9.87%	-10.56%	-11.81%	-12.32%	-13.36%				
1956	50,983	1,768	6,963	(5,195)	-10.19%	-8.99%	-10.05%	-10.38%	-11.11%	-11.43%	-12.11%			
1957	53,651	3,886	8,554	(4,668)	-8.70%	-9.43%	-8.87%	-9.55%	-9.83%	-10.36%	-10.60%	-11.10%		
1958	94,547	6,326	12,086	(5,760)	-6.09%	-7.04%	-7.84%	-7.70%	-8.18%	-8.45%	-8.85%	-9.03%	-9.39%	
1959	119,005	9,154	13,232	(4,078)	-3.43%	-4.61%	-5.43%	-6.19%	-6.22%	-6.59%	-6.86%	-7.18%	-7.32%	-7.60%
1960	146,641	25,310	22,017	3,293	2.25%	-0.30%	-1.82%	-2.71%	-3.53%	-3.69%	-4.02%	-4.31%	-4.58%	-4.70%
1961	59,014	3,215	16,481	(13,266)	-22.48%	-4.85%	-4.33%	-4.73%	-5.18%	-5.66%	-5.71%	-5.96%	-6.15%	-6.37%
1962	105,314	1,012	34,265	(33,253)	-31.58%	-28.31%	-13.90%	-11.00%	-10.12%	-9.99%	-10.00%	-9.87%	-9.99%	-10.05%
1963	165,355	1,133	31,716	(30,583)	-18.50%	-23.58%	-23.39%	-15.50%	-13.08%	-12.12%	-11.88%	-11.77%	-11.61%	-11.68%
1964	199,865	2,248	36,039	(33,791)	-16.91%	-17.63%	-20.75%	-20.94%	-15.91%	-14.04%	-13.20%	-12.94%	-12.80%	-12.65%
1965	188,804	1,696	39,089	(37,393)	-19.81%	-18.31%	-18.37%	-20.48%	-20.64%	-16.76%	-15.15%	-14.36%	-14.09%	-13.92%
1966	307,979	2,759	39,904	(37,145)	-12.06%	-15.00%	-15.55%	-16.12%	-17.80%	-18.07%	-15.53%	-14.41%	-13.85%	-13.65%
1967	136,986	2,133	31,927	(29,794)	-21.75%	-15.04%	-16.46%	-16.57%	-16.89%	-18.29%	-18.50%	-16.18%	-15.12%	-14.56%
1968	140,499	2,963	33,968	(31,005)	-22.07%	-21.91%	-16.73%	-17.48%	-17.36%	-17.53%	-18.71%	-18.89%	-16.75%	-15.74%
1969	162,072	2,962	44,867	(41,905)	-25.86%	-24.10%	-23.37%	-18.71%	-18.93%	-18.57%	-18.56%	-19.54%	-19.66%	-17.66%
1970	127,243	59,620	34,220	25,400	19.96%	-5.70%	-11.05%	-13.64%	-13.08%	-14.28%	-14.69%	-15.13%	-16.26%	-16.49%
1971	96,432	33,937	40,958	(7,021)	-7.28%	8.22%	-6.10%	-10.36%	-12.71%	-12.51%	-13.69%	-14.17%	-14.64%	-15.73%
1972	167,132	110,552	35,664	74,888	44.81%	25.75%	23.87%	9.29%	2.94%	-1.14%	-4.09%	-6.33%	-7.71%	-8.77%
1973	149,071	29,344	39,507	(10,163)	-6.82%	20.47%	13.98%	15.39%	5.87%	1.21%	-2.00%	-4.41%	-6.38%	-7.63%
1974	124,281	156,025	32,548	123,477	99.35%	41.45%	42.73%	33.74%	31.10%	19.93%	13.83%	9.41%	4.73%	1.83%
1975	155,197	8,125	69,338	(61,213)	-39.44%	22.08%	12.16%	21.32%	17.33%	17.74%	10.54%	6.46%	3.39%	0.35%
1976	204,890	106,656	126,346	(19,690)	-9.61%	-22.47%	8.79%	5.12%	13.40%	11.18%	12.27%	7.06%	3.98%	1.57%
1977	260,298	16,405	122,659	(106,254)	-40.82%	-27.07%	-30.17%	-8.55%	-8.26%	0.10%	-0.52%	1.51%	-1.55%	-3.37%
1978	323,261	72,133	233,494	(161,361)	-49.92%	-45.86%	-36.44%	-36.93%	-21.07%	-19.33%	-11.58%	-11.30%	-8.83%	-10.39%
1979	318,817	3,804	212,401	(208,597)	-65.43%	-57.62%	-52.77%	-44.79%	-44.13%	-31.27%	-28.90%	-21.66%	-20.89%	-18.19%
1980	387,831	79,920	458,132	(378,212)	-97.52%	-83.04%	-72.64%	-66.22%	-58.47%	-56.68%	-45.75%	-42.73%	-35.73%	-34.48%
1981	825,609	580	367,691	(367,111)	-44.47%	-61.42%	-62.26%	-60.11%	-57.73%	-53.48%	-52.60%	-45.34%	-43.25%	-38.21%
1982	605,121	7,109	329,477	(322,368)	-53.27%	-48.19%	-58.71%	-59.71%	-58.43%	-56.74%	-53.44%	-52.74%	-46.84%	-45.06%
1983	339,003	164,775	178,171	(13,396)	-3.95%	-35.56%	-39.72%	-50.11%	-52.08%	-51.83%	-50.89%	-48.30%	-47.90%	-42.74%
1984	258,818	2,846	141,735	(138,889)	-53.66%	-25.47%	-39.46%	-41.50%	-50.49%	-52.23%	-51.98%	-51.11%	-48.70%	-48.31%
1985	183,413	6,428	137,198	(130,770)	-71.30%	-60.98%	-36.23%	-43.67%	-43.97%	-51.96%	-53.43%	-53.08%	-52.17%	-49.81%
1986	163,111	526,716	230,624	296,092	181.53%	47.71%	4.37%	1.38%	-19.96%	-28.48%	-38.17%	-40.99%	-41.84%	-41.77%
1987	411,428	(241,164)	237,676	(478,840)	-116.38%	-31.81%	-41.36%	-44.49%	-34.36%	-40.19%	-41.46%	-48.31%	-49.87%	-49.88%
1988	356,277	58,599	180,326	(121,727)	-34.17%	-78.23%	-32.71%	-39.06%	-41.81%	-34.32%	-39.27%	-40.63%	-46.88%	-48.42%
1989	397,725	40,142	197,681	(157,539)	-39.61%	-37.04%	-65.05%	-34.78%	-39.21%	-41.32%	-35.32%	-39.32%	-40.52%	-46.15%
1990	605,322	42,383	293,405	(251,022)	-41.47%	-40.73%	-39.01%	-56.99%	-36.87%	-39.85%	-41.36%	-36.69%	-39.71%	-40.66%
1991	686,098	49,050	332,740	(283,690)	-41.35%	-41.40%	-40.98%	-39.80%	-52.62%	-38.04%	-40.22%	-41.36%	-37.63%	-39.99%
1992	1,286,023	4,254	522,481	(518,227)	-40.30%	-40.66%	-40.85%	-40.69%	-39.99%	-48.39%	-38.79%	-40.24%	-41.04%	-38.36%
1993	539,039	(763)	302,029	(302,792)	-56.17%	-44.99%	-43.99%	-43.50%	-43.06%	-42.24%	-49.37%	-40.89%	-42.10%	-42.71%
1994	637,351	1,785	276,351	(274,566)	-43.08%	-49.08%	-44.49%	-43.81%	-43.43%	-43.06%	-42.36%	-48.55%	-41.17%	-42.22%
1995	1,164,725	(5,100)	217,282	(222,382)	-19.09%	-27.58%	-34.16%	-36.34%	-37.13%	-37.67%	-37.81%	-37.58%	-42.91%	-37.05%
1996	316,021	3,653	187,948	(184,295)	-58.32%	-27.46%	-32.16%	-37.03%	-38.10%	-38.58%	-38.91%	-38.96%	-38.68%	-43.67%
1997	379,795	2,859	178,040	(175,181)	-46.13%	-51.66%	-31.27%	-34.29%	-38.17%	-38.80%	-39.15%	-39.40%	-39.42%	-39.12%
1998	1,161,767	96,612	311,185	(214,573)	-18.47%	-25.28%	-30.90%	-26.35%	-29.26%	-32.72%	-34.50%	-35.26%	-35.81%	-36.02%
1999	1,064,354	57,589	35,771	21,818	2.05%	-8.66%	-14.12%	-18.90%	-18.95%	-22.21%	-25.69%	-28.56%	-29.77%	-30.67%
2000	944,891	158,394	94,517	63,877	6.76%	4.27%	-4.06%	-8.56%	-12.63%	-14.13%	-17.38%	-20.75%	-24.10%	-25.55%
2001	644,735	(6)	46,542	(46,548)	-7.22%	1.09%	1.48%	-4.60%	-8.36%	-11.86%	-13.34%	-16.34%	-19.48%	-22.77%
2002	423,962	(2,932)	(189,519)	186,587	44.01%	13.10%	10.13%	7.33%	0.26%	-3.55%	-7.06%	-9.36%	-12.55%	-15.78%
2003	348,764	-	13,959	(13,959)	-4.00%	22.34%	8.89%	8.04%	6.18%	-0.06%	-3.58%	-6.86%	-9.07%	-12.13%
2004	444,145	-	82,638	(82,638)	-18.61%	-12.18%	7.40%	2.33%	3.82%	3.34%	-1.70%	-4.82%	-7.77%	-9.68%
2005	864,678	-	71,486	(71,486)	-8.27%	-11.78%	-10.14%	0.89%	-1.03%	0.98%	1.22%	-2.66%	-5.29%	-7.83%
2006	567,306	-	148,722	(148,722)	-26.22%	-15.38%	-16.14%	-14.24%	-4.92%	-5.37%	-2.66%	-1.72%	-4.73%	-7.03%
2007	283,204	-	130,105	(130,105)	-45.94%	-32.78%	-20.42%	-20.05%	-17.82%	-8.88%	-8.58%	-5.37%	-3.96%	-6.46%
2008	382,030	-	90,419	(90,419)	-23.67%	-33.15%	-29.96%	-21.02%	-20.59%	-18.59%	-10.58%	-10.04%	-6.80%	-5.22%
2009	324,145	-	51,003	(51,003)	-15.73%	-20.03%	-27.44%	-27.00%	-20.31%	-20.04%	-18.30%	-11.04%	-10.47%	-7.35%
2010	986,972	-	140,357	(140,357)	-14.22%	-14.60%	-16.64%	-20.84%	-22.04%	-18.55%	-18.55%	-17.34%	-11.72%	-11.17%
2011	650,594	-	366,488	(366,488)	-56.33%	-30.95%	-28.44%	-27.66%	-29.63%	-29.02%	-24.60%	-24.01%	-22.57%	-17.22%
2012	734,484	75,511	126,580	(51,069)	-6.95%	-30.15%	-23.52%	-22.58%	-22.72%	-24.68%	-24.90%	-21.90%	-21.62%	-20.52%
2013	910,651	74,293	165,990	(91,697)	-10.07%	-8.68%	-22.18%	-19.79%	-19.42%	-19.83%	-21.56%	-22.11%	-20.01%	-19.91%
2014	656,011	248	479,239	(478,991)	-73.02%	-36.43%	-27.02%	-33.48%	-28.65%	-27.67%	-27.34%	-28.41%	-28.18%	-25.48%
2015	1,126,614		353,277	(353,277)	-31.36%	-46.69%	-34.31%	-28.45%	-32.89%	-29.26%	-28.44%	-28.13%	-28.96%	-28.72%
2016	167,127		808,052	(808,052)	-483.50%	-89.77%	-84.13%	-60.55%	-49.60%	-50.63%	-43.76%	-42.13%	-40.94%	-41.17%

NA - Not Applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Gas Plant
Distribution Mains - Plastic
Account 376
1950-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1950	-	-	-	0	NA									
1951	-	-	-	0	NA	NA								
1952	-	-	-	0	NA	NA	NA							
1953	-	-	-	0	NA	NA	NA	NA						
1954	-	-	-	0	NA	NA	NA	NA	NA					
1955	-	-	-	0	NA	NA	NA	NA	NA	NA				
1956	-	-	-	0	NA	NA	NA	NA	NA	NA	NA			
1957	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA		
1958	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1959	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1960	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1961	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1962	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1963	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1964	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1965	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1966	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1967	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1968	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1969	-	(4)	218	(222)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1970	22,033	64	833	(769)	-3.49%	-4.50%	-4.50%	-4.50%	-4.50%	-4.50%	-4.50%	-4.50%	-4.50%	-4.50%
1971	14,194	1,905	1,559	346	2.44%	-1.17%	-1.78%	-1.78%	-1.78%	-1.78%	-1.78%	-1.78%	-1.78%	-1.78%
1972	14,884	(35)	1,072	(1,107)	-7.44%	-2.62%	-2.99%	-3.43%	-3.43%	-3.43%	-3.43%	-3.43%	-3.43%	-3.43%
1973	24,279	15,117	7,687	7,430	30.60%	16.15%	12.50%	7.83%	7.53%	7.53%	7.53%	7.53%	7.53%	7.53%
1974	15,204	45,717	3,461	42,256	277.93%	125.84%	89.35%	71.36%	53.16%	52.91%	52.91%	52.91%	52.91%	52.91%
1975	20,556	5,660	10,552	(4,892)	-23.80%	104.49%	74.61%	58.31%	49.41%	38.92%	38.72%	38.72%	38.72%	38.72%
1976	8,993	21,213	6,258	14,955	166.30%	34.06%	116.91%	86.55%	69.88%	60.12%	48.46%	48.27%	48.27%	48.27%
1977	23,480	(21,232)	11,067	(32,299)	-137.56%	-53.41%	-41.93%	29.34%	29.67%	24.53%	21.95%	18.05%	17.89%	17.89%
1978	80,753	22,383	14,926	7,457	9.23%	-23.83%	-8.73%	-11.05%	18.44%	20.15%	17.96%	16.88%	14.88%	14.78%
1979	50,967	6,921	21,584	(14,663)	-28.77%	-5.47%	-25.45%	-14.95%	-15.94%	6.41%	9.03%	8.00%	7.69%	6.80%
1980	35,605	22,108	57,784	(35,676)	-100.20%	-58.15%	-25.63%	-39.40%	-30.14%	-29.55%	-9.71%	-5.94%	-6.02%	-5.60%
1981	101,087	72,317	26,159	46,158	45.66%	7.67%	-2.23%	1.22%	-9.94%	-4.68%	-5.90%	6.92%	8.51%	7.88%
1982	67,171	36,173	33,419	2,754	4.10%	29.07%	6.49%	-0.56%	1.80%	-7.32%	-3.07%	-4.17%	6.45%	7.82%
1983	73,148	85,054	30,023	55,031	75.23%	41.18%	43.06%	24.64%	16.34%	14.94%	6.65%	9.91%	8.41%	17.00%
1984	70,630	17,137	21,494	(4,357)	-6.17%	35.24%	25.33%	31.91%	18.38%	12.35%	11.83%	4.85%	7.69%	6.47%
1985	82,520	106,421	16,770	89,651	108.64%	55.69%	62.01%	48.75%	47.96%	35.70%	28.87%	26.05%	19.48%	21.71%
1986	26,360	104,119	17,643	86,476	328.06%	161.76%	95.69%	89.77%	71.77%	65.50%	52.58%	44.41%	39.58%	32.78%
1987	176,931	305,993	25,515	280,478	158.52%	180.51%	159.76%	126.88%	118.08%	102.67%	93.03%	82.17%	73.91%	67.08%
1988	71,981	84,716	27,728	56,988	79.17%	135.58%	154.01%	143.55%	118.86%	112.50%	99.70%	91.54%	81.87%	74.41%
1989	87,195	50,357	17,237	33,120	37.98%	56.61%	110.26%	126.10%	122.86%	105.19%	101.46%	91.49%	85.37%	77.04%
1990	179,821	132,120	49,192	82,928	46.12%	43.46%	51.04%	87.90%	99.58%	100.77%	89.91%	88.52%	81.73%	77.84%
1991	199,509	102,292	40,741	61,551	30.85%	38.09%	38.07%	43.56%	71.99%	81.09%	83.85%	76.75%	76.63%	71.93%
1992	412,064	3,526	69,671	(66,145)	-16.05%	-0.75%	9.90%	12.69%	17.72%	39.82%	46.40%	50.55%	47.49%	48.96%
1993	212,635	18,927	51,695	(32,768)	-15.41%	-15.83%	-4.53%	4.54%	7.21%	11.66%	31.05%	36.78%	40.87%	38.69%
1994	377,917	2,738	44,330	(41,592)	-11.01%	-12.59%	-14.01%	-6.57%	0.29%	2.52%	6.10%	21.80%	26.43%	30.14%
1995	679,958	(31,276)	71,679	(103,155)	-15.17%	-13.68%	-13.97%	-14.48%	-9.68%	-4.81%	-3.07%	-0.41%	11.32%	14.76%
1996	122,055	74,816	67,252	7,564	6.20%	-11.92%	-11.63%	-12.20%	-13.08%	-8.71%	-4.19%	-2.58%	-0.06%	11.07%
1997	410,820	50,651	60,089	(9,438)	-2.30%	-0.35%	-8.66%	-9.22%	-9.95%	-11.08%	-7.62%	-3.89%	-2.53%	-0.40%
1998	718,480	24,132	91,963	(67,831)	-9.44%	-6.84%	-5.57%	-8.95%	-9.29%	-9.80%	-10.68%	-8.04%	-5.10%	-3.99%
1999	1,047,583	12,955	75,413	(62,458)	-5.96%	-7.38%	-6.42%	-5.75%	-7.90%	-8.25%	-8.68%	-9.44%	-7.52%	-5.31%
2000	722,555	17,415	51,491	(34,076)	-4.72%	-5.45%	-6.60%	-5.99%	-5.50%	-7.28%	-7.62%	-8.01%	-8.71%	-7.10%
2001	574,391	(6)	30,747	(30,753)	-5.35%	-5.00%	-5.43%	-6.37%	-5.89%	-5.48%	-7.02%	-7.34%	-7.70%	-8.35%
2002	799,169	(426)	52,732	(53,158)	-6.65%	-6.11%	-5.63%	-5.74%	-6.43%	-6.03%	-5.69%	-6.96%	-7.24%	-7.55%
2003	691,219	-	123	(123)	-0.02%	-3.57%	-4.07%	-4.24%	-4.71%	-5.46%	-5.19%	-4.92%	-6.13%	-6.43%
2004	400,630	-	13,816	(13,816)	-3.45%	-1.28%	-3.55%	-3.97%	-4.14%	-4.59%	-5.29%	-5.06%	-4.81%	-5.96%
2005	874,539	83,379	74,903	8,476	0.97%	-0.42%	-0.28%	-2.12%	-2.68%	-3.04%	-3.64%	-4.35%	-4.22%	-4.02%
2006	658,489	-	98,788	(98,788)	-15.00%	-5.89%	-5.39%	-3.97%	-4.60%	-4.71%	-4.71%	-4.94%	-5.43%	-5.25%
2007	1,668,721	-	152,404	(152,404)	-9.13%	-10.79%	-7.58%	-7.12%	-5.98%	-6.08%	-6.01%	-5.86%	-5.88%	-6.19%
2008	1,772,781	-	306,435	(306,435)	-17.29%	-13.33%	-13.60%	-11.04%	-10.47%	-9.28%	-8.98%	-8.70%	-8.34%	-8.07%
2009	1,073,526	-	243,617	(243,617)	-22.69%	-19.33%	-15.56%	-15.49%	-13.11%	-12.51%	-11.30%	-10.83%	-10.46%	-10.01%
2010	1,606,639	-	239,095	(239,095)	-14.88%	-18.01%	-17.72%	-15.38%	-15.34%	-13.48%	-12.98%	-11.96%	-11.51%	-11.16%
2011	624,914	-	338,991	(338,991)	-54.25%	-25.91%	-24.86%	-22.22%	-18.98%	-18.63%	-16.56%	-15.95%	-14.78%	-14.14%
2012	575,885	28,892	128,955	(100,063)	-17.38%	-36.56%	-24.16%	-23.75%	-21.72%	-18.85%	-18.54%	-16.61%	-16.04%	-14.93%
2013	498,094	12,923	207,708	(194,785)	-39.11%	-27.45%	-37.31%	-26.41%	-25.50%	-23.13%	-20.14%	-19.74%	-17.81%	-17.22%
2014	709,130	526	169,519	(168,993)	-23.83%	-30.13%	-26.01%	-33.34%	-25.95%	-25.27%	-23.20%	-20.45%	-20.06%	-18.23%
2015	939,214	7,063	182,689	(175,626)	-18.70%	-20.91%	-25.13%	-23.49%	-29.23%	-24.58%	-24.24%	-22.66%	-20.28%	-19.93%
2016	596,095		3,793,004	(3,793,004)	-636.31%	-258.49%	-184.35%	-157.97%	-133.57%	-121.00%	-90.28%	-79.33%	-66.23%	-56.76%

NA - Not Applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Gas Plant
Distribution Measure & Regulating Station Equipment - General
Account 378
1950-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1950	-	70	58	12	NA									
1951	-	211	43	168	NA	NA								
1952	-	1,464	2,474	(1,010)	NA	NA	NA							
1953	-	(235)	1,000	(1,235)	NA	NA	NA	NA						
1954	-	242	135	107	NA	NA	NA	NA	NA					
1955	-	690	97	593	NA	NA	NA	NA	NA	NA				
1956	-	3,965	601	3,364	NA	NA	NA	NA	NA	NA	NA			
1957	-	5,073	2,388	2,685	NA	NA	NA	NA	NA	NA	NA	NA		
1958	-	1,573	510	1,063	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1959	-	2,483	2,045	438	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1960	-	5,753	2,369	3,384	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1961	-	5,412	1,827	3,585	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1962	-	828	2,311	(1,483)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1963	-	4,398	2,126	2,272	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1964	-	746	528	218	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1965	-	831	2,442	(1,611)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1966	-	2,805	1,257	1,548	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1967	-	962	494	468	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1968	-	2,020	5,436	(3,416)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1969	-	3,286	1,476	1,810	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1970	-	16,395	9,504	6,891	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1971	-	7,019	2,502	4,517	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1972	-	4,666	3,624	1,042	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1973	-	3,442	2,002	1,440	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1974	-	2,989	1,725	1,264	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1975	-	(198)	8,082	(8,270)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976	-	4,636	16,426	(11,790)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977	-	2,572	89	2,483	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1978	-	3,146	19,089	(15,943)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979	-	9,160	7,835	1,325	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1980	-	1,196	10,892	(9,696)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1981	-	592	11,794	(11,202)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1982	-	12,783	9,841	2,942	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1983	-	44,873	11,598	33,275	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1984	-	14,488	8,070	6,418	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1985	-	107	327	(220)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1986	-	(18,487)	-	(18,487)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1987	-	(9,061)	-	(9,061)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1988	-	39	14,752	(14,713)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1989	-	730	5,490	(4,760)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1990	-	(115)	11,898	(12,013)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1991	-	(33)	10,486	(10,519)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1992	-	-	18,741	(18,741)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1993	-	(1,260)	16,928	(18,188)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1994	-	(626)	23,307	(23,933)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1995	-	-	24,383	(24,383)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1996	-	-	32,297	(32,297)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1997	-	(33)	60,207	(60,240)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1998	-	(18)	64,663	(64,681)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1999	-	(333)	43,594	(43,927)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2000	-	152	45,895	(45,743)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2001	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2002	8,815	-	407	(407)	-4.62%	-4.62%	-523.54%	-1021.86%	-1755.61%	-2438.98%	-2805.37%	-3081.97%	-3353.47%	-3559.80%
2003	9,566	-	460	(460)	-4.80%	-4.72%	-4.72%	-253.58%	-492.57%	-844.47%	-1172.20%	-1347.92%	-1480.57%	-1610.78%
2004	474	-	48,720	(48,720)	-10267.97%	-489.84%	-262.99%	-262.99%	-505.60%	-738.57%	-1081.61%	-1401.10%	-1572.39%	-1701.71%
2005	20,557	-	7,962	(7,962)	-38.73%	-269.51%	-186.76%	-146.02%	-146.02%	-262.08%	-373.54%	-537.65%	-690.50%	-772.45%
2006	49,209	-	23,213	(23,213)	-47.17%	-44.69%	-113.75%	-100.69%	-91.13%	-91.13%	-142.75%	-192.32%	-265.30%	-333.28%
2007	85,150	-	43,100	(43,100)	-50.62%	-49.36%	-47.95%	-79.15%	-74.84%	-71.28%	-71.28%	-97.60%	-122.88%	-160.10%
2008	1,306	-	-	0	0.00%	-49.85%	-48.88%	-47.55%	-78.49%	-74.25%	-70.75%	-70.75%	-96.88%	-121.97%
2009	16,993	-	12,543	(12,543)	-73.81%	-68.55%	-53.79%	-51.66%	-50.12%	-78.04%	-74.21%	-71.02%	-71.02%	-94.84%
2010	2,203	-	-	0	0.00%	-65.34%	-61.18%	-52.67%	-50.92%	-49.49%	-77.06%	-73.33%	-70.21%	-70.21%
2011	2,119	-	15,709	(15,709)	-741.39%	-363.47%	-132.55%	-124.89%	-66.21%	-60.24%	-57.75%	-84.97%	-80.88%	-77.46%
2012	93,682	128,388	138,538	(10,150)	-10.83%	-26.99%	-26.39%	-33.39%	-33.02%	-40.46%	-41.78%	-41.55%	-59.41%	-57.55%
2013	27,399		4,028	(4,028)	-14.70%	-11.71%	-24.26%	-23.83%	-29.80%	-29.53%	-37.37%	-39.11%	-39.08%	-55.31%
2014	1,228	113,620	116,144	(2,525)	-205.66%	-22.89%	-13.66%	-26.05%	-25.60%	-31.30%	-31.02%	-38.27%	-39.84%	-39.76%
2015	293,236		74,629	(74,629)	-25.45%	-26.20%	-25.22%	-21.98%	-25.63%	-25.49%	-27.37%	-27.29%	-31.09%	-32.47%
2016	60,115		3,919	(3,919)	-6.52%	-22.23%	-22.86%	-22.28%	-20.03%	-23.22%	-23.12%	-24.85%	-24.79%	-28.56%

NA - Not Applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Gas Plant
Distribution Measure & Regulating Station Equipment - City Gate
Account 379
1950-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1950	793	-	-	0	0.00%									
1951	341	-	-	0	0.00%	0.00%								
1952	21,476	-	-	0	0.00%	0.00%	0.00%							
1953	5,715	-	-	0	0.00%	0.00%	0.00%	0.00%						
1954	3,166	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%					
1955	860	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%				
1956	9,293	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
1957	40,475	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
1958	751	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
1959	19,837	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1960	46,004	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1961	15,591	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1962	22,040	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1963	61,100	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1964	8,807	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1965	16,512	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1966	15,499	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1967	9,737	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1968	32,546	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1969	17,565	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1970	18,101	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1971	10,939	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1972	19,911	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1973	23,660	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1974	6,786	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1975	21,180	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1976	34,435	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1977	3,530	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1978	98,545	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1979	84,055	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1980	28,236	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1981	107,307	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1982	111,108	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1983	58,306	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1984	110,686	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1985	5,649	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1986	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1987	-	-	-	0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1988	160,011	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1989	76,757	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1990	53,406	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1991	86,250	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1992	171,373	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1993	245,739	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1994	287,322	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1995	131,413	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1996	266,836	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1997	136,515	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1998	194,779	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1999	260,094	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2000	52,736	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2001	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2002	-	-	-	0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2003	-	-	-	0	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2004	-	-	-	0	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2005	12,025	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2006	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2007	3,000	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2008	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2009	-	-	310	(310)	NA	NA	-10.34%	-10.34%	-2.06%	-2.06%	-2.06%	-2.06%	-2.06%	-0.46%
2010	-	-	-	0	NA	NA	NA	-10.34%	-10.34%	-2.06%	-2.06%	-2.06%	-2.06%	-2.06%
2011	-	-	-	0	NA	NA	NA	NA	-10.34%	-10.34%	-2.06%	-2.06%	-2.06%	-2.06%
2012	-	-	-	0	NA	NA	NA	NA	NA	-10.34%	-10.34%	-2.06%	-2.06%	-2.06%
2013	-		-	0	NA	NA	NA	NA	NA	NA	-10.34%	-10.34%	-2.06%	-2.06%
2014	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	-10.34%	-10.34%	-2.06%
2015	6,424		73,058	(73,058)	-1137.27%	-1137.27%	-1137.27%	-1137.27%	-1137.27%	-1137.27%	-1142.09%	-1142.09%	-778.55%	-778.55%
2016	94,420		920	(920)	-0.97%	-73.36%	-73.36%	-73.36%	-73.36%	-73.36%	-73.36%	-73.67%	-73.67%	-71.54%

NA - Not Applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Gas Plant
Distribution Services - Metallic
Account 380
1950-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1950	6,197	3	5,236	(5,233)	-84.44%									
1951	5,205	127	4,856	(4,729)	-90.85%	-87.37%								
1952	17,277	36	9,454	(9,418)	-54.51%	-62.93%	-67.58%							
1953	15,269	38	8,072	(8,034)	-52.62%	-53.62%	-58.76%	-62.38%						
1954	21,309	140	13,024	(12,884)	-60.46%	-57.19%	-56.33%	-59.37%	-61.75%					
1955	16,255	41	9,654	(9,613)	-59.14%	-59.89%	-57.79%	-56.98%	-59.32%	-61.23%				
1956	45,687	363	10,010	(9,647)	-21.12%	-31.09%	-38.61%	-40.78%	-42.83%	-44.90%	-46.82%			
1957	31,602	82	12,500	(12,418)	-39.29%	-28.55%	-33.86%	-38.80%	-40.42%	-42.07%	-43.74%	-45.32%		
1958	29,525	(88)	13,244	(13,332)	-45.15%	-42.13%	-33.14%	-36.57%	-40.10%	-41.30%	-42.59%	-43.97%	-45.30%	
1959	35,626	2,497	22,108	(19,611)	-55.05%	-50.56%	-46.88%	-38.62%	-40.72%	-43.06%	-43.80%	-44.68%	-45.78%	-46.85%
1960	49,007	3,004	43,930	(40,926)	-83.51%	-71.53%	-64.71%	-59.20%	-50.11%	-50.82%	-51.71%	-51.77%	-51.95%	-52.71%
1961	24,930	518	37,704	(37,186)	-149.16%	-105.65%	-89.19%	-79.85%	-72.34%	-61.52%	-61.36%	-61.28%	-60.79%	-60.41%
1962	40,373	3,098	49,880	(46,782)	-115.87%	-128.58%	-109.26%	-96.38%	-87.95%	-80.67%	-70.07%	-69.42%	-68.77%	-67.97%
1963	37,209	860	48,458	(47,598)	-127.92%	-121.65%	-128.34%	-113.84%	-102.65%	-94.81%	-87.75%	-77.39%	-76.44%	-75.41%
1964	55,921	53	95,052	(94,999)	-169.88%	-153.12%	-141.85%	-143.00%	-128.95%	-118.12%	-110.21%	-102.85%	-92.17%	-90.71%
1965	57,529	80	68,093	(68,013)	-118.22%	-143.69%	-139.79%	-134.74%	-136.40%	-126.62%	-118.14%	-111.61%	-105.29%	-95.85%
1966	49,230	192	63,443	(63,251)	-128.48%	-122.95%	-139.08%	-137.01%	-133.46%	-134.93%	-126.91%	-119.59%	-113.80%	-108.07%
1967	53,495	6	68,249	(68,243)	-127.57%	-128.01%	-124.49%	-136.23%	-135.01%	-132.38%	-133.70%	-127.01%	-120.65%	-115.50%
1968	60,123	266	72,934	(72,668)	-120.87%	-124.02%	-125.37%	-123.50%	-132.89%	-132.30%	-130.43%	-131.66%	-126.14%	-120.68%
1969	56,841	4	88,300	(88,296)	-155.34%	-137.62%	-134.46%	-133.12%	-130.03%	-136.72%	-135.84%	-133.87%	-134.75%	-129.57%
1970	48,719	7,168	79,589	(72,421)	-148.65%	-152.25%	-140.86%	-137.62%	-135.94%	-132.81%	-138.24%	-137.33%	-135.44%	-136.15%
1971	65,848	9,095	118,641	(109,546)	-166.36%	-158.83%	-157.67%	-148.11%	-144.26%	-141.93%	-138.45%	-142.38%	-141.27%	-139.32%
1972	103,125	10,290	107,579	(97,289)	-94.34%	-122.41%	-128.28%	-133.88%	-131.54%	-131.00%	-130.71%	-129.26%	-133.39%	-133.04%
1973	71,461	13,397	166,605	(153,208)	-214.39%	-143.48%	-149.75%	-149.56%	-150.51%	-146.12%	-143.96%	-142.47%	-140.00%	-142.69%
1974	108,303	94,646	174,606	(79,960)	-73.83%	-129.71%	-116.82%	-126.17%	-128.93%	-132.23%	-130.90%	-130.59%	-130.42%	-129.38%
1975	93,629	5,341	171,786	(166,445)	-177.77%	-122.06%	-146.17%	-131.97%	-137.09%	-138.24%	-140.01%	-138.12%	-137.27%	-136.66%
1976	135,413	8,655	210,172	(201,517)	-148.82%	-160.65%	-132.78%	-147.05%	-136.43%	-139.84%	-140.52%	-141.76%	-140.07%	-139.23%
1977	117,142	821	126,658	(125,837)	-107.42%	-129.62%	-142.64%	-126.24%	-138.22%	-131.03%	-134.38%	-135.31%	-136.73%	-135.62%
1978	150,341	9,092	219,945	(210,853)	-140.25%	-125.87%	-133.58%	-141.92%	-129.72%	-138.67%	-132.81%	-135.42%	-136.14%	-137.29%
1979	152,141	8,712	226,018	(217,306)	-142.83%	-141.55%	-132.02%	-136.12%	-142.13%	-132.36%	-139.44%	-134.44%	-136.55%	-137.11%
1980	277,354	9,085	311,143	(302,058)	-108.91%	-120.92%	-125.94%	-122.82%	-127.05%	-132.18%	-126.07%	-131.78%	-128.58%	-130.54%
1981	384,302	9,613	411,144	(401,531)	-104.48%	-106.34%	-113.16%	-117.38%	-116.31%	-119.92%	-124.06%	-120.22%	-124.74%	-122.77%
1982	314,996	(78)	308,084	(308,162)	-97.83%	-101.49%	-103.59%	-108.88%	-112.57%	-112.14%	-115.38%	-118.97%	-116.15%	-120.04%
1983	170,800	228	128,131	(127,903)	-74.88%	-89.76%	-96.26%	-99.32%	-104.41%	-108.13%	-108.08%	-111.32%	-114.78%	-112.45%
1984	154,357	1,135	136,495	(135,360)	-87.69%	-80.96%	-89.26%	-94.97%	-97.94%	-102.64%	-106.16%	-106.25%	-109.35%	-112.64%
1985	321,721	833	120,889	(120,056)	-37.32%	-53.65%	-59.26%	-71.89%	-81.19%	-85.93%	-90.80%	-94.66%	-95.39%	-98.72%
1986	213,032	5,331	164,712	(159,381)	-74.82%	-52.26%	-60.19%	-63.11%	-72.42%	-80.32%	-84.64%	-89.09%	-92.69%	-93.45%
1987	203,059	12	164,404	(164,392)	-80.96%	-77.81%	-60.15%	-64.92%	-66.52%	-73.68%	-80.40%	-84.27%	-88.34%	-91.67%
1988	263,412	3,142	136,838	(133,696)	-50.76%	-63.90%	-67.32%	-57.68%	-61.69%	-63.39%	-70.00%	-76.54%	-80.44%	-84.31%
1989	457,349	2,146	233,570	(231,424)	-50.60%	-50.66%	-57.32%	-60.60%	-55.46%	-58.55%	-60.11%	-65.77%	-71.76%	-75.50%
1990	788,528	736	261,198	(260,462)	-33.03%	-39.48%	-41.45%	-46.13%	-49.31%	-47.59%	-50.17%	-51.81%	-56.83%	-62.43%
1991	769,364	3,176	356,511	(353,335)	-45.93%	-39.40%	-41.94%	-42.96%	-46.07%	-48.34%	-47.17%	-49.14%	-50.45%	-54.54%
1992	981,414	133	358,621	(358,488)	-36.53%	-40.66%	-38.29%	-40.17%	-41.02%	-43.37%	-45.19%	-44.55%	-46.16%	-47.29%
1993	384,230	5,641	221,147	(215,506)	-56.09%	-42.03%	-43.43%	-40.63%	-41.98%	-42.61%	-44.64%	-46.22%	-45.57%	-47.00%
1994	764,226	3,172	219,899	(216,727)	-28.36%	-37.64%	-37.13%	-39.46%	-38.09%	-39.47%	-40.14%	-41.94%	-43.39%	-43.01%
1995	993,608	2,207	261,141	(258,934)	-26.06%	-27.06%	-32.27%	-33.61%	-36.04%	-35.53%	-36.87%	-37.55%	-39.12%	-40.43%
1996	282,088	1,968	183,025	(181,057)	-64.18%	-34.49%	-32.19%	-35.98%	-36.14%	-37.94%	-37.16%	-38.30%	-38.87%	-40.32%
1997	78,224	838	155,036	(154,198)	-197.12%	-93.05%	-43.89%	-38.28%	-41.02%	-39.75%	-40.87%	-39.64%	-40.55%	-41.02%
1998	1,097,883	2,977	174,357	(171,380)	-15.61%	-27.68%	-34.74%	-31.22%	-30.54%	-33.27%	-33.97%	-35.69%	-35.35%	-36.40%
1999	862,107	5,293	106,935	(101,642)	-11.79%	-13.93%	-20.96%	-26.22%	-26.17%	-26.58%	-29.12%	-30.46%	-32.37%	-32.45%
2000	758,051	10,864	127,418	(116,554)	-15.38%	-13.47%	-14.33%	-19.45%	-23.55%	-24.16%	-24.82%	-27.12%	-28.61%	-30.52%
2001	419,823	(669)	69,516	(70,185)	-16.72%	-15.85%	-14.14%	-14.65%	-19.09%	-22.73%	-23.46%	-24.18%	-26.35%	-27.86%
2002	119,335	(433)	73,631	(74,064)	-62.06%	-26.75%	-20.10%	-16.79%	-16.39%	-20.63%	-24.02%	-24.46%	-25.02%	-27.09%
2003	194,028	-	65,576	(65,576)	-33.80%	-44.56%	-28.62%	-21.89%	-18.19%	-17.37%	-21.35%	-24.52%	-24.84%	-25.32%
2004	-	-	103	(103)	NA	-33.85%	-44.59%	-28.63%	-21.89%	-18.19%	-17.37%	-21.35%	-24.52%	-24.84%
2005	537	-	6,722	(6,722)	-1251.68%	-1270.82%	-37.21%	-46.66%	-29.53%	-22.34%	-18.47%	-17.56%	-21.54%	-24.70%
2006	7,297	-	6,902	(6,902)	-94.60%	-173.92%	-175.23%	-39.29%	-47.75%	-30.17%	-22.69%	-18.71%	-17.73%	-21.69%
2007	747,051	301	320,072	(319,771)	-42.80%	-43.31%	-44.17%	-44.18%	-42.06%	-44.29%	-36.51%	-29.38%	-24.50%	-22.18%
2008	325,115	-	260,296	(260,296)	-80.06%	-54.10%	-54.38%	-54.97%	-54.98%	-51.75%	-52.64%	-44.32%	-35.79%	-29.76%
2009	152,343	-	205,883	(205,883)	-135.14%	-97.64%	-64.18%	-64.37%	-64.88%	-64.89%	-60.66%	-60.77%	-51.36%	-41.34%
2010	542,203	-	277,790	(277,790)	-51.23%	-69.64%	-72.96%	-60.21%	-60.35%	-60.71%	-60.72%	-58.06%	-58.29%	-51.33%
2011	502,649	-	21,671	(21,671)	-4.31%	-28.66%	-42.21%	-50.29%	-47.83%	-47.98%	-48.26%	-48.27%	-47.13%	-47.82%
2012	456,043	-	151,664	(151,664)	-33.26%	-18.08%	-30.06%	-39.74%	-46.37%	-45.39%	-45.52%	-45.76%	-45.76%	-44.97%
2013	268,225		253,371	(253,371)	-94.46%	-55.92%	-34.78%	-39.82%	-47.38%	-52.11%	-49.79%	-49.90%	-50.11%	-50.11%
2014	106,689	-	65,872	(65,872)	-61.74%	-85.15%	-56.67%	-36.94%	-41.07%	-48.14%	-52.55%	-50.20%	-50.30%	-50.51%
2015	370,867		121,849	(121,849)	-32.86%	-39.31%	-59.14%	-49.32%	-36.05%	-39.71%	-45.77%	-49.87%	-48.35%	-48.44%
2016	362,402		38,040	(38,040)	-10.50%	-21.80%	-26.88%	-43.24%	-40.33%	-31.57%	-35.65%	-41.14%	-45.24%	-44.77%

NA - Not Applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Gas Plant
Distribution Services - Plastic
Account 380
1970-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1970	8,822	106	2,488	(2,382)	-27.00%									
1971	8,573	(115)	2,563	(2,678)	-31.24%	-29.09%								
1972	17,781	1,590	5,244	(3,654)	-20.55%	-24.03%	-24.77%							
1973	40,040	454	14,296	(13,842)	-34.57%	-30.26%	-30.39%	-29.99%						
1974	51,456	17,467	21,140	(3,673)	-7.14%	-19.14%	-19.37%	-20.24%	-20.71%					
1975	25,235	1,762	17,817	(16,055)	-63.62%	-25.72%	-28.76%	-27.67%	-27.89%	-27.84%				
1976	42,762	3,480	17,478	(13,998)	-32.73%	-44.20%	-28.23%	-29.82%	-28.89%	-29.00%	-28.91%			
1977	132,564	1,733	22,929	(21,196)	-15.99%	-20.07%	-25.55%	-21.79%	-23.54%	-23.37%	-23.58%	-23.68%		
1978	55,089	13,057	33,166	(20,109)	-36.50%	-22.01%	-24.00%	-27.91%	-24.43%	-25.60%	-25.35%	-25.49%	-25.52%	
1979	197,247	9,776	45,751	(35,975)	-18.24%	-22.23%	-20.08%	-21.34%	-23.70%	-22.01%	-22.93%	-22.86%	-22.98%	-23.05%
1980	132,930	13,543	69,596	(56,053)	-42.17%	-27.87%	-29.11%	-25.75%	-26.28%	-27.89%	-26.21%	-26.71%	-26.55%	-26.61%
1981	210,468	39,260	93,176	(53,916)	-25.62%	-32.02%	-26.99%	-27.87%	-25.71%	-26.10%	-27.29%	-26.07%	-26.45%	-26.33%
1982	254,407	8,266	63,104	(54,838)	-21.56%	-23.39%	-27.57%	-25.25%	-25.98%	-24.63%	-24.97%	-25.90%	-25.02%	-25.36%
1983	143,208	1,693	51,619	(49,926)	-34.86%	-26.35%	-26.10%	-28.98%	-26.72%	-27.26%	-25.94%	-26.18%	-26.98%	-26.16%
1984	133,589	2,604	60,332	(57,728)	-43.21%	-38.89%	-30.59%	-29.18%	-31.15%	-28.78%	-29.15%	-27.77%	-27.93%	-28.61%
1985	142,963	11,550	39,776	(28,226)	-19.74%	-31.08%	-32.37%	-28.29%	-27.65%	-29.55%	-27.71%	-28.09%	-26.95%	-27.12%
1986	95,770	22,810	62,002	(39,192)	-40.92%	-28.24%	-33.61%	-33.96%	-29.86%	-28.95%	-30.53%	-28.68%	-28.99%	-27.84%
1987	166,822	64,299	75,014	(10,715)	-6.42%	-19.01%	-19.27%	-25.20%	-27.23%	-25.69%	-25.67%	-27.39%	-26.17%	-26.54%
1988	137,917	46,472	72,044	(25,572)	-18.54%	-11.91%	-18.85%	-19.08%	-23.84%	-25.77%	-24.77%	-24.91%	-26.53%	-25.51%
1989	140,084	12,402	77,618	(65,216)	-46.55%	-32.66%	-22.82%	-26.03%	-24.71%	-27.74%	-28.80%	-27.28%	-27.04%	-28.33%
1990	349,291	4,096	110,758	(106,662)	-30.54%	-35.12%	-31.48%	-26.21%	-27.80%	-26.68%	-28.58%	-29.26%	-28.01%	-27.73%
1991	254,831	20,544	182,930	(162,386)	-63.72%	-44.54%	-44.92%	-40.79%	-35.33%	-35.79%	-34.01%	-34.88%	-34.88%	-33.01%
1992	451,363	6,116	208,587	(202,471)	-44.86%	-51.67%	-44.67%	-44.89%	-42.17%	-38.19%	-38.36%	-36.83%	-37.28%	-37.11%
1993	610,266	31,910	276,052	(244,142)	-40.01%	-42.07%	-46.26%	-42.96%	-43.24%	-41.49%	-38.72%	-38.81%	-37.65%	-37.95%
1994	705,761	21,928	314,158	(292,230)	-41.41%	-40.76%	-41.80%	-44.57%	-42.50%	-42.73%	-41.47%	-39.39%	-39.44%	-38.52%
1995	739,770	51,941	377,392	(325,451)	-43.99%	-42.73%	-41.92%	-42.45%	-44.41%	-42.86%	-43.01%	-42.02%	-40.35%	-40.36%
1996	255,077	78,334	376,198	(297,864)	-116.77%	-62.65%	-53.84%	-50.18%	-49.31%	-50.53%	-48.46%	-48.38%	-47.25%	-45.46%
1997	123,681	93,960	304,165	(210,205)	-169.96%	-134.14%	-74.52%	-61.71%	-56.27%	-54.48%	-55.23%	-52.76%	-52.52%	-51.28%
1998	1,213,825	72,118	327,413	(255,295)	-21.03%	-34.80%	-47.93%	-46.68%	-45.46%	-44.55%	-44.58%	-45.70%	-44.57%	-44.63%
1999	1,955,088	110,770	285,652	(174,882)	-8.94%	-13.57%	-19.45%	-26.45%	-29.47%	-31.16%	-32.12%	-33.07%	-34.31%	-34.11%
2000	870,978	96,624	271,789	(175,165)	-20.11%	-12.39%	-14.98%	-19.59%	-25.20%	-27.89%	-29.52%	-30.51%	-31.44%	-32.59%
2001	1,038,157	443	165,476	(165,033)	-15.90%	-17.82%	-13.33%	-15.17%	-18.85%	-23.43%	-25.88%	-27.47%	-28.49%	-29.42%
2002	210,674	(1,780)	158,565	(160,345)	-76.11%	-26.05%	-23.61%	-16.58%	-17.60%	-21.08%	-25.39%	-27.54%	-28.91%	-29.79%
2003	778,902	-	127,486	(127,486)	-16.37%	-29.09%	-22.33%	-21.67%	-16.54%	-17.44%	-20.49%	-24.30%	-26.32%	-27.67%
2004	-	-	2,855	(2,855)	NA	-16.73%	-29.37%	-22.47%	-21.76%	-16.60%	-17.49%	-20.53%	-24.34%	-26.36%
2005	88,767	-	18,592	(18,592)	-20.95%	-24.16%	-17.16%	-28.68%	-22.41%	-21.74%	-16.68%	-17.54%	-20.54%	-24.30%
2006	-	-	1,791	(1,791)	NA	-22.96%	-26.18%	-17.37%	-28.85%	-22.49%	-21.80%	-16.71%	-17.57%	-20.57%
2007	1,663,428	126,255	776,287	(650,032)	-39.08%	-39.19%	-38.26%	-38.42%	-31.64%	-35.05%	-29.79%	-27.98%	-22.35%	-22.14%
2008	757,228	-	371,772	(371,772)	-49.10%	-42.21%	-42.29%	-41.53%	-41.64%	-35.66%	-38.09%	-33.01%	-30.94%	-25.10%
2009	1,756,656	-	809,071	(809,071)	-46.06%	-46.97%	-43.83%	-43.87%	-43.39%	-43.46%	-39.28%	-40.76%	-36.65%	-34.64%
2010	7,637,094	2,209	812,372	(810,163)	-10.61%	-17.24%	-19.61%	-22.35%	-22.37%	-22.36%	-22.38%	-22.01%	-22.90%	-22.38%
2011	1,426,795	-	1,368,203	(1,368,203)	-95.89%	-24.03%	-27.61%	-29.01%	-30.28%	-30.29%	-30.23%	-30.25%	-29.48%	-30.17%
2012	7,931,702	-	521,755	(521,755)	-6.58%	-20.20%	-15.89%	-18.71%	-19.89%	-21.40%	-21.41%	-21.41%	-21.42%	-21.24%
2013	658,086		527,795	(527,795)	-80.20%	-12.22%	-24.14%	-18.28%	-20.80%	-21.86%	-23.17%	-23.18%	-23.17%	-23.18%
2014	283,813	-	695,038	(695,038)	-244.89%	-129.83%	-19.66%	-30.22%	-21.87%	-24.03%	-24.96%	-26.02%	-26.03%	-26.01%
2015	2,072,789		641,933	(641,933)	-30.97%	-56.73%	-61.86%	-21.80%	-30.35%	-22.81%	-24.69%	-25.51%	-26.44%	-26.45%
2016	13,090,836		405,413	(405,413)	-3.10%	-6.91%	-11.28%	-14.10%	-11.62%	-16.34%	-15.02%	-16.58%	-17.27%	-18.24%

NA - Not Applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Gas Plant
Distribution Meters
Account 381
1950-2016

Transaction Year	Transactional History Retirements		Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1950	26,646		2,144	940	1,204	4.52%									
1951	37,990		4,059	2,821	1,238	3.26%	3.78%								
1952	63,040		7,423	2,639	4,784	7.59%	5.96%	5.66%							
1953	60,652		7,433	4,097	3,336	5.50%	6.56%	5.79%	5.61%						
1954	85,796		10,084	4,330	5,754	6.71%	6.21%	6.62%	6.11%	5.95%					
1955	74,520		8,700	3,891	4,809	6.45%	6.59%	6.29%	6.58%	6.19%	6.06%				
1956	62,426		3,707	3,637	70	0.11%	3.56%	4.77%	4.93%	5.41%	5.20%	5.16%			
1957	36,346		3,616	3,140	476	1.31%	0.55%	3.09%	4.29%	4.52%	5.02%	4.86%	4.84%		
1958	37,469		3,238	2,461	777	2.07%	1.70%	0.97%	2.91%	4.01%	4.26%	4.76%	4.64%	4.63%	
1959	39,312		3,672	3,020	652	1.66%	1.86%	1.68%	1.13%	2.71%	3.73%	4.00%	4.50%	4.40%	4.41%
1960	42,518		12,226	1,941	10,285	24.19%	13.37%	9.82%	7.83%	5.62%	5.83%	6.03%	5.96%	6.16%	5.96%
1961	51,352		5,335	2,843	2,492	4.85%	13.61%	10.08%	8.32%	7.09%	5.48%	5.69%	5.89%	5.84%	6.04%
1962	81,735		9,611	3,146	6,465	7.91%	6.73%	10.96%	9.26%	8.19%	7.32%	6.04%	6.11%	6.21%	6.14%
1963	100,878		8,395	2,560	5,835	5.78%	6.74%	6.32%	9.07%	8.15%	7.50%	6.93%	5.98%	6.05%	6.14%
1964	66,968		10,296	3,100	7,196	10.75%	7.76%	7.81%	7.31%	9.40%	8.60%	8.02%	7.49%	6.60%	6.58%
1965	54,775		10,575	3,501	7,074	12.91%	11.72%	9.03%	8.73%	8.17%	9.88%	9.14%	8.58%	8.07%	7.20%
1966	60,906		6,822	3,066	3,756	6.17%	9.36%	9.87%	8.42%	8.30%	7.88%	9.39%	8.78%	8.31%	7.86%
1967	47,219		9,175	2,954	6,221	13.17%	9.23%	10.47%	10.55%	9.10%	8.86%	8.42%	9.74%	9.16%	8.70%
1968	38,275		3,315	3,244	71	0.19%	7.36%	6.86%	8.51%	9.07%	8.17%	8.12%	7.79%	9.07%	8.57%
1969	48,642		7,257	3,241	4,016	8.26%	4.70%	7.68%	7.21%	8.46%	8.94%	8.18%	8.14%	7.83%	9.00%
1970	23,708		3,401	22,229	(18,828)	-79.42%	-20.47%	-13.33%	-5.40%	-2.18%	0.84%	2.79%	3.48%	4.17%	4.23%
1971	68,330		16,142	70	16,072	23.52%	-2.99%	0.90%	0.74%	3.34%	3.94%	5.38%	6.26%	6.16%	6.40%
1972	105,572		64,409	939	63,470	60.12%	45.74%	30.72%	26.29%	22.77%	21.41%	19.04%	18.29%	17.31%	15.42%
1973	113,124		9,753	534	9,219	8.15%	33.24%	30.92%	22.51%	20.58%	18.61%	18.04%	16.61%	16.25%	15.66%
1974	88,323		19,378	989	18,389	20.82%	13.70%	29.67%	28.55%	22.13%	20.63%	19.02%	18.50%	17.23%	16.87%
1975	114,262		8,783	747	8,036	7.03%	13.04%	11.29%	23.53%	23.53%	18.77%	17.86%	16.73%	16.47%	15.59%
1976	114,583		10,423	1,062	9,361	8.17%	7.60%	11.28%	10.46%	20.24%	20.61%	16.84%	16.22%	15.36%	15.23%
1977	169,671		666	1,055	(389)	-0.23%	3.16%	4.27%	7.27%	7.44%	15.32%	16.04%	13.21%	12.92%	12.37%
1978	177,839		17,998	181	17,817	10.02%	5.02%	5.80%	6.04%	8.01%	8.03%	14.25%	14.92%	12.63%	12.42%
1979	174,838		41,213	4,965	36,248	20.73%	15.33%	10.28%	9.90%	9.46%	10.66%	10.36%	15.32%	15.82%	13.86%
1980	266,193		60,676		60,676	22.79%	21.98%	18.54%	14.50%	13.70%	12.95%	13.58%	13.07%	16.82%	17.15%
1981	316,320		41,757		41,757	13.20%	17.58%	18.31%	16.73%	14.13%	13.57%	13.01%	13.49%	13.10%	16.13%
1982	345,536		40,902	693	40,209	11.64%	12.38%	15.37%	16.22%	15.36%	13.54%	13.14%	12.73%	13.13%	12.83%
1983	264,175		4,128	14,608	(10,480)	-3.97%	4.88%	7.72%	11.09%	12.32%	12.05%	10.84%	10.67%	10.46%	10.91%
1984	338,570		1,831	3,181	(1,350)	-0.40%	-1.96%	2.99%	5.55%	8.55%	9.79%	9.82%	8.99%	8.94%	8.85%
1985	272,779		49	2,332	(2,283)	-0.84%	-0.59%	-1.61%	2.14%	4.41%	7.13%	8.33%	8.47%	7.83%	7.85%
1986	286,699		1,386	740	646	0.23%	-0.29%	-0.33%	-1.16%	1.77%	3.76%	6.18%	7.30%	7.50%	7.00%
1987	358,589		6,879	220	6,659	1.86%	1.13%	0.55%	0.29%	-0.45%	1.79%	3.44%	5.55%	6.56%	6.78%
1988	383,673			461	(461)	-0.12%	0.84%	0.67%	0.35%	0.20%	-0.38%	1.46%	2.91%	4.78%	5.71%
1989	450,133		37	384	(347)	-0.08%	-0.10%	0.49%	0.44%	0.24%	0.14%	-0.32%	1.21%	2.46%	4.11%
1990	363,083		1,210	6,588	(5,378)	-1.48%	-0.70%	-0.52%	0.03%	0.06%	-0.06%	-0.10%	-0.48%	0.89%	2.04%
1991	440,704		2	1,950	(1,948)	-0.44%	-0.91%	-0.61%	-0.50%	-0.07%	-0.04%	-0.12%	-0.15%	-0.47%	0.72%
1992	588,449		259	1,448	(1,189)	-0.20%	-0.30%	-0.61%	-0.48%	-0.42%	-0.10%	-0.07%	-0.14%	-0.16%	-0.43%
1993	383,383		2,680	15,953	(13,273)	-3.46%	-1.49%	-1.16%	-1.23%	-0.99%	-0.87%	-0.54%	-0.47%	-0.50%	-0.49%
1994	719,429		600	411	189	0.03%	-1.19%	-0.84%	-0.76%	-0.87%	-0.75%	-0.67%	-0.43%	-0.38%	-0.41%
1995	566,826		101	(2,196)	2,297	0.41%	0.19%	-0.65%	-0.53%	-0.52%	-0.63%	-0.56%	-0.52%	-0.32%	-0.28%
1996	1,141,639		94,452		94,452	8.27%	5.66%	3.99%	2.98%	2.43%	2.10%	1.79%	1.61%	1.48%	1.50%
1997	875,696		60,670		60,670	6.93%	7.69%	6.09%	4.77%	3.91%	3.35%	2.99%	2.67%	2.45%	2.28%
1998	1,517,478		127,900		127,900	8.43%	7.88%	8.01%	6.96%	5.92%	5.23%	4.68%	4.32%	4.00%	3.74%
1999	1,844,190		53,435		53,435	2.90%	5.39%	5.71%	6.26%	5.70%	5.09%	4.62%	4.25%	3.99%	3.76%
2000	2,353,706		8,590		8,590	0.36%	1.48%	3.32%	3.80%	4.46%	4.19%	3.85%	3.56%	3.33%	3.17%
2001	104				0	0.00%	0.36%	1.48%	3.32%	3.80%	4.46%	4.19%	3.85%	3.56%	3.33%
2002					0	NA	0.00%	0.36%	1.48%	3.32%	3.80%	4.46%	4.19%	3.85%	3.56%
2003					0	NA	NA	0.00%	0.36%	1.48%	3.32%	3.80%	4.46%	4.19%	3.85%
2004					0	NA	NA	NA	0.00%	0.36%	1.48%	3.32%	3.80%	4.46%	4.19%
2005	1,723,375				0	0.00%	0.00%	0.00%	0.00%	0.00%	0.21%	1.05%	2.55%	3.01%	3.65%
2006	10,653,105				0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.06%	0.37%	1.05%	1.32%
2007	1,201,950			260,415	(260,415)	-21.67%	-2.20%	-1.92%	-1.92%	-1.92%	-1.92%	-1.92%	-1.58%	-1.12%	-0.37%
2008	1,602,503				0	0.00%	-9.29%	-1.94%	-1.72%	-1.72%	-1.72%	-1.72%	-1.72%	-1.44%	-1.02%
2009	1,182,564	*			0	0.00%	0.00%	-6.53%	-1.78%	-1.59%	-1.59%	-1.59%	-1.59%	-1.59%	-1.35%
2010	1,622,257	*		352,882	(352,882)	-21.75%	-12.58%	-8.01%	-10.93%	-3.77%	-3.41%	-3.41%	-3.41%	-3.41%	-3.41%
2011	1,963,880	*			0	0.00%	-9.84%	-7.40%	-5.54%	-8.10%	-3.36%	-3.07%	-3.07%	-3.07%	-3.07%
2012					0	NA	0.00%	-9.84%	-7.40%	-5.54%	-8.10%	-3.36%	-3.07%	-3.07%	-3.07%
2013	2,160,792		879	245,637	(244,758)	-11.33%	-11.33%	-5.93%	-10.40%	-8.62%	-7.00%	-8.82%	-4.21%	-3.88%	-3.88%
2014	2,472,223		17,003	98,719	(81,716)	-3.31%	-7.05%	-7.05%	-4.95%	-8.27%	-7.23%	-6.17%	-7.70%	-4.11%	-3.82%
2015	2,916,824		34,053	133,579	(99,526)	-3.41%	-3.36%	-5.64%	-5.64%	-4.48%	-6.99%	-6.32%	-5.59%	-6.87%	-4.03%
2016	2,520,819		12,018		12,018	0.48%	-1.61%	-2.14%	-4.11%	-4.11%	-3.44%	-5.62%	-5.17%	-4.66%	-5.82%

* Pro forma Ret

NA - Not Applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Gas Plant
Distribution Meters - Telemetering
Account 381
2009-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2009	601,146	-	-	0	0.00%									
2010		-	-	0	NA	0.00%								
2011		-	-	0	NA	NA	0.00%							
2012		-	-	0	NA	NA	NA	0.00%						
2013		-	-	0	NA	NA	NA	NA	0.00%					
2014		-	-	0	NA	NA	NA	NA	NA	0.00%				
2015		-	-	0	NA	NA	NA	NA	NA	NA	0.00%			
2016		-	-	0	NA	NA	NA	NA	NA	NA	NA	0.00%		

NA - Not Applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Gas Plant
Distribution House Regulators
Account 383
1950-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1950	1,070	145	53	92	8.60%									
1951	301	98	60	38	12.62%	9.48%								
1952	299	74	75	(1)	-0.33%	6.17%	7.72%							
1953	558	61	95	(34)	-6.09%	-4.08%	0.26%	4.26%						
1954	2,121	182	180	2	0.09%	-1.19%	-1.11%	0.15%	2.23%					
1955	6,116	1,638	169	1,469	24.02%	17.86%	16.34%	15.79%	15.69%	14.96%				
1956	13,364	61	234	(173)	-1.29%	6.65%	6.01%	5.70%	5.62%	5.72%	5.85%			
1957	843	60	201	(141)	-16.73%	-2.21%	5.68%	5.16%	4.88%	4.82%	4.91%	5.07%		
1958	2,713	80	544	(464)	-17.10%	-17.01%	-4.60%	3.00%	2.75%	2.56%	2.53%	2.64%	2.88%	
1959	2,036	516	393	123	6.04%	-7.18%	-8.62%	-3.46%	3.25%	3.00%	2.82%	2.78%	2.89%	3.10%
1960	11,596	2,540	507	2,033	17.53%	15.82%	10.35%	9.02%	4.51%	7.76%	7.34%	7.15%	7.10%	7.14%
1961	9,620	1,085	1,341	(256)	-2.66%	8.38%	8.17%	5.53%	4.83%	2.79%	5.60%	5.36%	5.23%	5.19%
1962	6,013	2,076	1,119	957	15.92%	4.48%	10.04%	9.76%	7.48%	6.86%	4.50%	6.78%	6.52%	6.40%
1963	9,762	4,111	1,100	3,011	30.84%	25.15%	14.62%	15.53%	15.04%	12.95%	12.36%	9.10%	10.57%	10.22%
1964	10,151	2,557	786	1,771	17.45%	24.01%	22.14%	15.43%	15.94%	15.53%	13.83%	13.34%	10.38%	11.54%
1965	2,188	716	643	73	3.34%	14.94%	21.97%	20.67%	14.72%	15.38%	15.01%	13.40%	12.94%	10.15%
1966	1,793	226	1,733	(1,507)	-84.05%	-36.02%	2.38%	14.01%	14.39%	10.24%	11.90%	11.67%	10.28%	9.87%
1967	4,161	866	1,905	(1,039)	-24.97%	-42.76%	-30.37%	-3.84%	8.23%	9.59%	6.89%	9.12%	9.01%	7.83%
1968	13,826	1,310	1,224	86	0.62%	-5.30%	-12.44%	-10.87%	-1.92%	5.72%	7.00%	5.38%	7.42%	7.38%
1969	16,243	4,883	1,243	3,640	22.41%	12.39%	7.85%	3.28%	3.28%	6.25%	10.38%	10.90%	9.13%	10.27%
1970	4,116	513	1,858	(1,345)	-32.68%	11.27%	6.97%	3.50%	-0.41%	-0.22%	3.20%	7.54%	8.27%	6.92%
1971	4,454	943	2,728	(1,785)	-40.08%	-36.52%	2.06%	1.54%	-1.04%	-4.37%	-4.01%	-0.19%	4.36%	5.31%
1972	18,791	2,242	1,452	790	4.20%	-4.28%	-8.55%	2.98%	2.41%	0.56%	-1.83%	-1.66%	0.90%	4.32%
1973	812	635	2,638	(2,003)	-246.67%	-6.19%	-12.46%	-15.42%	-1.58%	-1.06%	-2.65%	-4.93%	-4.65%	-1.72%
1974	27	23	2,383	(2,360)	-8740.74%	-520.02%	-18.20%	-22.25%	-23.77%	-6.89%	-5.11%	-6.43%	-8.60%	-8.21%
1975	11,025	33	4,469	(4,436)	-40.24%	-61.49%	-74.17%	-26.13%	-27.90%	-28.40%	-13.52%	-10.70%	-11.51%	-13.23%
1976	4,020	1	1,563	(1,562)	-38.86%	-39.87%	-55.45%	-65.23%	-27.60%	-29.02%	-29.37%	-15.23%	-12.24%	-12.93%
1977	6,656	3,658	1,943	1,715	25.77%	1.43%	-19.74%	-30.57%	-38.36%	-19.01%	-21.06%	-22.02%	-11.11%	-9.08%
1978	224	106	2,460	(2,354)	-1050.89%	-9.29%	-20.19%	-30.27%	-40.98%	-48.32%	-24.57%	-26.07%	-26.61%	-14.62%
1979	626	284	1,941	(1,657)	-264.70%	-471.88%	-30.59%	-33.47%	-36.78%	-47.19%	-54.11%	-28.13%	-29.27%	-29.55%
1980	920		4,775	(4,775)	-519.02%	-416.04%	-496.38%	-83.92%	-69.36%	-55.68%	-65.66%	-71.71%	-38.61%	-38.75%
1981	10,487	1,138	11,295	(10,157)	-96.85%	-130.90%	-137.86%	-154.55%	-91.09%	-81.93%	-68.40%	-75.29%	-79.29%	-50.01%
1982	-	700	6,367	(5,667)	NA	-150.89%	-180.58%	-184.96%	-200.78%	-121.05%	-106.65%	-85.08%	-91.96%	-95.57%
1983	1	216	3,941	(3,725)	-372500.00%	-939200.00%	-186.39%	-213.22%	-215.90%	-231.16%	-140.74%	-122.88%	-96.05%	-102.92%
1984	(1)	31	5,927	(5,896)	589600.00%	NA	NA	-242.63%	-264.93%	-264.91%	-279.28%	-171.92%	-148.60%	-113.42%
1985	1	125	3,272	(3,147)	-314700.00%	NA	-1276800.00%	-1843500.00%	-272.62%	-292.49%	-291.04%	-304.93%	-188.55%	-162.31%
1986	-	287	8,247	(7,960)	NA	-1110700.00%	NA	-2072800.00%	-2639500.00%	-348.51%	-362.26%	-357.19%	-369.86%	-230.64%
1987	-	725	5,478	(4,753)	NA	NA	-1586000.00%	NA	-2548100.00%	-3114800.00%	-393.83%	-403.93%	-396.68%	-408.64%
1988	1	269	9,801	(9,532)	-953200.00%	-1428500.00%	-2224500.00%	-1269600.00%	-3128800.00%	-1750650.00%	-2034000.00%	-484.67%	-487.44%	-475.85%
1989	-		166	(166)	NA	-969800.00%	-1445100.00%	-2241100.00%	-1277900.00%	-3145400.00%	-1758950.00%	-2042300.00%	-486.25%	-488.89%
1990	1	442	14,537	(14,095)	-1409500.00%	-1426100.00%	-1189650.00%	-1427300.00%	-1825300.00%	-1321766.67%	-2277450.00%	-1642466.67%	-1831366.67%	-620.57%
1991	-	1	6,816	(6,815)	NA	-2091000.00%	-2107600.00%	-1530400.00%	-1768050.00%	-2166050.00%	-1548933.33%	-2618200.00%	-1869633.33%	-2058533.33%
1992	-	193	7,188	(6,995)	NA	NA	-2790500.00%	-2807100.00%	-1880150.00%	-2117800.00%	-2515800.00%	-1782100.00%	-2967950.00%	-2102800.00%
1993	185,044	-	-	0	0.00%	-3.78%	-7.46%	-15.08%	-15.17%	-20.32%	-22.89%	-27.19%	-28.89%	-32.08%
1994	133,048	-	-	0	0.00%	0.00%	-2.20%	-4.34%	-8.77%	-8.82%	-11.82%	-13.32%	-15.82%	-16.81%
1995	124,714	-	-	0	0.00%	0.00%	0.00%	-1.58%	-3.12%	-6.30%	-6.34%	-8.49%	-9.57%	-11.36%
1996	194,036	-	-	0	0.00%	0.00%	0.00%	0.00%	-1.10%	-2.17%	-4.38%	-4.41%	-5.90%	-6.65%
1997	243,744	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	-0.79%	-1.57%	-3.17%	-3.19%	-4.27%
1998	560,791	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.49%	-0.96%	-1.94%	-1.95%
1999	-	(12,615)	-	(12,615)	NA	-2.25%	-1.57%	-1.26%	-1.12%	-1.00%	-0.88%	-1.36%	-1.83%	-2.81%
2000	788,842	-	-	0	0.00%	-1.60%	-0.93%	-0.79%	-0.71%	-0.66%	-0.62%	-0.57%	-0.88%	-1.18%
2001	-	-	-	0	NA	0.00%	-1.60%	-0.93%	-0.79%	-0.71%	-0.66%	-0.62%	-0.57%	-0.88%
2002	-	-	-	0	NA	NA	0.00%	-1.60%	-0.93%	-0.79%	-0.71%	-0.66%	-0.62%	-0.57%
2003	2,330	-	-	0	0.00%	0.00%	0.00%	0.00%	-1.59%	-0.93%	-0.79%	-0.70%	-0.66%	-0.62%
2004	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	-1.59%	-0.93%	-0.79%	-0.70%	-0.66%
2005	-	-	-	0	NA	NA	0.00%	0.00%	0.00%	0.00%	-1.59%	-0.93%	-0.79%	-0.70%
2006	-	-	-	0	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	-1.59%	-0.93%	-0.79%
2007	603,813	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.90%	-0.65%
2008	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.90%
2009	-	-	-	0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2010	69	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2011	12	-	2,849	(2,849)	-23965.10%	-3511.34%	-3511.34%	-3511.34%	-0.47%	-0.47%	-0.47%	-0.47%	-0.47%	-0.47%
2012				0	NA	-23965.10%	-3511.34%	-3511.34%	-3511.34%	-0.47%	-0.47%	-0.47%	-0.47%	-0.47%
2013				0	NA	NA	-23965.10%	-3511.34%	-3511.34%	-3511.34%	-0.47%	-0.47%	-0.47%	-0.47%
2014	-		4,095	(4,095)	NA	NA	NA	-58402.78%	-8557.10%	-8557.10%	-8557.10%	-1.15%	-1.15%	-1.15%
2015	29		594	(594)	-2048.24%	-16157.96%	-16157.96%	-16157.96%	-18427.01%	-6842.60%	-6842.60%	-6842.60%	-1.25%	-1.25%
2016				0	NA	-2048.24%	-16157.96%	-16157.96%	-16157.96%	-18427.01%	-6842.60%	-6842.60%	-6842.60%	-1.25%

NA - Not Applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Gas Plant
General Structures & Improvements
Account 390
1950-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
1950	-	-	-	0	NA									
1951	-	-	-	0	NA	NA								
1952	-	-	-	0	NA	NA	NA							
1953	-	-	-	0	NA	NA	NA	NA						
1954	-	-	-	0	NA	NA	NA	NA	NA					
1955	-	-	-	0	NA	NA	NA	NA	NA	NA				
1956	-	-	-	0	NA	NA	NA	NA	NA	NA	NA			
1957	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA		
1958	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1959	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1960	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1961	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1962	-	-	18	(18)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1963	-	-	57	(57)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1964	-	710	64	646	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1965	-	10,414	-	10,414	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1966	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1967	4,173	-	-	0	0.00%	0.00%	249.56%	265.04%	263.67%	263.24%	263.24%	263.24%	263.24%	263.24%
1968	-	-	-	0	NA	0.00%	0.00%	249.56%	265.04%	263.67%	263.24%	263.24%	263.24%	263.24%
1969	-	-	-	0	NA	NA	0.00%	0.00%	249.56%	265.04%	263.67%	263.24%	263.24%	263.24%
1970	206	30	7	23	11.17%	11.17%	11.17%	0.53%	0.53%	238.34%	253.09%	251.79%	251.38%	251.38%
1971	-	-	-	0	NA	11.17%	11.17%	11.17%	0.53%	0.53%	238.34%	253.09%	251.79%	251.38%
1972	-	-	-	0	NA	NA	11.17%	11.17%	11.17%	0.53%	0.53%	238.34%	253.09%	251.79%
1973	-	-	-	0	NA	NA	NA	11.17%	11.17%	11.17%	0.53%	0.53%	238.34%	253.09%
1974	-	-	-	0	NA	NA	NA	NA	11.17%	11.17%	11.17%	0.53%	0.53%	238.34%
1975	-	-	-	0	NA	NA	NA	NA	NA	11.17%	11.17%	11.17%	0.53%	0.53%
1976	-	-	-	0	NA	NA	NA	NA	NA	NA	11.17%	11.17%	11.17%	0.53%
1977	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	11.17%	11.17%	11.17%
1978	6,719	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.33%	0.33%
1979	-	17	86,083	(86,066)	NA	-1280.93%	-1280.93%	-1280.93%	-1280.93%	-1280.93%	-1280.93%	-1280.93%	-1280.93%	-1242.50%
1980	-	-	-	0	NA	NA	-1280.93%	-1280.93%	-1280.93%	-1280.93%	-1280.93%	-1280.93%	-1280.93%	-1280.93%
1981	-	-	-	0	NA	NA	NA	-1280.93%	-1280.93%	-1280.93%	-1280.93%	-1280.93%	-1280.93%	-1280.93%
1982	-	-	-	0	NA	NA	NA	NA	-1280.93%	-1280.93%	-1280.93%	-1280.93%	-1280.93%	-1280.93%
1983	-	-	-	0	NA	NA	NA	NA	NA	-1280.93%	-1280.93%	-1280.93%	-1280.93%	-1280.93%
1984	-	-	-	0	NA	NA	NA	NA	NA	NA	-1280.93%	-1280.93%	-1280.93%	-1280.93%
1985	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	-1280.93%	-1280.93%	-1280.93%
1986	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	-1280.93%	-1280.93%
1987	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	-1280.93%
1988	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1989	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1990	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1991	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1992	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1993	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1994	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1995	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1996	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1997	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1998	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1999	5,000	(12,615)	-	(12,615)	-252.30%	-252.30%	-252.30%	-252.30%	-252.30%	-252.30%	-252.30%	-252.30%	-252.30%	-252.30%
2000	-	-	-	0	NA	-252.30%	-252.30%	-252.30%	-252.30%	-252.30%	-252.30%	-252.30%	-252.30%	-252.30%
2001	-	-	-	0	NA	NA	-252.30%	-252.30%	-252.30%	-252.30%	-252.30%	-252.30%	-252.30%	-252.30%
2002	-	-	-	0	NA	NA	NA	-252.30%	-252.30%	-252.30%	-252.30%	-252.30%	-252.30%	-252.30%
2003	2,330	-	-	0	0.00%	0.00%	0.00%	0.00%	-172.11%	-172.11%	-172.11%	-172.11%	-172.11%	-172.11%
2004	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	-172.11%	-172.11%	-172.11%	-172.11%	-172.11%
2005	-	-	-	0	NA	NA	0.00%	0.00%	0.00%	0.00%	-172.11%	-172.11%	-172.11%	-172.11%
2006	-	-	-	0	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	-172.11%	-172.11%	-172.11%
2007	0	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-172.11%	-172.11%
2008	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-172.11%
2009	-	-		0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2010	-	-		0	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2011	-			0	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2012	32,183			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2013				0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2014				0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2015	3,617		1,517	(1,517)	-41.92%	-41.92%	-41.92%	-4.24%	-4.24%	-4.24%	-4.24%	-4.24%	-4.24%	-4.24%
2016	345,469		47,119	(47,119)	-13.64%	-13.93%	-13.93%	-13.93%	-12.76%	-12.76%	-12.76%	-12.76%	-12.76%	-12.76%

NA - Not Applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Gas Plant
General Office Furniture & Equipment
Account 391
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-			0	NA	NA								
2002	-			0	NA	NA	NA							
2003	-			0	NA	NA	NA	NA						
2004	-			0	NA	NA	NA	NA	NA					
2005	-			0	NA	NA	NA	NA	NA	NA				
2006	314			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
2007	1,354			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
2008	-			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
2009	-			0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2010	-	-	-	0	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2011	107,074	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2012	-			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2013	2,662			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2014				0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2015	-		-	0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2016	-		-	0	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Xcel Energy Gas Plant
Network Equipment
Account 391
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-			0	NA	NA								
2002	211,126			0	0.00%	0.00%	0.00%							
2003	891,533			0	0.00%	0.00%	0.00%	0.00%						
2004	1,195,553			0	0.00%	0.00%	0.00%	0.00%	0.00%					
2005	20,385			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%				
2006	-			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
2007	1,934			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
2008	-			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
2009	28,745			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2010	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2011	-	-	-	0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2012	-			0	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2013				0	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2014	14,837			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2015	22,729		-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2016	-		-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Xcel Energy Gas Plant
General Transportation Equipment - Automobiles
Account 392
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-			0	NA	NA								
2002	-			0	NA	NA	NA							
2003	-			0	NA	NA	NA	NA						
2004	-			0	NA	NA	NA	NA	NA					
2005	-			0	NA	NA	NA	NA	NA	NA				
2006	-			0	NA	NA	NA	NA	NA	NA	NA			
2007	-			0	NA	NA	NA	NA	NA	NA	NA	NA		
2008	-			0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2009	-			0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2010	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2011	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2012	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2013	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2014	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2015	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2016	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NA - Not Applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Gas Plant
General Transportation Equipment - Light Trucks
Account 392
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-			0	NA	NA								
2002	-			0	NA	NA	NA							
2003	-			0	NA	NA	NA	NA						
2004	95214.23			0	0.00%	0.00%	0.00%	0.00%	0.00%					
2005	11236.34			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%				
2006	-			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
2007	-			0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
2008	-			0	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
2009	-			0	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2010	-	-	-	0	NA	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%
2011	-	-	(5,720)	5,720	NA	NA	NA	NA	NA	NA	50.91%	5.37%	5.37%	5.37%
2012	-			0	NA	NA	NA	NA	NA	NA	NA	50.91%	5.37%	5.37%
2013				0	NA	NA	NA	NA	NA	NA	NA	NA	50.91%	5.37%
2014				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	50.91%
2015	-		-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2016	239,316	18,180	-	18,180	7.60%	7.60%	7.60%	7.60%	7.60%	9.99%	9.99%	9.99%	9.99%	9.99%

Xcel Energy Gas Plant
General Transportation Equipment - Trailers
Account 392
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-			0	NA	NA								
2002	-			0	NA	NA	NA							
2003	-			0	NA	NA	NA	NA						
2004	192,824			0	0.00%	0.00%	0.00%	0.00%	0.00%					
2005	-			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%				
2006	-			0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%			
2007	-			0	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%		
2008	-			0	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	
2009	-			0	NA	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%
2010	-	-	-	0	NA	NA	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%
2011	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	0.00%	0.00%	0.00%
2012	-			0	NA	NA	NA	NA	NA	NA	NA	NA	0.00%	0.00%
2013				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00%
2014				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2015	-		-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2016	14,256		-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Xcel Energy Gas Plant
General Transportation Equip - Heavy Trucks
Account 392
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-			0	NA	NA								
2002	-			0	NA	NA	NA							
2003	-			0	NA	NA	NA	NA						
2004	1,102,569			0	0.00%	0.00%	0.00%	0.00%	0.00%					
2005	-			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%				
2006	-			0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%			
2007	-			0	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%		
2008	-			0	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	
2009	-			0	NA	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%
2010	-	-	-	0	NA	NA	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%
2011	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	0.00%	0.00%	0.00%
2012	-			0	NA	NA	NA	NA	NA	NA	NA	NA	0.00%	0.00%
2013				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00%
2014				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2015	-		-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2016	-	44,866	-	44,866	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NA - Not Applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Gas Plant
General Stores Equipment
Account 393
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-			0	NA	NA								
2002	-			0	NA	NA	NA							
2003	-			0	NA	NA	NA	NA						
2004	-			0	NA	NA	NA	NA	NA					
2005	-			0	NA	NA	NA	NA	NA	NA				
2006	-			0	NA	NA	NA	NA	NA	NA	NA			
2007	-			0	NA	NA	NA	NA	NA	NA	NA	NA		
2008	-			0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2009	-			0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2010	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2011	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2012	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2013	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2014	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2015	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2016	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Xcel Energy Gas Plant
General Tools, Shop & Garage Equipment
Account 394
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-			0	NA	NA								
2002	59,775			0	0.00%	0.00%	0.00%							
2003	149,102			0	0.00%	0.00%	0.00%	0.00%						
2004	652,196			0	0.00%	0.00%	0.00%	0.00%	0.00%					
2005	395,221			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%				
2006	316,359			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
2007	525,912			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
2008	-			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
2009	1,270,951			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2010	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2011	413,970	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2012	775,000	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2013	302,442	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2014	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2015	677,271	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2016	204,565	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Xcel Energy Gas Plant
General Laboratory Equipment
Account 395
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-			0	NA	NA								
2002	-			0	NA	NA	NA							
2003	-			0	NA	NA	NA	NA						
2004	-			0	NA	NA	NA	NA	NA					
2005	11,898			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%				
2006	310			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
2007	33,318			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
2008	-			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
2009	7,380			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2010	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2011	2,517	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2012	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2013	-	-	-	0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2014	-	-	-	0	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2015	-	-	-	0	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2016	-	-	-	0	NA	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%

NA - Not Applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Gas Plant
General Power Operated Equipment
Account 396
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-			0	NA	NA								
2002	-			0	NA	NA	NA							
2003	-			0	NA	NA	NA	NA						
2004	-			0	NA	NA	NA	NA	NA					
2005	-			0	NA	NA	NA	NA	NA	NA				
2006	-			0	NA	NA	NA	NA	NA	NA	NA			
2007	66,375			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
2008	-			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
2009	-			0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2010	-	-	-	0	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2011	70,455	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2012				0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2013				0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2014	-			0	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2015	-		-	0	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2016	671,655	226,474	-	226,474	33.72%	33.72%	33.72%	33.72%	33.72%	30.52%	30.52%	30.52%	30.52%	28.01%

Xcel Energy Gas Plant
General Communication Equipment
Account 397
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-			0	NA	NA								
2002	-			0	NA	NA	NA							
2003	8,730			0	0.00%	0.00%	0.00%	0.00%						
2004	1,846,637			0	0.00%	0.00%	0.00%	0.00%	0.00%					
2005	87,979			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%				
2006	-			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
2007	125,517			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
2008	-			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
2009	179,437			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2010	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2011	11,640	-	21,350	(21,350)	-183.42%	-183.42%	-11.17%	-11.17%	-6.74%	-6.74%	-5.28%	-0.95%	-0.94%	-0.94%
2012	17,372		38,436	(38,436)	-221.25%	-206.07%	-206.07%	-28.68%	-28.68%	-17.90%	-17.90%	-14.17%	-2.64%	-2.63%
2013	10,249			0	0.00%	-139.15%	-152.28%	-152.28%	-27.34%	-27.34%	-17.37%	-17.37%	-13.83%	-2.62%
2014	171,106			0	0.00%	0.00%	-19.34%	-28.42%	-28.42%	-15.34%	-15.34%	-11.60%	-11.60%	-9.91%
2015	-		-	0	NA	0.00%	0.00%	-19.34%	-28.42%	-28.42%	-15.34%	-15.34%	-11.60%	-11.60%
2016			-	0	NA	NA	0.00%	0.00%	-19.34%	-28.42%	-28.42%	-15.34%	-15.34%	-11.60%

Xcel Energy Gas Plant
General Communication Equipment - AES
Account 397
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-			0	NA	NA								
2002	-			0	NA	NA	NA							
2003	-			0	NA	NA	NA	NA						
2004	3,294			0	0.00%	0.00%	0.00%	0.00%	0.00%					
2005	-			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%				
2006	26,179			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
2007	45,532			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
2008	-			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
2009	5,338			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2010	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2011	2,147	-	71	(71)	-3.30%	-3.30%	-0.95%	-0.95%	-0.13%	-0.09%	-0.09%	-0.09%	-0.09%	-0.09%
2012				0	NA	-3.30%	-3.30%	-0.95%	-0.95%	-0.13%	-0.09%	-0.09%	-0.09%	-0.09%
2013				0	NA	NA	-3.30%	-3.30%	-0.95%	-0.95%	-0.13%	-0.09%	-0.09%	-0.09%
2014	2,365,462			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2015	1,331,967		-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2016			-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

NA - Not Applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Gas Plant
General Miscellaneous Equipment
Account 398
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-			0	NA	NA								
2002	33,743			0	0.00%	0.00%	0.00%							
2003	-			0	NA	0.00%	0.00%	0.00%						
2004	-			0	NA	NA	0.00%	0.00%	0.00%					
2005	10,161			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%				
2006	500			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
2007	-			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
2008	-			0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
2009	5,493			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2010	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2011	-	-	-	0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2012				0	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2013	20,200			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2014	-			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2015	32,504		-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2016			-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

NA - Not Applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Common Plant
General Structures & Improvements
Account 390
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000			11,128	(11,128)	NA									
2001	11,177		2,928	(2,928)	-26.20%	-125.76%								
2002	84,542			0	0.00%	-3.06%	-14.68%							
2003				0	NA	0.00%	-3.06%	-14.68%						
2004				0	NA	NA	0.00%	-3.06%	-14.68%					
2005	115,441		30,562	(30,562)	NA	-26.47%	-26.47%	-15.28%	-15.86%	-21.13%				
2006	333,652		391,986	(391,986)	NA	-94.09%	-94.09%	-94.09%	-79.18%	-78.10%	-80.14%			
2007	2,085,723		1,689,125	(1,689,125)	-80.99%	-86.02%	-83.31%	-83.31%	-83.31%	-80.62%	-80.39%	-80.81%		
2008	1,493,463		1,988,153	(1,988,153)	-133.12%	-102.74%	-104.00%	-101.78%	-101.78%	-101.78%	-99.68%	-99.48%	-99.75%	
2009	34,948			0	0.00%	-130.08%	-101.75%	-103.08%	-100.90%	-100.90%	-100.90%	-98.84%	-98.65%	-98.92%
2010				0	NA	0.00%	-130.08%	-101.75%	-103.08%	-100.90%	-100.90%	-100.90%	-98.84%	-98.65%
2011		(10,312)	1,041,313	(1,051,625)	NA	NA	-3009.11%	-198.88%	-130.84%	-129.72%	-126.78%	-126.78%	-126.78%	-124.20%
2012	3,697,183	2,874	2,498,298	(2,495,424)	NA	-95.94%	-95.94%	-95.04%	-105.92%	-98.81%	-99.63%	-98.54%	-98.54%	-98.54%
2013	10,192,810		724,240	(724,240)	NA	-23.18%	-30.75%	-30.75%	-30.67%	-40.60%	-45.41%	-46.76%	-46.63%	-46.63%
2014	2,569,934	1,006	610,379	(609,373)	NA	-10.45%	-23.26%	-29.65%	-29.65%	-29.59%	-38.18%	-42.63%	-43.86%	-43.76%
2015	1,033,009	(1,667)		(1,667)	NA	-16.96%	-9.68%	-21.90%	-27.91%	-27.91%	-27.85%	-36.12%	-40.55%	-41.75%
2016	828,431	932	463,032	(462,100)	NA	-24.91%	-24.22%	-12.29%	-23.43%	-29.17%	-29.17%	-29.11%	-36.94%	-41.13%

NA - Not Applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Common Plant
General Office Furniture & Equipment
Account 391
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000				0	NA									
2001				0	NA	NA								
2002	11,807			0	0.00%	0.00%	0.00%							
2003	784,169			0	0.00%	0.00%	0.00%	0.00%						
2004	685,962	7,700		7,700	1.12%	0.52%	0.52%	0.52%	0.52%					
2005		12,781		12,781	NA	2.99%	1.39%	1.38%	1.38%	1.38%				
2006		2,150	1,797	353	NA	NA	3.04%	1.42%	1.41%	1.41%	1.41%			
2007	1,086,869	180	10,001	(9,821)	-0.90%	-0.87%	0.30%	0.62%	0.43%	0.43%	0.43%	0.43%		
2008	989,344	(351,919)		(351,919)	-35.57%	-17.42%	-17.41%	-16.79%	-12.34%	-9.61%	-9.58%	-9.58%	-9.58%	
2009	59,885		8,869	(8,869)	-14.81%	-34.39%	-17.35%	-17.33%	-16.73%	-12.39%	-9.70%	-9.67%	-9.67%	-9.67%
2010	-			0	NA	-14.81%	-34.39%	-17.35%	-17.33%	-16.73%	-12.39%	-9.70%	-9.67%	-9.67%
2011	859,438		48,000	(48,000)	-5.59%	-5.59%	-6.19%	-21.42%	-13.97%	-13.96%	-13.54%	-10.80%	-8.91%	-8.88%
2012	1,179,782			0	NA	-2.35%	-2.35%	-2.71%	-13.24%	-10.03%	-10.02%	-9.71%	-8.18%	-7.05%
2013	4,781,782		17,008	(17,008)	NA	-0.29%	-0.95%	-0.95%	-1.07%	-5.41%	-4.86%	-4.86%	-4.72%	-4.30%
2014	5,902,551	3,247	6,100	(2,853)	NA	-0.19%	-0.17%	-0.53%	-0.53%	-0.60%	-3.11%	-2.95%	-2.95%	-2.86%
2015		5,560		5,560	NA	0.05%	-0.13%	-0.12%	-0.49%	-0.49%	-0.56%	-3.07%	-2.91%	-2.91%
2016				0	NA	NA	0.05%	-0.13%	-0.12%	-0.49%	-0.49%	-0.56%	-3.07%	-2.91%

Xcel Energy Common
General Network Equipment
Account 391
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000				0	NA									
2001				0	NA	NA								
2002	852,835			0	0.00%	0.00%	0.00%							
2003	32,731,604			0	0.00%	0.00%	0.00%	0.00%						
2004	35,907,145			0	0.00%	0.00%	0.00%	0.00%	0.00%					
2005	3,379,968			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%				
2006	726,936		335	(335)	NA	-0.01%	0.00%	0.00%	0.00%	0.00%	0.00%			
2007	5,880,457			0	0.00%	-0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
2008	10,701,667			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
2009	(787,840)	327,097	478,143	(151,046)	19.17%	-1.52%	-0.96%	-0.92%	-0.76%	-0.27%	-0.17%	-0.17%	-0.17%	-0.17%
2010				0	NA	19.17%	-1.52%	-0.96%	-0.92%	-0.76%	-0.27%	-0.17%	-0.17%	-0.17%
2011	19,747,779	33,319	17,090	16,229	0.08%	0.08%	-0.71%	-0.45%	-0.38%	-0.37%	-0.34%	-0.18%	-0.12%	-0.12%
2012	3,602,211	38,588	799	37,789	NA	0.23%	0.23%	-0.43%	-0.29%	-0.25%	-0.24%	-0.23%	-0.12%	-0.09%
2013	21,150,757	10,776	314	10,462	NA	0.19%	0.14%	0.14%	-0.20%	-0.16%	-0.14%	-0.14%	-0.13%	-0.09%
2014	10,839,036	25,567	(4,637)	30,204	NA	0.13%	0.22%	0.17%	0.17%	-0.10%	-0.09%	-0.08%	-0.08%	-0.08%
2015	9,137,814	5,560		5,560	NA	0.18%	0.11%	0.19%	0.16%	0.16%	-0.08%	-0.07%	-0.06%	-0.06%
2016	9,493,912			0	NA	0.03%	0.12%	0.09%	0.15%	0.14%	0.14%	-0.07%	-0.06%	-0.06%

NA - Not Applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Common Plant
General Transportation Equipment - Automobiles
Account 392
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000				0	NA									
2001				0	NA	NA								
2002				0	NA	NA	NA							
2003				0	NA	NA	NA	NA						
2004		75,586		75,586	NA	NA	NA	NA	NA					
2005				0	NA	NA	NA	NA	NA	NA				
2006				0	NA	NA	NA	NA	NA	NA	NA			
2007				0	NA	NA	NA	NA	NA	NA	NA	NA		
2008				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2009				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2010				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2011				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2012				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2013				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2014				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2015	165,915			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2016		52,553		52,553	NA	31.67%	31.67%	31.67%	31.67%	31.67%	31.67%	31.67%	31.67%	31.67%

Xcel Energy Common Plant
General Transportation Equipment - Light Trucks
Account 392
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000				0	NA									
2001				0	NA	NA								
2002				0	NA	NA	NA							
2003				0	NA	NA	NA	NA						
2004	108,012	2,441		2,441	2.26%	2.26%	2.26%	2.26%	2.26%					
2005		43,830		43,830	NA	42.84%	42.84%	42.84%	42.84%	42.84%				
2006		5,087	91	4,996	NA	NA	47.46%	47.46%	47.46%	47.46%	47.46%			
2007		3,737		3,737	NA	NA	NA	50.92%	50.92%	50.92%	50.92%	50.92%		
2008			4,275	(4,275)	NA	NA	NA	NA	46.97%	46.97%	46.97%	46.97%	46.97%	
2009				0	NA	NA	NA	NA	NA	46.97%	46.97%	46.97%	46.97%	46.97%
2010				0	NA	NA	NA	NA	NA	NA	46.97%	46.97%	46.97%	46.97%
2011				0	NA	NA	NA	NA	NA	NA	NA	46.97%	46.97%	46.97%
2012				0	NA	NA	NA	NA	NA	NA	NA	NA	46.97%	46.97%
2013				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	46.97%
2014				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2015	254,091	13,222	(12,241)	25,463	NA	10.02%	10.02%	10.02%	10.02%	10.02%	10.02%	8.34%	9.81%	11.78%
2016	2,021,256	89,804	(420)	90,224	NA	5.08%	5.08%	5.08%	5.08%	5.08%	5.08%	5.08%	4.90%	5.06%

NA - Not Applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Common Plant
General Transportation Equipment - Trailers
Account 392
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-	-	-	0	NA	NA								
2002	-	-	-	0	NA	NA	NA							
2003	-	-	-	0	NA	NA	NA	NA						
2004	-	-	-	0	NA	NA	NA	NA	NA					
2005	-	-	-	0	NA	NA	NA	NA	NA	NA				
2006	-	-	-	0	NA	NA	NA	NA	NA	NA	NA			
2007	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA		
2008	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2009	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2010	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2011	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2012				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2013			632	(632)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2014				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2015	116,343			0	NA	0.00%	-0.54%	-0.54%	-0.54%	-0.54%	-0.54%	-0.54%	-0.54%	-0.54%
2016	35,980	3,431		3,431	NA	2.25%	2.25%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%

Xcel Energy Common Plant
General Transportation Equipment - Heavy Trucks
Account 392
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000				0	NA									
2001				0	NA	NA								
2002				0	NA	NA	NA							
2003				0	NA	NA	NA	NA						
2004	35,125	50,391	-	50,391	143.46%	143.46%	143.46%	143.46%	143.46%					
2005				0	NA	143.46%	143.46%	143.46%	143.46%	143.46%				
2006				0	NA	NA	143.46%	143.46%	143.46%	143.46%	143.46%			
2007				0	NA	NA	NA	143.46%	143.46%	143.46%	143.46%	143.46%		
2008				0	NA	NA	NA	NA	143.46%	143.46%	143.46%	143.46%	143.46%	
2009				0	NA	NA	NA	NA	NA	143.46%	143.46%	143.46%	143.46%	143.46%
2010				0	NA	NA	NA	NA	NA	NA	143.46%	143.46%	143.46%	143.46%
2011				0	NA	NA	NA	NA	NA	NA	NA	143.46%	143.46%	143.46%
2012				0	NA	NA	NA	NA	NA	NA	NA	NA	143.46%	143.46%
2013				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	143.46%
2014				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2015		21,032	(1,056)	22,088	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2016		20,136		20,136	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NA - Not Applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Common Plant
General Stores Equipment
Account 393
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-	-	-	0	NA	NA								
2002	-	-	-	0	NA	NA	NA							
2003	125,531	-	-	0	0.00%	0.00%	0.00%	0.00%						
2004	51,469	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%					
2005	69,759	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%				
2006	165,198	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
2007	113,152	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
2008	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
2009	-	-	-	0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2010	-	-	-	0	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2011	351,877	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2012	43,860			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2013	9,329			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2014				0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2015				0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2016	12,021			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Xcel Energy Common Plant
General Tools, Shop & Garage Equipment
Account 394
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000				0	NA									
2001				0	NA	NA								
2002	271,426			0	0.00%	0.00%	0.00%							
2003	126,619			0	0.00%	0.00%	0.00%	0.00%						
2004	236,890	5,379		5,379	2.27%	1.48%	0.85%	0.85%	0.85%					
2005	568,743			0	NA	0.67%	0.58%	0.45%	0.45%	0.45%				
2006	139,917	12,259	2,642	9,617	NA	1.36%	1.59%	1.40%	1.12%	1.12%	1.12%			
2007	368,342			0	0.00%	1.89%	0.89%	1.14%	1.04%	0.88%	0.88%	0.88%		
2008	98,515			0	0.00%	0.00%	1.58%	0.82%	1.06%	0.97%	0.83%	0.83%	0.83%	
2009	291,266			0	0.00%	0.00%	0.00%	1.07%	0.66%	0.88%	0.82%	0.71%	0.71%	0.71%
2010	-			0	NA	0.00%	0.00%	0.00%	1.07%	0.66%	0.88%	0.82%	0.71%	0.71%
2011	170,079		7,103	(7,103)	-4.18%	-4.18%	-1.54%	-1.27%	-0.77%	0.24%	0.15%	0.42%	0.39%	0.35%
2012	66,031			0	NA	-3.01%	-3.01%	-1.35%	-1.13%	-0.71%	0.22%	0.15%	0.41%	0.38%
2013	334,636		20,310	(20,310)	NA	-5.07%	-4.80%	-4.80%	-3.18%	-2.85%	-2.06%	-1.21%	-0.87%	-0.55%
2014				0	NA	-6.07%	-5.07%	-4.80%	-4.80%	-3.18%	-2.85%	-2.06%	-1.21%	-0.87%
2015	145,898			0	NA	0.00%	-4.23%	-3.72%	-3.83%	-3.83%	-2.72%	-2.48%	-1.86%	-1.10%
2016	3,890			0	NA	0.00%	0.00%	-4.19%	-3.69%	-3.80%	-3.80%	-2.71%	-2.47%	-1.85%

NA - Not Applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Common
General Laboratory Equipment
Account 395
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-	-	-	0	NA	NA								
2002	26,373	-	-	0	0.00%	0.00%	0.00%							
2003	-	-	-	0	NA	0.00%	0.00%	0.00%						
2004	9,610	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%					
2005	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%				
2006	-	-	-	0	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%			
2007	-	-	-	0	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%		
2008	-	-	-	0	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	
2009	-	-	-	0	NA	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%
2010	-	-	-	0	NA	NA	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%
2011	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	0.00%	0.00%	0.00%
2012				0	NA	NA	NA	NA	NA	NA	NA	NA	0.00%	0.00%
2013				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00%
2014				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2015				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2016	36,686			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Xcel Energy Common Plant
General Power Operated Equipment
Account 396
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-	-	-	0	NA	NA								
2002	-	-	-	0	NA	NA	NA							
2003	-	-	-	0	NA	NA	NA	NA						
2004	-	-	-	0	NA	NA	NA	NA	NA					
2005	-	-	-	0	NA	NA	NA	NA	NA	NA				
2006	-	-	-	0	NA	NA	NA	NA	NA	NA	NA			
2007	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA		
2008	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2009	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2010	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2011	-	-	-	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2012				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2013				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2014				0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2015	4,968			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2016				0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

NA - Not Applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Common Plant
General Communication Equipment
Account 397
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000				0	NA									
2001				0	NA	NA								
2002	2,147,381			0	0.00%	0.00%	0.00%							
2003	-			0	#VALUE!	0.00%	0.00%	0.00%						
2004	5,675,203			0	0.00%	0.00%	0.00%	0.00%	0.00%					
2005	7,019,641			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%				
2006	734,267			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
2007	189,472			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
2008	127,474			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
2009	1,147,802			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2010				0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2011	1,105,612			0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2012	109,489			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2013	44,115		150	(150)	NA	-0.10%	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%	0.00%	0.00%	0.00%
2014	545,824			0	NA	-0.03%	-0.02%	-0.01%	-0.01%	-0.01%	0.00%	0.00%	0.00%	0.00%
2015	59,122			0	NA	0.00%	-0.02%	-0.02%	-0.01%	-0.01%	0.00%	0.00%	0.00%	0.00%
2016	24,140	12,270		12,270	NA	14.74%	1.95%	1.80%	1.55%	0.64%	0.64%	0.40%	0.38%	0.36%

Xcel Energy Common Plant
General Communication Equipment - AES
Account 397
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-	-	-	0	NA	NA								
2002	3,669,806	-	-	0	0.00%	0.00%	0.00%							
2003	380,447	-	-	0	0.00%	0.00%	0.00%	0.00%						
2004	836,004	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%					
2005	490,062	-	-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%				
2006	-	-	-	0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
2007	2,720,952	-	395,655	(395,655)	-14.54%	-14.54%	-12.32%	-9.78%	-8.94%	-4.89%	-4.89%	-4.89%		
2008	97,882	-	-	0	0.00%	-14.04%	-14.04%	-11.96%	-9.55%	-8.74%	-4.83%	-4.83%	-4.83%	
2009	-	-	-	0	NA	0.00%	-14.04%	-14.04%	-11.96%	-9.55%	-8.74%	-4.83%	-4.83%	-4.83%
2010	-			0	NA	NA	0.00%	-14.04%	-14.04%	-11.96%	-9.55%	-8.74%	-4.83%	-4.83%
2011	3,562,640			0	0.00%	0.00%	0.00%	0.00%	-6.20%	-6.20%	-5.76%	-5.13%	-4.89%	-3.37%
2012	188,021			0	NA	0.00%	0.00%	0.00%	0.00%	-6.02%	-6.02%	-5.60%	-5.01%	-4.78%
2013	42,946			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	-5.98%	-5.98%	-5.57%	-4.98%
2014	3,253			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-5.98%	-5.98%	-5.57%
2015	59,122			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-5.93%	-5.93%
2016	3,633,035			0	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-3.84%

NA - Not Applicable

Northern States Power Company - Minnesota: Transmission, Distribution & General Study

Xcel Energy Common Plant
General Miscellaneous Equipment
Account 398
2000-2016

Transaction Year	Transactional History Retirements	Salvage	Removal Cost	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
2000	-			0	NA									
2001	-		-	0	NA	NA								
2002	225,190		-	0	0.00%	0.00%	0.00%							
2003	1,875		-	0	0.00%	0.00%	0.00%	0.00%						
2004	7,482		-	0	0.00%	0.00%	0.00%	0.00%	0.00%					
2005	54,187		-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%				
2006	145,815		-	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
2007	164,511		7,622	(7,622)	-4.63%	-2.46%	-2.09%	-2.05%	-2.04%	-1.27%	-1.27%	-1.27%		
2008	42,440		-	0	0.00%	-3.68%	-2.16%	-1.87%	-1.84%	-1.83%	-1.19%	-1.19%	-1.19%	
2009	35,714		-	0	0.00%	0.00%	-3.14%	-1.96%	-1.72%	-1.69%	-1.69%	-1.13%	-1.13%	-1.13%
2010	-		-	0	NA	0.00%	0.00%	-3.14%	-1.96%	-1.72%	-1.69%	-1.69%	-1.13%	-1.13%
2011	18,100	0	6003	(6,003)	-33.17%	-33.17%	-11.16%	-6.24%	-5.22%	-3.35%	-2.96%	-2.91%	-2.90%	-1.96%
2012			(1,501)	1,501	NA	-24.87%	-24.87%	-8.37%	-4.68%	-4.65%	-2.98%	-2.63%	-2.59%	-2.58%
2013	237,763			0	NA	0.63%	-1.76%	-1.76%	-1.54%	-1.35%	-2.43%	-1.88%	-1.74%	-1.72%
2014				0	NA	0.00%	0.63%	-1.76%	-1.76%	-1.54%	-1.35%	-2.43%	-1.88%	-1.74%
2015	46,651		1,002	(1,002)	NA	-2.15%	-0.35%	0.18%	-1.82%	-1.82%	-1.63%	-1.45%	-2.41%	-1.90%
2016	57,878			0	NA	-0.96%	-0.96%	-0.29%	0.15%	-1.53%	-1.53%	-1.39%	-1.26%	-2.18%

NA - Not Applicable

Electric Utility

FERC Account	Account Description	Present (1) Average Life	Curve	Net Salvage	Annual Rate	Notes	Proposed (2) Average Life	Curve	Net Salvage	Annual Rate	Notes
Intangible Plant - Total Company											
302	Franchise and Consents	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
303	Computer Software 3 Year	0	N/A	0	0.00%	(4)	3	N/A	0	33.33%	(4)
303	Computer Software 5 Year	5	N/A	0	18.99%		5	N/A	0	22.57%	
303	Computer Software 7 Year	0	N/A	0	0.00%	(4)	7	N/A	0	14.29%	(4)
303	Computer Software 10 Year	0	N/A	0	0.00%	(4)	10	N/A	0	10.00%	(4)
303	Computer Software 15 Year	0	N/A	0	0.00%	(4)	15	N/A	0	6.67%	(4)
Transmission - Total Company											
352	Structures and Improvements	68	R5	0	1.30%		70	R5	-5	1.46%	
353	Station Equipment	56	R2	-10	1.77%		56	R2	-15	2.01%	
354	Towers and Fixtures	70	R4	-35	1.40%		75	R4	-35	1.38%	
355	Poles and Fixtures	62	R2	-35	2.05%		62	R2	-50	2.41%	
356	Overhead Conductors and Devices	63	R1	-30	1.89%		67	R1	-35	1.90%	
357	Underground Conduit	73	R4	0	1.22%		73	R4	0	1.32%	
358	Underground Conductor and Devices	55	R2	0	1.67%		50	R3	-5	2.01%	
359	Roads and Trails	0	0	0	0.00%	(4)	60	R3	0	1.67%	(4)
Distribution - ND Only											
361	Structures and Improvements	60	R3	-30	2.31%		63	R2.5	-30	1.87%	
362	Station Equipment	55	R1.5	-20	2.26%		53	R2	-25	2.41%	
364	Poles, Towers, and Fixtures	44	R1	-100	4.70%		47	R1	-120	4.23%	
365	Overhead Conductors and Devices	39	L0	-20	3.14%		39	L0	-25	3.20%	
366	Underground Conduit	52	R3	-10	2.23%		56	R3	-20	1.87%	
367	Underground Conductor and Devices	45	R2.5	0	2.30%		49	R1.5	-10	2.12%	
368	Line Transformers	32	N/A	-5	3.77%		32	N/A	-5	4.25%	
368	Line Capacitors	25	N/A	-10	4.62%		25	N/A	-7	3.67%	
369	Overhead Services	40	R1.5	-70	4.43%		42	R1.5	-85	4.44%	
369	Underground Services	41	R4	-5	2.71%		44	R4	-5	1.72%	
370	Meters	15	N/A	0	7.96%		15	N/A	-5	17.08%	
373	Street Lighting and Signal Systems	29	L0	-35	4.77%		29	L0	-40	4.45%	
General - Total Company											
390	Structures and Improvements	57	R1.5	-20	1.97%		55	R1.5	-20	2.20%	
	Structures and Improvements - Leasehold										
390	Improvements	10	SQ	0	0.00%		10	SQ	0	8.18%	(5)
391	Office Furniture and Equipment	20	N/A	0	4.83%		20	N/A	0	4.40%	
391	Network Equipment	4	N/A	0	23.28%		6	N/A	0	13.46%	
392	Automobiles	10	N/A	0	9.82%		10	N/A	5	9.52%	
392	Light Trucks	12	N/A	0	8.12%		10	N/A	10	9.93%	
392	Trailers	15	N/A	0	6.59%		12	N/A	20	5.77%	
392	Heavy Trucks	14	N/A	0	7.02%		12	N/A	15	6.83%	
393	Stores Equipment	20	N/A	0	4.84%		20	N/A	0	4.94%	
394	Tools, Shop, and Garage Equipment	15	N/A	0	6.46%		15	N/A	0	6.82%	
395	Laboratory Equipment	10	N/A	0	9.36%		10	N/A	0	11.02%	
396	Power Operated Equipment	12	N/A	0	8.22%		12	N/A	15	3.63%	
397	General Communication Equipment	9	N/A	0	10.76%		10	N/A	0	8.43%	
397	Communication Equipment - Two Way	9	N/A	0	10.70%		10	N/A	0	10.14%	
397	Comm. & Telecomm. Equipment - AES	15	N/A	0	6.51%		15	N/A	0	6.82%	
397	Comm. & Telecomm. Equipment - EMS	15	N/A	0	6.49%		15	N/A	0	6.39%	
398	Miscellaneous Equipment	15	N/A	0	6.28%		15	N/A	0	6.59%	

Common Utility

FERC Account	Account Description	Present (1) Average Life	Curve	Net Salvage	Annual Rate	Notes	Proposed (2) Average Life	Curve	Net Salvage	Annual Rate	Notes
Intangible Plant - Total Company											
301	Intangible Organization Costs	0	N/A	0	0.00%		0	N/A	0	0.00%	
302	Franchise and Consents	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
303	Computer Software 3 Year	3	N/A	0	33.33%		3	N/A	0	37.34%	
303	Computer Software 5 Year	5	N/A	0	20.75%		5	N/A	0	20.97%	
303	Computer Software 7 Year	7	N/A	0	14.29%		7	N/A	0	14.29%	
303	Computer Software 10 Year	10	N/A	0	10.99%		10	N/A	0	9.75%	
303	Computer Software 15 year	0	N/A	0	0.00%	(6)	15	N/A	0	6.75%	(6)
General - Total Company											
390	Structures and Improvements	55	R1.5	-20	2.23%		50	L0	-25	2.60%	
	Structures and Improvements - Leasehold										
390	Improvements	10	SQ	0	6.67%	(7)	15	SQ	0	6.68%	(5)
391	Office Furniture and Equipment	20	N/A	0	5.32%		20	N/A	0	5.15%	
391	Network Equipment	4	N/A	0	25.97%		5	N/A	0	18.09%	
392	Automobiles	10	N/A	0	10.24%		10	N/A	5	7.87%	
392	Light Trucks	12	N/A	0	8.79%		10	N/A	10	8.50%	
392	Trailers	15	N/A	0	6.82%		12	N/A	20	5.11%	
392	Heavy Trucks	14	N/A	0	7.39%		12	N/A	15	6.57%	
393	Stores Equipment	20	N/A	0	5.03%		20	N/A	0	4.96%	
394	Tools, Shop, and Garage Equipment	15	N/A	0	6.84%		15	N/A	0	6.67%	
395	Laboratory Equipment	10	N/A	0	11.61%		10	N/A	0	10.00%	
396	Power Operated Equipment	12	N/A	0	8.55%		12	N/A	15	5.73%	
397	Comm. & Telecomm. Equipment	9	N/A	0	11.90%		10	N/A	0	6.48%	
397	Communication Equipment - Two Way	9	N/A	0	12.06%		10	N/A	0	9.82%	
397	Communication Equipment - Smart Grid	0	N/A	0	0.00%	(6)	10	N/A	0	10.00%	
398	Miscellaneous Equipment	15	N/A	0	7.20%		15	N/A	0	6.13%	

(1) Approved depreciation rates and parameters from Case No. PU-12-813

(2) Proposed depreciation parameters for Average Life, Curve, and Net Salvage are from the Alliance report at Schedule 7.

(3) Amortized over the terms of the franchise agreements or license.

(4) Currently there is no balance in these accounts. In the event plant is added to these accounts, the Company is requests authorization to use the depreciation rate proposed based on the proposed parameters for each account.

(5) Depreciated over lease term.

(6) New subaccount not in prior case.

(7) Although the stated approved rate from PU-12-813 is 10.78%, the assets in this group are depreciated over their appropriate lease term. The assets in this group at the time of filing the last case had an approximate 10 year term. The assets currently in this group were in-serviced in 2016 and have a 15 year life. Therefore, the present annual depreciation rate represents 1 divided by the term of 15 years, or 6.67%.

Electric Utility
Excluding Fully Accrued Assets

FERC Account	Account Description	Adjusted Plant 1/1/2020	Depreciation Reserve 1/1/2020	Est. Future Net Salvage %	Est. Future Net Salvage Amount	Unacrrued Balance	Proposed Remaining Life (Yrs)	Annual Accrual	Depreciation/ Amortization Rate	Reserve Ratio	Note
Intangible Plant - Total Company											
302	Franchise and Consents	$ 254,353,164	$ 92,129,160	0%	$ -	$ 162,224,004	0.00	$ -	0.00%	36.22%	
303	Computer Software 3 Year	-	-	0%	-	-	0.00	-	33.33%	0.00%	
303	Computer Software 5 Year	84,834,782	39,752,559	0%	-	45,082,224	2.35	19,148,393	22.57%	46.86%	
303	Computer Software 7 Year	-	-	0%	-	-	0.00	-	14.29%	0.00%	
303	Computer Software 10 Year	-	-	0%	-	-	0.00	-	10.00%	0.00%	
303	Computer Software 15 Year	-	-	0%	-	-	0.00	-	6.67%	0.00%	
	Total Intangible Plant	339,187,946	131,881,718		-	207,306,228		19,148,393			
Transmission - Total Company											
352	Structures and Improvements	125,866,620	25,783,317	-5%	(6,293,331)	106,376,634	58.07	1,831,898	1.46%	20.48%	
353	Station Equipment	1,282,548,604	356,938,460	-15%	(192,382,291)	1,117,992,434	43.40	25,762,300	2.01%	27.83%	
354	Towers and Fixtures	118,022,279	93,957,416	-35%	(41,307,798)	65,372,661	40.02	1,633,538	1.38%	79.61%	
355	Poles and Fixtures	1,441,024,312	280,060,038	-50%	(720,512,156)	1,881,476,430	54.11	34,770,642	2.41%	19.43%	
356	Overhead Conductors and Devices	595,600,941	155,146,601	-35%	(208,460,329)	648,914,670	57.48	11,290,277	1.90%	26.05%	
357	Underground Conduit	29,883,406	5,845,634	0%	-	24,037,772	60.84	395,084	1.32%	19.56%	
358	Underground Conductor and Devices	36,985,970	10,215,408	-5%	(1,849,298)	28,619,860	38.51	743,203	2.01%	27.62%	
359	Roads and Trails	-	-	0%	-	-	0.00	-	1.67%	0.00%	
	Total Transmission	3,629,932,132	927,946,874		(1,170,805,203)	3,872,790,461		76,426,942			
Distribution - ND Only											
361	Structures and Improvements	1,089,400	541,555	-30%	(326,820)	874,665	42.96	20,362	1.87%	49.71%	
362	Station Equipment	34,463,023	8,450,072	-25%	(8,615,756)	34,628,706	41.74	829,715	2.41%	24.52%	
364	Poles, Towers, and Fixtures	17,242,070	12,946,269	-120%	(20,690,484)	24,986,284	34.23	729,914	4.23%	75.09%	
365	Overhead Conductors and Devices	22,573,598	6,380,243	-25%	(5,643,399)	21,836,754	30.19	723,355	3.20%	28.26%	
366	Underground Conduit	7,319,050	4,253,324	-20%	(1,463,810)	4,529,536	33.07	136,984	1.87%	58.11%	
367	Underground Conductor and Devices	66,455,866	22,068,896	-10%	(6,645,587)	51,032,557	36.28	1,406,599	2.12%	33.21%	
368	Line Transformers	26,472,691	5,532,556	-5%	(1,323,635)	22,263,769	19.77	1,126,051	4.25%	20.90%	
368	Line Capacitors	619,830	309,104	-7%	(43,388)	354,114	15.57	22,737	3.67%	49.87%	
369	Overhead Services	5,645,012	4,372,423	-85%	(4,798,260)	6,070,848	24.23	250,557	4.44%	77.46%	
369	Underground Services	9,384,994	6,014,824	-5%	(469,250)	3,839,420	23.80	161,317	1.72%	64.09%	
370	Meters	3,396,024	(1,010,720)	-5%	(169,801)	4,576,545	7.89	580,130	17.08%	-29.76%	
373	Street Lighting and Signal Systems	3,206,047	1,105,849	-40%	(1,282,419)	3,382,617	23.69	142,761	4.45%	34.49%	
	Total Distribution - ND Only	$ 197,867,604	$ 70,964,396		$ (51,472,608)	$ 178,375,816		$ 6,130,480			

FERC Account	Account Description	Adjusted Plant 1/1/2020	Depreciation Reserve 1/1/2020	Est. Future Net Salvage %	Est. Future Net Salvage Amount	Unacrrued Balance	Proposed Remaining Life (Yrs)	Annual Accrual	Depreciation/ Amortization Rate	Reserve Ratio	Note
General - Total Company											
390	Structures and Improvements	$ 72,970,511	$ 26,628,536	-20%	$ (14,594,102)	$ 60,936,077	37.91	$ 1,607,403	2.20%	36.49%	
	Structures and Improvements - Leasehold										
390	Improvements	1,075,433	352,898	0%	-	722,535	8.22	87,919	8.18%	32.81%	
391	Office Furniture and Equipment	31,852,266	19,329,498	0%	-	12,522,768	8.94	1,400,602	4.40%	60.68%	
391	Network Equipment	48,587,258	28,849,203	0%	-	19,738,055	3.02	6,539,973	13.46%	59.38%	
392	Automobiles	6,383,510	1,412,787	5%	319,175	4,651,547	7.66	607,419	9.52%	22.13%	
392	Light Trucks	26,363,136	11,863,590	10%	2,636,314	11,863,232	4.53	2,618,110	9.93%	45.00%	
392	Trailers	20,963,111	9,126,295	20%	4,192,622	7,644,193	6.32	1,209,136	5.77%	43.54%	
392	Heavy Trucks	106,143,649	46,412,379	15%	15,921,547	43,809,723	6.04	7,254,557	6.83%	43.73%	
393	Stores Equipment	1,624,278	923,711	0%	-	700,567	8.72	80,302	4.94%	56.87%	
394	Tools, Shop, and Garage Equipment	99,182,174	40,454,197	0%	-	58,727,977	8.68	6,764,978	6.82%	40.79%	
395	Laboratory Equipment	2,570,365	1,304,300	0%	-	1,266,064	4.47	283,148	11.02%	50.74%	
396	Power Operated Equipment	51,534,536	33,283,045	15%	7,730,180	10,521,311	5.63	1,870,178	3.63%	64.58%	
397	General Communication Equipment	11,245,667	8,410,341	0%	-	2,835,326	2.99	948,249	8.43%	74.79%	
397	Communication Equipment - Two Way	58,409,389	13,600,117	0%	-	44,809,272	7.57	5,920,122	10.14%	23.28%	
397	Comm. & Telecomm. Equipment - AES	6,539,567	4,369,037	0%	-	2,170,529	4.87	445,789	6.82%	66.81%	
397	Comm. & Telecomm. Equipment - EMS	41,674,693	16,120,977	0%	-	25,553,716	9.59	2,664,843	6.39%	38.68%	
398	Miscellaneous Equipment	1,597,851	571,524	0%	-	1,026,327	9.75	105,240	6.59%	35.77%	
	Total General	588,717,392	263,012,436		16,205,737	309,499,220		40,407,968			
	Total Electric Utility	$ 4,755,705,075	$ 1,393,805,425		$ (1,206,072,074)	$ 4,567,971,725		$ 142,113,783			

Common Utility
Excluding Fully Accrued Assets

FERC Account	Account Description	Adjusted Plant 1/1/2020	Depreciation Reserve 1/1/2020	Est. Future Net Salvage %	Est. Future Net Salvage Amount	Unacrrued Balance	Proposed Remaining Life (Yrs)	Annual Accrual	Depreciation/ Amortization Rate	Reserve Ratio	Note
Intangible Plant - Total Company											
301	Intangible Organization Costs	$ 100,608	$ -	0%	$ -	$ 100,608	0.00	$ -	0.00%	0.00%	
302	Franchise and Consents	-	-	0%	-	-	0.00	-	0.00%	0.00%	
303	Computer Software 3 Year	9,540,269	3,532,506	0%	-	6,007,763	1.69	3,562,549	37.34%	37.03%	
303	Computer Software 5 Year	140,166,559	53,222,112	0%	-	86,944,447	2.96	29,399,316	20.97%	37.97%	
303	Computer Software 7 Year	-	-	0%	-	-	0.00	-	14.29%	0.00%	
303	Computer Software 10 Year	11,291,873	7,150,132	0%	-	4,141,742	3.76	1,100,465	9.75%	63.32%	
303	Computer Software 15 year	165,829,929	30,154,197	0%	-	135,675,732	12.13	11,188,909	6.75%	18.18%	
	Total Intangible Plant	326,929,238	94,058,947		-	232,870,291		45,251,238			
General - Total Company											
390	Structures and Improvements	187,900,208	24,171,229	-25%	(46,975,052)	210,704,032	43.19	4,878,206	2.60%	12.86%	
	Structures and Improvements - Leasehold										
390	Improvements	18,094,329	4,114,677	0%	-	13,979,652	11.56	1,209,274	6.68%	22.74%	
391	Office Furniture and Equipment	25,562,914	10,017,231	0%	-	15,545,683	11.81	1,316,171	5.15%	39.19%	
391	Network Equipment	128,574,645	65,336,905	0%	-	63,237,740	2.72	23,259,034	18.09%	50.82%	
392	Automobiles	1,482,184	768,356	5%	74,109	639,719	5.48	116,643	7.87%	51.84%	
392	Light Trucks	3,090,043	1,496,680	10%	309,004	1,284,359	4.89	262,673	8.50%	48.44%	
392	Trailers	614,710	351,557	20%	122,942	140,211	4.46	31,441	5.11%	57.19%	
392	Heavy Trucks	4,049,469	1,679,616	15%	607,420	1,762,433	6.62	266,225	6.57%	41.48%	
393	Stores Equipment	246,162	79,322	0%	-	166,840	13.67	12,209	4.96%	32.22%	
394	Tools, Shop, and Garage Equipment	4,630,324	1,932,092	0%	-	2,698,232	8.74	308,718	6.67%	41.73%	
395	Laboratory Equipment	-	-	0%	-	-	0.00	-	10.00%	0.00%	
396	Power Operated Equipment	1,027,122	494,263	15%	154,068	378,791	6.43	58,898	5.73%	48.12%	
397	Comm. & Telecomm. Equipment	148,850	120,071	0%	-	28,778	2.99	9,639	6.48%	80.67%	
397	Communication Equipment - Two Way	76,870	27,805	0%	-	49,065	6.50	7,548	9.82%	36.17%	
397	Communication Equipment - Smart Grid	529,266	33,748	0%	-	495,518	9.50	52,160	10.00%	6.38%	
398	Miscellaneous Equipment	229,106	190,365	0%	-	38,741	2.76	14,054	6.13%	83.09%	
	Total General	376,256,202	110,813,918		(45,707,508)	311,149,792		31,802,893			
	Total Common Utility	703,185,439	204,872,865		(45,707,508)	544,020,083		77,054,132			
	Total Electric and Common	$ 5,458,890,515	$ 1,598,678,289		$ (1,251,779,582)	$ 5,111,991,807		$ 219,167,915			

North Dakota

2021 ACCRUAL COMPARISON

	Present (a)	75% DOE (b)	90% DOE (c)	Average (d) = avg (b)(c)	Difference = (d) - (a)
Monticello	$276,513	$1,291,695	$857,464	$1,074,580	$798,067
Prairie Island Unit 1	$0	$808,393	$655,843	$732,118	$732,118
Prairie Island Unit 2	$0	$513,637	$372,971	$443,304	$443,304
TOTAL	$276,513	$2,613,726	$1,886,277	$2,250,002	$1,973,489

2021 SUMMARY

	Operational Earnings Rate	Post-Shutdown Earnings Rate	Market Value Balance 6/30/2020	Book Value 6/30/2020	Unrealized Gain/Loss 6/30/2020	Tax-Effect Adjustment	Tax-Adjusted Fund Balance 6/30/2020	2021 Proforma Decommissioning Accrual
Monticello	4.68%	3.82%	$51,901,470	$37,950,615	$13,950,856	$3,883,918	$48,017,552	**$ 1,291,695**
Prairie Island Unit 1	4.67%	3.53%	$34,423,105	$25,302,319	9,120,786	2,539,227	31,883,878	**808,393**
Prairie Island Unit 2	4.73%	3.44%	$36,919,829	$26,798,304	10,121,526	2,817,833	34,101,997	**513,637**
TOTAL DECOMMISSIONING ACCRUAL			**$123,244,404**	**$90,051,237**	**$33,193,167**	**$9,240,978**	**$114,003,426**	**$2,613,726**

INPUT DATA

Escalation Rate (Labor)	4.03%
Escalation Rate (Non-Labor)	2.83%
Escalation Rate (PIIC)	0.00%
Jurisdictional Factor	5.1744%
Tax Rate for tax-effect adjustment	27.84%

AMOUNT TO RECOVER

	LABOR				NON-LABOR				PIIC Payment						
	Cost Estimate Nominal $s	Jurisdictional Cost in Nominal $s	Escalation Factor	Jurisdictional Cost in Future $'s	Cost Estimate Nominal $s	Jurisdictional Cost in Nominal $s	Escalation Factor	Jurisdictional Cost in Future $'s	Cost Estimate Nominal $s	Jurisdictional Cost in Nominal $s	Escalation Factor	Jurisdictional Cost in Future $'s	Total Cost Estimate Nominal $s	Total Jurisdictional Cost in Nominal $s	Total Jurisdictional Cost in Future $'s
Monticello															
Factors	*2017*	*5.1744%*	*4.03%*				*2.83%*				*0.00%*				
2030	$21,103,620	$1,091,976	1.6713	$1,825,020	$8,935,561	$462,358	1.4373	$664,547	$0	$0	1.0000	$0	$30,039,182	$1,554,334	$2,489,566
2031	72,416,242	3,747,073	1.7387	6,515,035	42,961,353	2,222,973	1.4780	3,285,553	0	0	1.0000	0	115,377,595	5,970,045	9,800,589
2032	78,476,357	4,060,645	1.8088	7,344,894	102,263,189	5,291,460	1.5198	8,041,960	0	0	1.0000	0	180,739,546	9,352,104	15,386,854
2033	78,663,227	4,070,314	1.8816	7,658,703	100,155,666	5,182,409	1.5629	8,099,587	0	0	1.0000	0	178,818,892	9,252,723	15,758,289
2034	66,380,423	3,434,758	1.9575	6,723,539	38,894,671	2,012,548	1.6071	3,234,366	0	0	1.0000	0	105,275,094	5,447,306	9,957,905
2035	86,879,803	4,495,469	2.0364	9,154,572	113,147,091	5,854,631	1.6526	9,675,364	0	0	1.0000	0	200,026,894	10,350,100	18,829,936
2036	50,307,504	2,603,088	2.1184	5,514,383	20,688,337	1,070,488	1.6993	1,819,080	0	0	1.0000	0	70,995,841	3,673,576	7,333,462
2037	34,623,126	1,791,523	2.2038	3,948,159	14,196,883	734,597	1.7474	1,283,635	0	0	1.0000	0	48,820,010	2,526,120	5,231,794
2038	25,156,478	1,301,685	2.2926	2,984,244	13,523,979	699,779	1.7969	1,257,432	0	0	1.0000	0	38,680,457	2,001,464	4,241,676
2039	1,500,016	77,616	2.3850	185,114	612,162	31,675	1.8477	58,527	0	0	1.0000	0	2,112,178	109,292	243,641
2040	1,516,203	78,454	2.4811	194,652	618,018	31,978	1.9000	60,759	0	0	1.0000	0	2,134,221	110,432	255,411
2041	1,500,016	77,616	2.5811	200,335	612,162	31,675	1.9538	61,887	0	0	1.0000	0	2,112,178	109,292	262,223
2042	1,500,016	77,616	2.6851	208,407	612,162	31,675	2.0091	63,639	0	0	1.0000	0	2,112,178	109,292	272,046
2043	1,500,016	77,616	2.7933	216,805	612,162	31,675	2.0659	65,438	0	0	1.0000	0	2,112,178	109,292	282,243
2044	1,516,203	78,454	2.9059	227,979	618,018	31,978	2.1244	67,935	0	0	1.0000	0	2,134,221	110,432	295,914
2045	1,500,016	77,616	3.0230	234,634	612,162	31,675	2.1845	69,195	0	0	1.0000	0	2,112,178	109,292	303,829
2046	1,500,016	77,616	3.1448	244,087	612,162	31,675	2.2463	71,153	0	0	1.0000	0	2,112,178	109,292	315,240
2047	1,500,016	77,616	3.2716	253,929	612,162	31,675	2.3099	73,167	0	0	1.0000	0	2,112,178	109,292	327,096
2048	2,179,848	112,793	3.4034	383,880	2,608,953	134,996	2.3753	320,657	0	0	1.0000	0	4,788,801	247,790	704,537
2049	1,500,016	77,616	3.5406	274,808	612,162	31,675	2.4425	77,367	0	0	1.0000	0	2,112,178	109,292	352,175
2050	2,993,217	154,880	3.6833	570,468	5,091,766	263,466	2.5116	661,721	0	0	1.0000	0	8,084,983	418,346	1,232,189
2051	2,993,217	154,880	3.8317	593,452	5,091,766	263,466	2.5827	680,454	0	0	1.0000	0	8,084,983	418,346	1,273,906
2052	3,871,904	200,346	3.9861	798,599	7,685,122	397,655	2.6558	1,056,093	0	0	1.0000	0	11,557,026	598,001	1,854,693
2053	4,502,592	232,980	4.1468	966,122	9,619,891	497,767	2.7310	1,359,402	0	0	1.0000	0	14,122,483	730,747	2,325,524
2054	3,208,842	166,037	4.3139	716,266	5,738,641	296,938	2.8082	833,860	0	0	1.0000	0	8,947,483	462,974	1,550,127
2055	4,286,967	221,823	4.4877	995,474	8,973,016	464,296	2.8877	1,340,747	0	0	1.0000	0	13,259,983	686,119	2,336,221
2056	4,734,404	244,975	4.6686	1,143,689	10,272,622	531,542	2.9694	1,578,360	0	0	1.0000	0	15,007,026	776,517	2,722,050
2057	1,483,425	76,758	4.8567	372,789	562,389	29,100	3.0535	88,857	0	0	1.0000	0	2,045,814	105,858	461,646
2058	1,483,425	76,758	5.0525	387,818	562,389	29,100	3.1399	91,371	0	0	1.0000	0	2,045,814	105,858	479,189
2059	1,483,425	76,758	5.2561	403,446	562,389	29,100	3.2287	93,955	0	0	1.0000	0	2,045,814	105,858	497,401
2060	1,499,612	77,595	5.4679	424,283	568,245	29,403	3.3201	97,621	0	0	1.0000	0	2,067,857	106,998	521,904
2061	1,483,425	76,758	5.6882	436,613	562,389	29,100	3.4141	99,350	0	0	1.0000	0	2,045,814	105,858	535,963
2062	1,483,425	76,758	5.9175	454,213	562,389	29,100	3.5107	102,161	0	0	1.0000	0	2,045,814	105,858	556,375
2063	1,483,425	76,758	6.1560	472,520	562,389	29,100	3.6100	105,051	0	0	1.0000	0	2,045,814	105,858	577,571
2064	1,499,612	77,595	6.4040	496,920	568,245	29,403	3.7122	109,150	0	0	1.0000	0	2,067,857	106,998	606,070
2065	1,483,425	76,758	6.6621	511,367	562,389	29,100	3.8173	111,084	0	0	1.0000	0	2,045,814	105,858	622,451
2066	1,483,425	76,758	6.9306	531,977	562,389	29,100	3.9253	114,226	0	0	1.0000	0	2,045,814	105,858	646,203
2067	1,483,425	76,758	7.2099	553,415	562,389	29,100	4.0364	117,459	0	0	1.0000	0	2,045,814	105,858	670,874
2068	1,499,612	77,595	7.5005	582,003	568,245	29,403	4.1506	122,040	0	0	1.0000	0	2,067,857	106,998	704,043
2069	1,483,425	76,758	7.8027	598,917	562,389	29,100	4.2681	124,202	0	0	1.0000	0	2,045,814	105,858	723,119
2070	1,483,425	76,758	8.1172	623,057	562,389	29,100	4.3889	127,717	0	0	1.0000	0	2,045,814	105,858	750,774
2071	1,483,425	76,758	8.4443	648,165	562,389	29,100	4.5131	131,331	0	0	1.0000	0	2,045,814	105,858	779,496
2072	1,499,612	77,595	8.7846	681,643	568,245	29,403	4.6408	136,454	0	0	1.0000	0	2,067,857	106,998	818,097
2073	1,483,425	76,758	9.1386	701,458	562,389	29,100	4.7721	138,868	0	0	1.0000	0	2,045,814	105,858	840,326
2074	1,483,425	76,758	9.5069	729,727	562,389	29,100	4.9072	142,800	0	0	1.0000	0	2,045,814	105,858	872,527
2075	1,483,425	76,758	9.8901	759,141	562,389	29,100	5.0460	146,839	0	0	1.0000	0	2,045,814	105,858	905,980
2076	1,499,612	77,595	10.2886	798,346	568,245	29,403	5.1888	152,566	0	0	1.0000	0	2,067,857	106,998	950,913
2077	1,483,425	76,758	10.7033	821,560	562,389	29,100	5.3357	155,269	0	0	1.0000	0	2,045,814	105,858	976,829
2078	1,961,857	101,513	11.1346	1,130,311	1,982,353	102,574	5.4867	562,793	0	0	1.0000	0	3,944,210	204,087	1,693,104
2079	2,057,543	106,465	11.5833	1,233,211	2,269,412	117,427	5.6420	662,525	0	0	1.0000	0	4,326,955	223,892	1,895,736
2080	1,978,045	102,351	12.0501	1,233,340	1,988,167	102,875	5.8016	596,838	0	0	1.0000	0	3,966,212	205,226	1,830,179
2081	1,961,857	101,513	12.5357	1,272,542	1,982,353	102,574	5.9658	611,936	0	0	1.0000	0	3,944,210	204,087	1,884,478
2082	1,961,857	101,513	13.0409	1,323,826	1,982,353	102,574	6.1346	629,250	0	0	1.0000	0	3,944,210	204,087	1,953,077
2083	2,057,543	106,465	13.5665	1,444,351	2,269,412	117,427	6.3083	740,767	0	0	1.0000	0	4,326,955	223,892	2,185,119
2084	1,978,045	102,351	14.1132	1,444,501	1,988,167	102,875	6.4868	667,328	0	0	1.0000	0	3,966,212	205,226	2,111,829
2085	1,961,857	101,513	14.6820	1,490,420	1,982,353	102,574	6.6704	684,209	0	0	1.0000	0	3,944,210	204,087	2,174,629
2086	1,961,857	101,513	15.2737	1,550,486	1,982,353	102,574	6.8591	703,565	0	0	1.0000	0	3,944,210	204,087	2,254,051
2087	2,057,543	106,465	15.8892	1,691,637	2,269,412	117,427	7.0532	828,239	0	0	1.0000	0	4,326,955	223,892	2,519,876
2088	2,641,689	136,690	16.5295	2,259,423	3,979,101	205,893	7.2528	1,493,299	0	0	1.0000	0	6,620,790	342,583	3,752,722
2089	1,961,857	101,513	17.1957	1,745,594	1,982,353	102,574	7.4581	765,007	0	0	1.0000	0	3,944,210	204,087	2,510,601
2090	1,674,798	86,660	17.8887	1,550,234	1,121,175	58,014	7.6692	444,918	0	0	1.0000	0	2,795,973	144,674	1,995,152
2091	(2,390,110)	(123,673)	18.6096	(2,301,501)	23,380,010	1,209,765	7.8862	9,540,445	0	0	1.0000	0	20,989,900	1,086,092	7,238,944
	$612,869,402	$31,712,033		$89,135,006	$578,980,274	$29,958,490		$67,301,377	$0	$0		$0	$1,191,849,676	$61,670,523	$156,436,383

AMOUNT TO RECOVER

	LABOR				NON-LABOR				PIIC Payment						
	Cost Estimate Nominal $s	Jurisdictional Cost in Nominal $s	Escalation Factor	Jurisdictional Cost in Future $'s	Cost Estimate Nominal $s	Jurisdictional Cost in Nominal $s	Escalation Factor	Jurisdictional Cost in Future $'s	Cost Estimate Nominal $s	Jurisdictional Cost in Nominal $s	Escalation Factor	Jurisdictional Cost in Future $'s	Total Cost Estimate Nominal $s	Total Jurisdictional Cost in Nominal $s	Total Jurisdictional Cost in Future $'s
Prairie Island Unit 1															
Factors	*2017*	*5.1744%*	*4.03%*				*2.83%*				*0.00%*				
2033	$22,324,352	$1,155,141	1.8816	$2,173,513	$9,728,959	$503,411	1.5629	$786,781	$1,250,000	$64,679	1.0000	$64,679	$33,303,311	$1,723,231	$3,024,974
2034	63,582,247	3,289,971	1.9575	6,440,117	33,397,619	1,728,111	1.6071	2,777,247	1,250,000	64,679	1.0000	64,679	98,229,866	5,082,761	9,282,044
2035	65,877,290	3,408,724	2.0364	6,941,526	81,239,936	4,203,642	1.6526	6,946,939	1,250,000	64,679	1.0000	64,679	148,367,226	7,677,046	13,953,144
2036	57,759,315	2,988,672	2.1184	6,331,202	65,595,019	3,394,119	1.6993	5,767,626	1,250,000	64,679	1.0000	64,679	124,604,334	6,447,470	12,163,507
2037	38,110,947	1,971,995	2.2038	4,345,883	36,889,671	1,908,802	1.7474	3,335,441	1,250,000	64,679	1.0000	64,679	76,250,618	3,945,477	7,746,004
2038	13,207,914	683,424	2.2926	1,566,818	18,994,691	982,853	1.7969	1,766,088	1,250,000	64,679	1.0000	64,679	33,452,605	1,730,956	3,397,586
2039	36,035,855	1,864,623	2.3850	4,447,125	76,476,728	3,957,177	1.8477	7,311,675	1,250,000	64,679	1.0000	64,679	113,762,582	5,886,479	11,823,480
2040	31,919,556	1,651,631	2.4811	4,097,861	13,365,606	691,584	1.9000	1,314,009	1,250,000	64,679	1.0000	64,679	46,535,162	2,407,894	5,476,550
2041	17,321,318	896,266	2.5811	2,313,353	8,020,873	415,028	1.9538	810,882	1,250,000	64,679	1.0000	64,679	26,592,191	1,375,974	3,188,915
2042	12,531,952	648,448	2.6851	1,741,147	10,243,700	530,045	2.0091	1,064,914	1,250,000	64,679	1.0000	64,679	24,025,652	1,243,172	2,870,740
2043	6,294,452	325,697	2.7933	909,770	5,067,672	262,219	2.0659	541,719	1,250,000	64,679	1.0000	64,679	12,612,125	652,596	1,516,168
2044	804,798	41,643	2.9059	121,011	514,011	26,597	2.1244	56,502	1,250,000	64,679	1.0000	64,679	2,568,809	132,919	242,192
2045	796,451	41,211	3.0230	124,581	505,298	26,146	2.1845	57,116	1,250,000	64,679	1.0000	64,679	2,551,749	132,037	246,377
2046	796,451	41,211	3.1448	129,601	505,298	26,146	2.2463	58,731	1,250,000	64,679	1.0000	64,679	2,551,749	132,037	253,012
2047	796,451	41,211	3.2716	134,827	505,298	26,146	2.3099	60,394	1,250,000	64,679	1.0000	64,679	2,551,749	132,037	259,900
2048	804,798	41,643	3.4034	141,728	514,011	26,597	2.3753	63,175	1,250,000	64,679	1.0000	64,679	2,568,809	132,919	269,583
2049	796,451	41,211	3.5406	145,912	505,298	26,146	2.4425	63,861	1,250,000	64,679	1.0000	64,679	2,551,749	132,037	274,453
2050	796,451	41,211	3.6833	151,793	505,298	26,146	2.5116	65,668	1,250,000	64,679	1.0000	64,679	2,551,749	132,037	282,141
2051	796,451	41,211	3.8317	157,909	505,298	26,146	2.5827	67,527	1,250,000	64,679	1.0000	64,679	2,551,749	132,037	290,115
2052	804,798	41,643	3.9861	165,994	514,011	26,597	2.6558	70,636	1,250,000	64,679	1.0000	64,679	2,568,809	132,919	301,309
2053	892,138	46,162	4.1468	191,426	792,357	40,999	2.7310	111,969	1,250,000	64,679	1.0000	64,679	2,934,495	151,841	368,075
2054	987,824	51,114	4.3139	220,499	1,079,416	55,853	2.8082	156,846	1,250,000	64,679	1.0000	64,679	3,317,240	171,646	442,024
2055	987,824	51,114	4.4877	229,382	1,079,416	55,853	2.8877	161,286	1,250,000	64,679	1.0000	64,679	3,317,240	171,646	455,348
2056	1,044,014	54,021	4.6686	252,202	1,231,659	63,730	2.9694	189,241	1,250,000	64,679	1.0000	64,679	3,525,673	182,431	506,123
2057	939,981	48,638	4.8567	236,220	935,887	48,426	3.0535	147,869	1,250,000	64,679	1.0000	64,679	3,125,868	161,743	448,768
2058	1,083,510	56,065	5.0525	283,267	1,366,475	70,706	3.1399	222,010	1,250,000	64,679	1.0000	64,679	3,699,985	191,450	569,957
2059	939,981	48,638	5.2561	255,646	935,887	48,426	3.2287	156,353	1,250,000	64,679	1.0000	64,679	3,125,868	161,743	476,679
2060	900,484	46,594	5.4679	254,773	801,070	41,450	3.3201	137,619	1,250,000	64,679	1.0000	64,679	2,951,554	152,724	457,071
2061	987,824	51,114	5.6882	290,744	1,079,416	55,853	3.4141	190,687	1,250,000	64,679	1.0000	64,679	3,317,240	171,646	546,110
2062	987,824	51,114	5.9175	302,464	1,079,416	55,853	3.5107	196,082	1,250,000	64,679	1.0000	64,679	3,317,240	171,646	563,226
2063	939,981	48,638	6.1560	299,415	935,887	48,426	3.6100	174,818	1,250,000	64,679	1.0000	64,679	3,125,868	161,743	538,913
2064	996,170	51,545	6.4040	330,097	1,088,129	56,304	3.7122	209,010	1,250,000	64,679	1.0000	64,679	3,334,299	172,528	603,786
2065	987,824	51,114	6.6621	340,523	1,079,416	55,853	3.8173	213,207	1,250,000	64,679	1.0000	64,679	3,317,240	171,646	618,410
2066	939,981	48,638	6.9306	337,090	935,887	48,426	3.9253	190,087	1,250,000	64,679	1.0000	64,679	3,125,868	161,743	591,856
2067	987,824	51,114	7.2099	368,523	1,079,416	55,853	4.0364	225,444	1,250,000	64,679	1.0000	64,679	3,317,240	171,646	658,647
2068	996,170	51,545	7.5005	386,616	1,088,129	56,304	4.1506	233,694	1,250,000	64,679	1.0000	64,679	3,334,299	172,528	684,989
2069	939,981	48,638	7.8027	379,507	935,887	48,426	4.2681	206,687	1,250,000	64,679	1.0000	64,679	3,125,868	161,743	650,874
2070	987,824	51,114	8.1172	414,899	1,079,416	55,853	4.3889	245,132	1,250,000	64,679	1.0000	64,679	3,317,240	171,646	724,710
2071	987,824	51,114	8.4443	431,618	1,079,416	55,853	4.5131	252,069	1,250,000	64,679	1.0000	64,679	3,317,240	171,646	748,366
2072	996,170	51,545	8.7846	452,805	1,088,129	56,304	4.6408	261,294	1,250,000	64,679	1.0000	64,679	3,334,299	172,528	778,779
2073	987,824	51,114	9.1386	467,106	1,079,416	55,853	4.7721	266,535	1,250,000	64,679	1.0000	64,679	3,317,240	171,646	798,320
2074	987,824	51,114	9.5069	485,931	1,079,416	55,853	4.9072	274,081	1,250,000	64,679	1.0000	64,679	3,317,240	171,646	824,691
2075	1,319,646	68,283	9.8901	675,327	2,074,884	107,362	5.0460	541,748	1,250,000	64,679	1.0000	64,679	4,644,530	240,324	1,281,754
2076	996,170	51,545	10.2886	530,330	1,088,129	56,304	5.1888	292,148	1,250,000	64,679	1.0000	64,679	3,334,299	172,528	887,157
2077	987,974	51,121	10.7033	547,166	12,727,775	658,580	5.3357	3,513,986	1,250,000	64,679	1.0000	64,679	14,965,749	774,381	4,125,832
2078	(1,417,257)	(73,334)	11.1346	(816,543)	3,195,063	165,324	5.4867	907,082	0	0	1.0000	0	1,777,806	91,990	90,539
	$395,531,633	$20,466,207		$50,728,706	$405,609,673	$20,987,681		$42,663,918	$56,250,000	$2,910,574		$2,910,574	$857,391,305	$44,364,463	$96,303,198

AMOUNT TO RECOVER

	LABOR				NON-LABOR				PHC Payment						
	Cost Estimate Nominal $s	Jurisdictional Cost in Nominal $s	Escalation Factor	Jurisdictional Cost in Future $'s	Cost Estimate Nominal $s	Jurisdictional Cost in Nominal $s	Escalation Factor	Jurisdictional Cost in Future $'s	Cost Estimate Nominal $s	Jurisdictional Cost in Nominal $s	Escalation Factor	Jurisdictional Cost in Future $'s	Total Cost Estimate Nominal $s	Total Jurisdictional Cost in Nominal $s	Total Jurisdictional Cost in Future $'s
Prairie Island Unit 2															
Factors	*2017*	*5.1744%*	*4.03%*				*2.83%*				*0.00%*				
2034	$7,760,265	$401,544	1.9575	$786,022	$4,479,535	$231,787	1.6071	$372,505	$1,250,000	$64,679	1.0000	$64,679	$13,489,800	$698,010	$1,223,206
2035	46,911,429	2,427,363	2.0364	4,943,083	35,601,339	1,842,139	1.6526	3,044,319	1,250,000	64,679	1.0000	64,679	83,762,768	4,334,182	8,052,082
2036	67,514,044	3,493,416	2.1184	7,400,452	86,298,832	4,465,407	1.6993	7,588,066	1,250,000	64,679	1.0000	64,679	155,062,875	8,023,502	15,053,198
2037	70,896,041	3,668,412	2.2038	8,084,447	70,558,163	3,650,929	1.7474	6,379,634	1,250,000	64,679	1.0000	64,679	142,704,204	7,384,021	14,528,760
2038	46,603,528	2,411,432	2.2926	5,528,448	42,782,149	2,213,700	1.7969	3,977,797	1,250,000	64,679	1.0000	64,679	90,635,677	4,689,811	9,570,925
2039	40,663,625	2,104,080	2.3850	5,018,231	77,452,618	4,007,673	1.8477	7,404,977	1,250,000	64,679	1.0000	64,679	119,366,242	6,176,432	12,487,887
2040	37,417,177	1,936,097	2.4811	4,803,651	14,193,501	734,422	1.9000	1,395,402	1,250,000	64,679	1.0000	64,679	52,860,679	2,735,199	6,263,732
2041	23,327,583	1,207,052	2.5811	3,115,521	13,070,130	676,295	1.9538	1,321,345	1,250,000	64,679	1.0000	64,679	37,647,713	1,948,026	4,501,546
2042	14,406,921	745,465	2.6851	2,001,648	15,753,640	815,149	2.0091	1,637,716	1,250,000	64,679	1.0000	64,679	31,410,561	1,625,294	3,704,044
2043	7,172,862	371,149	2.7933	1,036,731	7,649,042	395,789	2.0659	817,659	1,250,000	64,679	1.0000	64,679	16,071,904	831,617	1,919,070
2044	804,798	41,643	2.9059	121,011	514,011	26,597	2.1244	56,502	1,250,000	64,679	1.0000	64,679	2,568,809	132,919	242,192
2045	796,451	41,211	3.0230	124,581	505,298	26,146	2.1845	57,116	1,250,000	64,679	1.0000	64,679	2,551,749	132,037	246,377
2046	796,451	41,211	3.1448	129,601	505,298	26,146	2.2463	58,731	1,250,000	64,679	1.0000	64,679	2,551,749	132,037	253,012
2047	796,451	41,211	3.2716	134,827	505,298	26,146	2.3099	60,394	1,250,000	64,679	1.0000	64,679	2,551,749	132,037	259,900
2048	804,798	41,643	3.4034	141,728	514,011	26,597	2.3753	63,175	1,250,000	64,679	1.0000	64,679	2,568,809	132,919	269,583
2049	796,451	41,211	3.5406	145,912	505,298	26,146	2.4425	63,861	1,250,000	64,679	1.0000	64,679	2,551,749	132,037	274,453
2050	796,451	41,211	3.6833	151,793	505,298	26,146	2.5116	65,668	1,250,000	64,679	1.0000	64,679	2,551,749	132,037	282,141
2051	796,451	41,211	3.8317	157,909	505,298	26,146	2.5827	67,527	1,250,000	64,679	1.0000	64,679	2,551,749	132,037	290,115
2052	804,798	41,643	3.9861	165,994	514,011	26,597	2.6558	70,636	1,250,000	64,679	1.0000	64,679	2,568,809	132,919	301,309
2053	892,138	46,162	4.1468	191,426	792,358	40,999	2.7310	111,969	1,250,000	64,679	1.0000	64,679	2,934,496	151,841	368,075
2054	987,824	51,114	4.3139	220,499	1,079,416	55,853	2.8082	156,846	1,250,000	64,679	1.0000	64,679	3,317,240	171,646	442,024
2055	987,824	51,114	4.4877	229,382	1,079,416	55,853	2.8877	161,286	1,250,000	64,679	1.0000	64,679	3,317,240	171,646	455,348
2056	1,044,014	54,021	4.6686	252,202	1,231,659	63,730	2.9694	189,241	1,250,000	64,679	1.0000	64,679	3,525,673	182,431	506,123
2057	939,981	48,638	4.8567	236,220	935,887	48,426	3.0535	147,869	1,250,000	64,679	1.0000	64,679	3,125,868	161,743	448,768
2058	1,083,510	56,065	5.0525	283,267	1,366,475	70,706	3.1399	222,010	1,250,000	64,679	1.0000	64,679	3,699,985	191,450	569,957
2059	939,981	48,638	5.2561	255,646	935,887	48,426	3.2287	156,353	1,250,000	64,679	1.0000	64,679	3,125,868	161,743	476,679
2060	900,484	46,594	5.4679	254,773	801,070	41,450	3.3201	137,619	1,250,000	64,679	1.0000	64,679	2,951,554	152,724	457,071
2061	987,824	51,114	5.6882	290,744	1,079,416	55,853	3.4141	190,687	1,250,000	64,679	1.0000	64,679	3,317,240	171,646	546,110
2062	987,824	51,114	5.9175	302,464	1,079,416	55,853	3.5107	196,082	1,250,000	64,679	1.0000	64,679	3,317,240	171,646	563,226
2063	939,981	48,638	6.1560	299,415	935,887	48,426	3.6100	174,818	1,250,000	64,679	1.0000	64,679	3,125,868	161,743	538,913
2064	996,170	51,545	6.4040	330,097	1,088,129	56,304	3.7122	209,010	1,250,000	64,679	1.0000	64,679	3,334,299	172,528	603,786
2065	987,824	51,114	6.6621	340,523	1,079,416	55,853	3.8173	213,207	1,250,000	64,679	1.0000	64,679	3,317,240	171,646	618,410
2066	939,981	48,638	6.9306	337,090	935,887	48,426	3.9253	190,087	1,250,000	64,679	1.0000	64,679	3,125,868	161,743	591,856
2067	987,824	51,114	7.2099	368,523	1,079,416	55,853	4.0364	225,444	1,250,000	64,679	1.0000	64,679	3,317,240	171,646	658,647
2068	996,170	51,545	7.5005	386,616	1,088,129	56,304	4.1506	233,694	1,250,000	64,679	1.0000	64,679	3,334,299	172,528	684,989
2069	939,981	48,638	7.8027	379,507	935,887	48,426	4.2681	206,687	1,250,000	64,679	1.0000	64,679	3,125,868	161,743	650,874
2070	987,824	51,114	8.1172	414,899	1,079,416	55,853	4.3889	245,132	1,250,000	64,679	1.0000	64,679	3,317,240	171,646	724,710
2071	987,824	51,114	8.4443	431,618	1,079,416	55,853	4.5131	252,069	1,250,000	64,679	1.0000	64,679	3,317,240	171,646	748,366
2072	996,170	51,545	8.7846	452,805	1,088,129	56,304	4.6408	261,294	1,250,000	64,679	1.0000	64,679	3,334,299	172,528	778,779
2073	987,824	51,114	9.1386	467,106	1,079,416	55,853	4.7721	266,535	1,250,000	64,679	1.0000	64,679	3,317,240	171,646	798,320
2074	987,824	51,114	9.5069	485,931	1,079,416	55,853	4.9072	274,081	1,250,000	64,679	1.0000	64,679	3,317,240	171,646	824,691
2075	1,319,646	68,283	9.8901	675,327	2,074,884	107,362	5.0460	541,748	1,250,000	64,679	1.0000	64,679	4,644,530	240,324	1,281,754
2076	996,170	51,545	10.2886	530,330	1,088,129	56,304	5.1888	292,148	1,250,000	64,679	1.0000	64,679	3,334,299	172,528	887,157
2077	987,824	51,114	10.7033	547,083	12,727,675	658,575	5.3357	3,513,958	1,250,000	64,679	1.0000	64,679	14,965,499	774,368	4,125,721
2078	(1,417,257)	(73,334)	11.1346	(816,543)	3,195,063	165,324	5.4867	907,082	0	-	1.0000	-	1,777,806	91,990	90,539
	$393,239,759	$20,347,618		$52,138,540	$414,428,049	$21,443,975		$44,179,991	$55,000,000	$2,845,895		$2,845,895	$862,667,807	$44,637,488	$99,164,425
	$1,401,640,794	$72,525,859		$192,002,251	$1,399,017,995	$72,390,146		$154,145,286	$111,250,000	$5,756,469		$5,756,469	$2,911,908,789	$150,672,473	$351,904,006

EXTERNAL FUND CALCULATION

Monticello

External Levelized

	Beginning Balance	Assumed Interest	Decommissioning Payment	Annuity	Ending Balance
2020	$48,017,552	1,125,228	-	$ 138,256	49,281,037
2021	49,281,037	2,336,578	-	1,291,695	52,909,310
2022	52,909,310	2,506,381	-	1,291,695	56,707,387
2023	56,707,387	2,684,131	-	1,291,695	60,683,214
2024	60,683,214	2,870,200	-	1,291,695	64,845,109
2025	64,845,109	3,064,977	-	1,291,695	69,201,781
2026	69,201,781	3,268,869	-	1,291,695	73,762,345
2027	73,762,345	3,482,303	-	1,291,695	78,536,344
2028	78,536,344	3,705,727	-	1,291,695	83,533,766
2029	83,533,766	3,939,606	-	1,291,695	88,765,067
2030	88,765,067	3,409,329	($2,489,566)	968,771	90,653,602
2031	90,653,602	3,462,968	($9,800,589)	-	84,315,980
2032	84,315,980	3,220,870	($15,386,854)	-	72,149,996
2033	72,149,996	2,756,130	(15,758,289)	-	59,147,837
2034	59,147,837	2,259,447	(9,957,905)	-	51,449,379
2035	51,449,379	1,965,366	(18,829,936)	-	34,584,809
2036	34,584,809	1,321,140	(7,333,462)	-	28,572,487
2037	28,572,487	1,091,469	(5,231,794)	-	24,432,162
2038	24,432,162	933,309	(4,241,676)	-	21,123,795
2039	21,123,795	806,929	(243,641)	-	21,687,083
2040	21,687,083	828,447	(255,411)	-	22,260,119
2041	22,260,119	850,337	(262,223)	-	22,848,233
2042	22,848,233	872,802	(272,046)	-	23,448,989
2043	23,448,989	895,751	(282,243)	-	24,062,497
2044	24,062,497	919,187	(295,914)	-	24,685,770
2045	24,685,770	942,996	(303,829)	-	25,324,938
2046	25,324,938	967,413	(315,240)	-	25,977,111
2047	25,977,111	992,326	(327,096)	-	26,642,341
2048	26,642,341	1,017,737	(704,537)	-	26,955,541
2049	26,955,541	1,029,702	(352,175)	-	27,633,068
2050	27,633,068	1,055,583	(1,232,189)	-	27,456,461
2051	27,456,461	1,048,837	(1,273,906)	-	27,231,392
2052	27,231,392	1,040,239	(1,854,693)	-	26,416,939
2053	26,416,939	1,009,127	(2,325,524)	-	25,100,542
2054	25,100,542	958,841	(1,550,127)	-	24,509,256
2055	24,509,256	936,254	(2,336,221)	-	23,109,288
2056	23,109,288	882,775	(2,722,050)	-	21,270,013
2057	21,270,013	812,515	(461,646)	-	21,620,882
2058	21,620,882	825,918	(479,189)	-	21,967,611
2059	21,967,611	839,163	(497,401)	-	22,309,372
2060	22,309,372	852,218	(521,904)	-	22,639,686
2061	22,639,686	864,836	(535,963)	-	22,968,559
2062	22,968,559	877,399	(556,375)	-	23,289,583
2063	23,289,583	889,662	(577,571)	-	23,601,674
2064	23,601,674	901,584	(606,070)	-	23,897,188
2065	23,897,188	912,873	(622,451)	-	24,187,610
2066	24,187,610	923,967	(646,203)	-	24,465,373
2067	24,465,373	934,577	(670,874)	-	24,729,076
2068	24,729,076	944,651	(704,043)	-	24,969,684
2069	24,969,684	953,842	(723,119)	-	25,200,407
2070	25,200,407	962,656	(750,774)	-	25,412,288
2071	25,412,288	970,749	(779,496)	-	25,603,541
2072	25,603,541	978,055	(818,097)	-	25,763,500
2073	25,763,500	984,166	(840,326)	-	25,907,340
2074	25,907,340	989,660	(872,527)	-	26,024,473
2075	26,024,473	994,135	(905,980)	-	26,112,628
2076	26,112,628	997,502	(950,913)	-	26,159,218
2077	26,159,218	999,282	(976,829)	-	26,181,671
2078	26,181,671	1,000,140	(1,693,104)	-	25,488,707
2079	25,488,707	973,669	(1,895,736)	-	24,566,639
2080	24,566,639	938,446	(1,830,179)	-	23,674,906
2081	23,674,906	904,381	(1,884,478)	-	22,694,810
2082	22,694,810	866,942	(1,953,077)	-	21,608,675
2083	21,608,675	825,451	(2,185,119)	-	20,249,007
2084	20,249,007	773,512	(2,111,829)	-	18,910,690
2085	18,910,690	722,388	(2,174,629)	-	17,458,449
2086	17,458,449	666,913	(2,254,051)	-	15,871,311
2087	15,871,311	606,284	(2,519,876)	-	13,957,720
2088	13,957,720	533,185	(3,752,722)	-	10,738,183
2089	10,738,183	410,199	(2,510,601)	-	8,637,780
2090	8,637,780	329,963	(1,995,152)	-	6,972,591
2091	6,972,591	266,353	(7,238,944)	-	(0)

EXTERNAL FUND CALCULATION

Prairie Island Unit 1

External Levelized

	Beginning Balance	Assumed Interest	Decommissioning Payment	Annuity	Ending Balance
2020	31,883,878	744,489	-	$ -	32,628,366
2021	32,628,366	1,542,621	-	808,393	34,979,380
2022	34,979,380	1,652,413	-	808,393	37,440,187
2023	37,440,187	1,767,333	-	808,393	40,015,913
2024	40,015,913	1,887,619	-	808,393	42,711,925
2025	42,711,925	2,013,523	-	808,393	45,533,841
2026	45,533,841	2,145,306	-	808,393	48,487,541
2027	48,487,541	2,283,244	-	808,393	51,579,179
2028	51,579,179	2,427,624	-	808,393	54,815,195
2029	54,815,195	2,578,746	-	808,393	58,202,334
2030	58,202,334	2,736,925	-	808,393	61,747,653
2031	61,747,653	2,902,491	-	808,393	65,458,537
2032	65,458,537	3,075,790	-	808,393	69,342,720
2033	69,342,720	2,457,358	($3,024,974)	541,624	69,316,728
2034	69,316,728	2,446,880	($9,282,044)	-	62,481,564
2035	62,481,564	2,205,599	($13,953,144)	-	50,734,019
2036	50,734,019	1,790,911	(12,163,507)	-	40,361,423
2037	40,361,423	1,424,758	(7,746,004)	-	34,040,177
2038	34,040,177	1,201,618	(3,397,586)	-	31,844,210
2039	31,844,210	1,124,101	(11,823,480)	-	21,144,831
2040	21,144,831	746,413	(5,476,550)	-	16,414,693
2041	16,414,693	579,439	(3,188,915)	-	13,805,217
2042	13,805,217	487,324	(2,870,740)	-	11,421,801
2043	11,421,801	403,190	(1,516,168)	-	10,308,822
2044	10,308,822	363,901	(242,192)	-	10,430,531
2045	10,430,531	368,198	(246,377)	-	10,552,353
2046	10,552,353	372,498	(253,012)	-	10,671,839
2047	10,671,839	376,716	(259,900)	-	10,788,654
2048	10,788,654	380,839	(269,583)	-	10,899,911
2049	10,899,911	384,767	(274,453)	-	11,010,225
2050	11,010,225	388,661	(282,141)	-	11,116,745
2051	11,116,745	392,421	(290,115)	-	11,219,051
2052	11,219,051	396,032	(301,309)	-	11,313,775
2053	11,313,775	399,376	(368,075)	-	11,345,076
2054	11,345,076	400,481	(442,024)	-	11,303,534
2055	11,303,534	399,015	(455,348)	-	11,247,201
2056	11,247,201	397,026	(506,123)	-	11,138,104
2057	11,138,104	393,175	(448,768)	-	11,082,511
2058	11,082,511	391,213	(569,957)	-	10,903,767
2059	10,903,767	384,903	(476,679)	-	10,811,991
2060	10,811,991	381,663	(457,071)	-	10,736,584
2061	10,736,584	379,001	(546,110)	-	10,569,475
2062	10,569,475	373,102	(563,226)	-	10,379,351
2063	10,379,351	366,391	(538,913)	-	10,206,830
2064	10,206,830	360,301	(603,786)	-	9,963,345
2065	9,963,345	351,706	(618,410)	-	9,696,641
2066	9,696,641	342,291	(591,856)	-	9,447,076
2067	9,447,076	333,482	(658,647)	-	9,121,911
2068	9,121,911	322,003	(684,989)	-	8,758,925
2069	8,758,925	309,190	(650,874)	-	8,417,241
2070	8,417,241	297,129	(724,710)	-	7,989,659
2071	7,989,659	282,035	(748,366)	-	7,523,328
2072	7,523,328	265,573	(778,779)	-	7,010,123
2073	7,010,123	247,457	(798,320)	-	6,459,260
2074	6,459,260	228,012	(824,691)	-	5,862,580
2075	5,862,580	206,949	(1,281,754)	-	4,787,775
2076	4,787,775	169,008	(887,157)	-	4,069,626
2077	4,069,626	143,658	(4,125,832)	-	87,452
2078	87,452	3,087	(90,539)	-	(0)

EXTERNAL FUND CALCULATION

Prairie Island Unit 2

External Levelized

	Beginning Balance	Assumed Interest	Decommissioning Payment	Annuity	Ending Balance
2020	34,101,997	806,512	-	$ -	34,908,509
2021	34,908,509	1,663,320	-	513,637	37,085,466
2022	37,085,466	1,766,290	-	513,637	39,365,393
2023	39,365,393	1,874,131	-	513,637	41,753,160
2024	41,753,160	1,987,072	-	513,637	44,253,869
2025	44,253,869	2,105,356	-	513,637	46,872,862
2026	46,872,862	2,229,234	-	513,637	49,615,733
2027	49,615,733	2,358,972	-	513,637	52,488,341
2028	52,488,341	2,494,846	-	513,637	55,496,824
2029	55,496,824	2,637,147	-	513,637	58,647,609
2030	58,647,609	2,786,179	-	513,637	61,947,425
2031	61,947,425	2,942,261	-	513,637	65,403,323
2032	65,403,323	3,105,725	-	513,637	69,022,685
2033	69,022,685	3,276,920	-	513,637	72,813,242
2034	72,813,242	2,512,108	($1,223,206)	426,319	74,528,463
2035	74,528,463	2,563,779	($8,052,082)	-	69,040,160
2036	69,040,160	2,374,982	($15,053,198)	-	56,361,944
2037	56,361,944	1,938,851	(14,528,760)	-	43,772,035
2038	43,772,035	1,505,758	(9,570,925)	-	35,706,868
2039	35,706,868	1,228,316	(12,487,887)	-	24,447,297
2040	24,447,297	840,987	(6,263,732)	-	19,024,552
2041	19,024,552	654,445	(4,501,546)	-	15,177,451
2042	15,177,451	522,104	(3,704,044)	-	11,995,512
2043	11,995,512	412,646	(1,919,070)	-	10,489,087
2044	10,489,087	360,825	(242,192)	-	10,607,719
2045	10,607,719	364,906	(246,377)	-	10,726,248
2046	10,726,248	368,983	(253,012)	-	10,842,219
2047	10,842,219	372,972	(259,900)	-	10,955,291
2048	10,955,291	376,862	(269,583)	-	11,062,571
2049	11,062,571	380,552	(274,453)	-	11,168,670
2050	11,168,670	384,202	(282,141)	-	11,270,732
2051	11,270,732	387,713	(290,115)	-	11,368,329
2052	11,368,329	391,071	(301,309)	-	11,458,091
2053	11,458,091	394,158	(368,075)	-	11,484,175
2054	11,484,175	395,056	(442,024)	-	11,437,207
2055	11,437,207	393,440	(455,348)	-	11,375,299
2056	11,375,299	391,310	(506,123)	-	11,260,486
2057	11,260,486	387,361	(448,768)	-	11,199,079
2058	11,199,079	385,248	(569,957)	-	11,014,371
2059	11,014,371	378,894	(476,679)	-	10,916,586
2060	10,916,586	375,531	(457,071)	-	10,835,046
2061	10,835,046	372,726	(546,110)	-	10,661,661
2062	10,661,661	366,761	(563,226)	-	10,465,197
2063	10,465,197	360,003	(538,913)	-	10,286,287
2064	10,286,287	353,848	(603,786)	-	10,036,349
2065	10,036,349	345,250	(618,410)	-	9,763,189
2066	9,763,189	335,854	(591,856)	-	9,507,187
2067	9,507,187	327,047	(658,647)	-	9,175,587
2068	9,175,587	315,640	(684,989)	-	8,806,238
2069	8,806,238	302,935	(650,874)	-	8,458,298
2070	8,458,298	290,965	(724,710)	-	8,024,553
2071	8,024,553	276,045	(748,366)	-	7,552,232
2072	7,552,232	259,797	(778,779)	-	7,033,250
2073	7,033,250	241,944	(798,320)	-	6,476,873
2074	6,476,873	222,804	(824,691)	-	5,874,986
2075	5,874,986	202,100	(1,281,754)	-	4,795,331
2076	4,795,331	164,959	(887,157)	-	4,073,133
2077	4,073,133	140,116	(4,125,721)	-	87,528
2078	87,528	3,011	(90,539)	-	0

2021 SUMMARY

	Operational Earnings Rate	Post-Shutdown Earnings Rate	Market Value Balance 6/30/2020	Book Value 6/30/2020	Unrealized Gain/Loss 6/30/2020	Tax-Effect Adjustment	Tax-Adjusted Fund Balance 6/30/2020	2021 Proforma Decommissioning Accrual
Monticello	4.68%	3.82%	$51,901,470	$37,950,615	$13,950,856	$3,883,918	$48,017,552	**$ 857,464**
Prairie Island Unit 1	4.67%	3.53%	$34,423,105	$25,302,319	9,120,786	2,539,227	31,883,878	**655,843**
Prairie Island Unit 2	4.73%	3.44%	$36,919,829	$26,798,304	10,121,526	2,817,833	34,101,997	**372,971**
TOTAL DECOMMISSIONING ACCRUAL			**$123,244,404**	**$90,051,237**	**$33,193,167**	**$9,240,978**	**$114,003,426**	**$1,886,277**

INPUT DATA

Escalation Rate (Labor)	4.03%
Escalation Rate (Non-Labor)	2.83%
Escalation Rate (PIIC)	0.00%
Jurisdictional Factor	5.1744%
Tax Rate for tax-effect adjustment	27.84%

AMOUNT TO RECOVER

	LABOR				NON-LABOR				PIIC Payment						
	Cost Estimate Nominal $s	Jurisdictional Cost in Nominal $s	Escalation Factor	Jurisdictional Cost in Future $'s	Cost Estimate Nominal $s	Jurisdictional Cost in Nominal $s	Escalation Factor	Jurisdictional Cost in Future $'s	Cost Estimate Nominal $s	Jurisdictional Cost in Nominal $s	Escalation Factor	Jurisdictional Cost in Future $'s	Total Cost Estimate Nominal $s	Total Jurisdictional Cost in Nominal $s	Total Jurisdictional Cost in Future $'s
Monticello															
Factors	*2017*	*5.1744%*	*4.03%*				*2.83%*				*0.00%*				
2030	$21,103,620	$1,091,976	1.6713	$1,825,020	$8,935,561	$462,358	1.4373	$664,547	$0	$0	1.0000	$0	$30,039,182	$1,554,334	$2,489,566
2031	72,416,242	3,747,073	1.7387	6,515,035	42,961,353	2,222,973	1.4780	3,285,553	0	0	1.0000	0	115,377,595	5,970,045	9,800,589
2032	78,476,357	4,060,645	1.8088	7,344,894	102,263,189	5,291,460	1.5198	8,041,960	0	0	1.0000	0	180,739,546	9,352,104	15,386,854
2033	78,663,227	4,070,314	1.8816	7,658,703	100,155,666	5,182,409	1.5629	8,099,587	0	0	1.0000	0	178,818,892	9,252,723	15,758,289
2034	66,380,423	3,434,758	1.9575	6,723,539	38,894,671	2,012,548	1.6071	3,234,366	0	0	1.0000	0	105,275,094	5,447,306	9,957,905
2035	86,879,803	4,495,469	2.0364	9,154,572	113,147,091	5,854,631	1.6526	9,675,364	0	0	1.0000	0	200,026,894	10,350,100	18,829,936
2036	50,307,504	2,603,088	2.1184	5,514,383	20,688,337	1,070,488	1.6993	1,819,080	0	0	1.0000	0	70,995,841	3,673,576	7,333,462
2037	34,623,126	1,791,523	2.2038	3,948,159	14,196,883	734,597	1.7474	1,283,635	0	0	1.0000	0	48,820,010	2,526,120	5,231,794
2038	24,271,478	1,255,892	2.2926	2,879,259	13,208,979	683,479	1.7969	1,228,144	0	0	1.0000	0	37,480,457	1,939,372	4,107,403
2039	615,016	31,823	2.3850	75,898	297,162	15,376	1.8477	28,411	0	0	1.0000	0	912,178	47,199	104,309
2040	631,203	32,661	2.4811	81,034	303,018	15,679	1.9000	29,791	0	0	1.0000	0	934,221	48,340	110,825
2041	615,016	31,823	2.5811	82,139	297,162	15,376	1.9538	30,042	0	0	1.0000	0	912,178	47,199	112,181
2042	615,016	31,823	2.6851	85,448	297,162	15,376	2.0091	30,892	0	0	1.0000	0	912,178	47,199	116,341
2043	615,016	31,823	2.7933	88,891	297,162	15,376	2.0659	31,766	0	0	1.0000	0	912,178	47,199	120,657
2044	631,203	32,661	2.9059	94,909	303,018	15,679	2.1244	33,309	0	0	1.0000	0	934,221	48,340	128,218
2045	615,016	31,823	3.0230	96,201	297,162	15,376	2.1845	33,589	0	0	1.0000	0	912,178	47,199	129,791
2046	615,016	31,823	3.1448	100,077	297,162	15,376	2.2463	34,540	0	0	1.0000	0	912,178	47,199	134,617
2047	615,016	31,823	3.2716	104,112	297,162	15,376	2.3099	35,518	0	0	1.0000	0	912,178	47,199	139,630
2048	1,294,848	67,000	3.4034	228,028	2,293,953	118,697	2.3753	281,942	0	0	1.0000	0	3,588,801	185,697	509,969
2049	615,016	31,823	3.5406	112,673	297,162	15,376	2.4425	37,556	0	0	1.0000	0	912,178	47,199	150,229
2050	2,108,217	109,087	3.6833	401,799	4,776,766	247,167	2.5116	620,784	0	0	1.0000	0	6,884,983	356,253	1,022,583
2051	2,108,217	109,087	3.8317	417,987	4,776,766	247,167	2.5827	638,358	0	0	1.0000	0	6,884,983	356,253	1,056,345
2052	2,986,904	154,553	3.9861	616,064	7,370,122	381,356	2.6558	1,012,806	0	0	1.0000	0	10,357,026	535,909	1,628,870
2053	3,617,592	187,187	4.1468	776,227	9,304,891	481,468	2.7310	1,314,889	0	0	1.0000	0	12,922,483	668,655	2,091,116
2054	2,323,842	120,244	4.3139	518,720	5,423,641	280,638	2.8082	788,089	0	0	1.0000	0	7,747,483	400,882	1,306,809
2055	3,401,967	176,030	4.4877	789,969	8,658,016	447,996	2.8877	1,293,679	0	0	1.0000	0	12,059,983	624,026	2,083,648
2056	3,849,404	199,182	4.6686	929,900	9,957,622	515,243	2.9694	1,529,962	0	0	1.0000	0	13,807,026	714,424	2,459,862
2057	598,425	30,965	4.8567	150,386	247,389	12,801	3.0535	39,087	0	0	1.0000	0	845,814	43,765	189,473
2058	598,425	30,965	5.0525	156,449	247,389	12,801	3.1399	40,193	0	0	1.0000	0	845,814	43,765	196,642
2059	598,425	30,965	5.2561	162,753	247,389	12,801	3.2287	41,330	0	0	1.0000	0	845,814	43,765	204,083
2060	614,612	31,802	5.4679	173,891	253,245	13,104	3.3201	43,506	0	0	1.0000	0	867,857	44,906	217,397
2061	598,425	30,965	5.6882	176,133	247,389	12,801	3.4141	43,703	0	0	1.0000	0	845,814	43,765	219,836
2062	598,425	30,965	5.9175	183,233	247,389	12,801	3.5107	44,940	0	0	1.0000	0	845,814	43,765	228,173
2063	598,425	30,965	6.1560	190,618	247,389	12,801	3.6100	46,211	0	0	1.0000	0	845,814	43,765	236,829
2064	614,612	31,802	6.4040	203,661	253,245	13,104	3.7122	48,644	0	0	1.0000	0	867,857	44,906	252,305
2065	598,425	30,965	6.6621	206,289	247,389	12,801	3.8173	48,865	0	0	1.0000	0	845,814	43,765	255,154
2066	598,425	30,965	6.9306	214,603	247,389	12,801	3.9253	50,247	0	0	1.0000	0	845,814	43,765	264,850
2067	598,425	30,965	7.2099	223,252	247,389	12,801	4.0364	51,669	0	0	1.0000	0	845,814	43,765	274,921
2068	614,612	31,802	7.5005	238,532	253,245	13,104	4.1506	54,389	0	0	1.0000	0	867,857	44,906	292,921
2069	598,425	30,965	7.8027	241,608	247,389	12,801	4.2681	54,635	0	0	1.0000	0	845,814	43,765	296,243
2070	598,425	30,965	8.1172	251,346	247,389	12,801	4.3889	56,181	0	0	1.0000	0	845,814	43,765	307,528
2071	598,425	30,965	8.4443	261,475	247,389	12,801	4.5131	57,771	0	0	1.0000	0	845,814	43,765	319,246
2072	614,612	31,802	8.7846	279,370	253,245	13,104	4.6408	60,812	0	0	1.0000	0	867,857	44,906	340,182
2073	598,425	30,965	9.1386	282,973	247,389	12,801	4.7721	61,087	0	0	1.0000	0	845,814	43,765	344,060
2074	598,425	30,965	9.5069	294,378	247,389	12,801	4.9072	62,816	0	0	1.0000	0	845,814	43,765	357,194
2075	598,425	30,965	9.8901	306,243	247,389	12,801	5.0460	64,593	0	0	1.0000	0	845,814	43,765	370,836
2076	614,612	31,802	10.2886	327,200	253,245	13,104	5.1888	67,993	0	0	1.0000	0	867,857	44,906	395,193
2077	598,425	30,965	10.7033	331,424	247,389	12,801	5.3357	68,301	0	0	1.0000	0	845,814	43,765	399,725
2078	1,076,857	55,720	11.1346	620,424	1,667,353	86,275	5.4867	473,364	0	0	1.0000	0	2,744,210	141,995	1,093,788
2079	1,172,543	60,672	11.5833	702,777	1,954,412	101,128	5.6420	570,565	0	0	1.0000	0	3,126,955	161,800	1,273,342
2080	1,093,045	56,558	12.0501	681,530	1,673,167	86,576	5.8016	502,277	0	0	1.0000	0	2,766,212	143,134	1,183,807
2081	1,076,857	55,720	12.5357	698,494	1,667,353	86,275	5.9658	514,698	0	0	1.0000	0	2,744,210	141,995	1,213,192
2082	1,076,857	55,720	13.0409	726,644	1,667,353	86,275	6.1346	529,261	0	0	1.0000	0	2,744,210	141,995	1,255,905
2083	1,172,543	60,672	13.5665	823,100	1,954,412	101,128	6.3083	637,947	0	0	1.0000	0	3,126,955	161,800	1,461,047
2084	1,093,045	56,558	14.1132	798,215	1,673,167	86,576	6.4868	561,598	0	0	1.0000	0	2,766,212	143,134	1,359,813
2085	1,076,857	55,720	14.6820	818,087	1,667,353	86,275	6.6704	575,487	0	0	1.0000	0	2,744,210	141,995	1,393,574
2086	1,076,857	55,720	15.2737	851,057	1,667,353	86,275	6.8591	591,767	0	0	1.0000	0	2,744,210	141,995	1,442,824
2087	1,172,543	60,672	15.8892	964,022	1,954,412	101,128	7.0532	713,277	0	0	1.0000	0	3,126,955	161,800	1,677,299
2088	1,756,689	90,897	16.5295	1,502,487	3,664,101	189,594	7.2528	1,375,084	0	0	1.0000	0	5,420,790	280,491	2,877,571
2089	1,076,857	55,720	17.1957	958,151	1,667,353	86,275	7.4581	643,446	0	0	1.0000	0	2,744,210	141,995	1,601,597
2090	789,798	40,867	17.8887	731,057	806,175	41,714	7.6692	319,916	0	0	1.0000	0	1,595,973	82,581	1,050,972
2091	(3,275,110)	(169,466)	18.6096	(3,153,691)	23,065,010	1,193,465	7.8862	9,411,906	0	0	1.0000	0	19,789,900	1,023,999	6,258,215
	$565,079,402	$29,239,209		$69,741,812	$561,970,274	$29,078,332		$63,665,723	$0	$0		$0	$1,127,049,676	$58,317,542	$133,407,535

AMOUNT TO RECOVER

	LABOR				NON-LABOR				PHC Payment						
	Cost Estimate Nominal $s	Jurisdictional Cost in Nominal $s	Escalation Factor	Jurisdictional Cost in Future $'s	Cost Estimate Nominal $s	Jurisdictional Cost in Nominal $s	Escalation Factor	Jurisdictional Cost in Future $'s	Cost Estimate Nominal $s	Jurisdictional Cost in Nominal $s	Escalation Factor	Jurisdictional Cost in Future $'s	Total Cost Estimate Nominal $s	Total Jurisdictional Cost in Nominal $s	Total Jurisdictional Cost in Future $'s
Prairie Island Unit 1															
Factors	*2017*	*5.1744%*	*4.03%*				*2.83%*				*0.00%*				
2033	$22,324,352	$1,155,141	1.8816	$2,173,513	$9,728,959	$503,411	1.5629	$786,781	$1,250,000	$64,679	1.0000	$64,679	$33,303,311	$1,723,231	$3,024,974
2034	63,582,247	3,289,971	1.9575	6,440,117	33,397,619	1,728,111	1.6071	2,777,247	1,250,000	64,679	1.0000	64,679	98,229,866	5,082,761	9,282,044
2035	65,877,290	3,408,724	2.0364	6,941,526	81,239,936	4,203,642	1.6526	6,946,939	1,250,000	64,679	1.0000	64,679	148,367,226	7,677,046	13,953,144
2036	57,759,315	2,988,672	2.1184	6,331,202	65,595,019	3,394,119	1.6993	5,767,626	1,250,000	64,679	1.0000	64,679	124,604,334	6,447,470	12,163,507
2037	38,110,947	1,971,995	2.2038	4,345,883	36,889,671	1,908,802	1.7474	3,335,441	1,250,000	64,679	1.0000	64,679	76,250,618	3,945,477	7,746,004
2038	13,207,914	683,424	2.2926	1,566,818	18,994,691	982,853	1.7969	1,766,088	1,250,000	64,679	1.0000	64,679	33,452,605	1,730,956	3,397,586
2039	36,035,855	1,864,623	2.3850	4,447,125	76,476,728	3,957,177	1.8477	7,311,675	1,250,000	64,679	1.0000	64,679	113,762,582	5,886,479	11,823,480
2040	31,919,556	1,651,631	2.4811	4,097,861	13,365,606	691,584	1.9000	1,314,009	1,250,000	64,679	1.0000	64,679	46,535,162	2,407,894	5,476,550
2041	16,871,318	872,982	2.5811	2,253,253	7,735,873	400,281	1.9538	782,070	1,250,000	64,679	1.0000	64,679	25,857,191	1,337,943	3,100,003
2042	12,081,952	625,163	2.6851	1,678,625	9,958,700	515,298	2.0091	1,035,286	1,250,000	64,679	1.0000	64,679	23,290,652	1,205,141	2,778,591
2043	5,844,452	302,413	2.7933	844,729	4,782,672	247,472	2.0659	511,253	1,250,000	64,679	1.0000	64,679	11,877,125	614,564	1,420,662
2044	354,798	18,359	2.9059	53,348	229,011	11,850	2.1244	25,174	1,250,000	64,679	1.0000	64,679	1,833,809	94,888	143,201
2045	346,451	17,927	3.0230	54,192	220,298	11,399	2.1845	24,901	1,250,000	64,679	1.0000	64,679	1,816,749	94,005	143,773
2046	346,451	17,927	3.1448	56,376	220,298	11,399	2.2463	25,606	1,250,000	64,679	1.0000	64,679	1,816,749	94,005	146,661
2047	346,451	17,927	3.2716	58,649	220,298	11,399	2.3099	26,330	1,250,000	64,679	1.0000	64,679	1,816,749	94,005	149,659
2048	354,798	18,359	3.4034	62,481	229,011	11,850	2.3753	28,147	1,250,000	64,679	1.0000	64,679	1,833,809	94,888	155,308
2049	346,451	17,927	3.5406	63,471	220,298	11,399	2.4425	27,842	1,250,000	64,679	1.0000	64,679	1,816,749	94,005	155,992
2050	346,451	17,927	3.6833	66,029	220,298	11,399	2.5116	28,630	1,250,000	64,679	1.0000	64,679	1,816,749	94,005	159,338
2051	346,451	17,927	3.8317	68,689	220,298	11,399	2.5827	29,440	1,250,000	64,679	1.0000	64,679	1,816,749	94,005	162,809
2052	354,798	18,359	3.9861	73,179	229,011	11,850	2.6558	31,471	1,250,000	64,679	1.0000	64,679	1,833,809	94,888	169,329
2053	442,138	22,878	4.1468	94,870	507,357	26,252	2.7310	71,695	1,250,000	64,679	1.0000	64,679	2,199,495	113,810	231,244
2054	537,824	27,829	4.3139	120,051	794,416	41,106	2.8082	115,434	1,250,000	64,679	1.0000	64,679	2,582,240	133,614	300,164
2055	537,824	27,829	4.4877	124,888	794,416	41,106	2.8877	118,701	1,250,000	64,679	1.0000	64,679	2,582,240	133,614	308,269
2056	594,014	30,736	4.6686	143,496	946,659	48,983	2.9694	145,452	1,250,000	64,679	1.0000	64,679	2,790,673	144,399	353,627
2057	489,981	25,353	4.8567	123,134	650,887	33,679	3.0535	102,839	1,250,000	64,679	1.0000	64,679	2,390,868	123,712	290,652
2058	633,510	32,780	5.0525	165,621	1,081,475	55,959	3.1399	175,707	1,250,000	64,679	1.0000	64,679	2,964,985	153,419	406,007
2059	489,981	25,353	5.2561	133,260	650,887	33,679	3.2287	108,740	1,250,000	64,679	1.0000	64,679	2,390,868	123,712	306,679
2060	450,484	23,310	5.4679	127,455	516,070	26,703	3.3201	88,658	1,250,000	64,679	1.0000	64,679	2,216,554	114,692	280,792
2061	537,824	27,829	5.6882	158,296	794,416	41,106	3.4141	140,340	1,250,000	64,679	1.0000	64,679	2,582,240	133,614	363,315
2062	537,824	27,829	5.9175	164,678	794,416	41,106	3.5107	144,310	1,250,000	64,679	1.0000	64,679	2,582,240	133,614	373,667
2063	489,981	25,353	6.1560	156,075	650,887	33,679	3.6100	121,582	1,250,000	64,679	1.0000	64,679	2,390,868	123,712	342,336
2064	546,170	28,261	6.4040	180,982	803,129	41,557	3.7122	154,267	1,250,000	64,679	1.0000	64,679	2,599,299	134,497	399,928
2065	537,824	27,829	6.6621	185,399	794,416	41,106	3.8173	156,913	1,250,000	64,679	1.0000	64,679	2,582,240	133,614	406,992
2066	489,981	25,353	6.9306	175,714	650,887	33,679	3.9253	132,201	1,250,000	64,679	1.0000	64,679	2,390,868	123,712	372,594
2067	537,824	27,829	7.2099	200,644	794,416	41,106	4.0364	165,920	1,250,000	64,679	1.0000	64,679	2,582,240	133,614	431,243
2068	546,170	28,261	7.5005	211,970	803,129	41,557	4.1506	172,485	1,250,000	64,679	1.0000	64,679	2,599,299	134,497	449,135
2069	489,981	25,353	7.8027	197,825	650,887	33,679	4.2681	143,746	1,250,000	64,679	1.0000	64,679	2,390,868	123,712	406,250
2070	537,824	27,829	8.1172	225,893	794,416	41,106	4.3889	180,410	1,250,000	64,679	1.0000	64,679	2,582,240	133,614	470,982
2071	537,824	27,829	8.4443	234,996	794,416	41,106	4.5131	185,515	1,250,000	64,679	1.0000	64,679	2,582,240	133,614	485,190
2072	546,170	28,261	8.7846	248,260	803,129	41,557	4.6408	192,856	1,250,000	64,679	1.0000	64,679	2,599,299	134,497	505,795
2073	537,824	27,829	9.1386	254,317	794,416	41,106	4.7721	196,161	1,250,000	64,679	1.0000	64,679	2,582,240	133,614	515,158
2074	537,824	27,829	9.5069	264,567	794,416	41,106	4.9072	201,715	1,250,000	64,679	1.0000	64,679	2,582,240	133,614	530,961
2075	869,646	44,999	9.8901	445,040	1,789,884	92,615	5.0460	467,335	1,250,000	64,679	1.0000	64,679	3,909,530	202,293	977,055
2076	546,170	28,261	10.2886	290,764	803,129	41,557	5.1888	215,630	1,250,000	64,679	1.0000	64,679	2,599,299	134,497	571,073
2077	537,974	27,837	10.7033	297,944	12,442,775	643,833	5.3357	3,435,301	1,250,000	64,679	1.0000	64,679	14,230,749	736,349	3,797,925
2078	(1,867,257)	(96,618)	11.1346	(1,075,808)	2,910,063	150,577	5.4867	826,171	0	0	1.0000	0	1,042,806	53,958	(249,638)
	$378,431,633	$19,581,393		$45,527,398	$394,779,673	$20,427,298		$40,742,038	$56,250,000	$2,910,574		$2,910,574	$829,461,305	$42,919,265	$89,180,009

AMOUNT TO RECOVER

	LABOR				NON-LABOR				PHC Payment						
	Cost Estimate Nominal $s	Jurisdictional Cost in Nominal $s	Escalation Factor	Jurisdictional Cost in Future $'s	Cost Estimate Nominal $s	Jurisdictional Cost in Nominal $s	Escalation Factor	Jurisdictional Cost in Future $'s	Cost Estimate Nominal $s	Jurisdictional Cost in Nominal $s	Escalation Factor	Jurisdictional Cost in Future $'s	Total Cost Estimate Nominal $s	Total Jurisdictional Cost in Nominal $s	Total Jurisdictional Cost in Future $'s
Prairie Island Unit 2															
Factors	*2017*	*5.1744%*	*4.03%*				*2.83%*				*0.00%*				
2034	$7,760,265	$401,544	1.9575	$786,022	$4,479,535	$231,787	1.6071	$372,505	$1,250,000	$64,679	1.0000	$64,679	$13,489,800	$698,010	$1,223,206
2035	46,911,429	2,427,363	2.0364	4,943,083	35,601,339	1,842,139	1.6526	3,044,319	1,250,000	64,679	1.0000	64,679	83,762,768	4,334,182	8,052,082
2036	67,514,044	3,493,416	2.1184	7,400,452	86,298,832	4,465,407	1.6993	7,588,066	1,250,000	64,679	1.0000	64,679	155,062,875	8,023,502	15,053,198
2037	70,896,041	3,668,412	2.2038	8,084,447	70,558,163	3,650,929	1.7474	6,379,634	1,250,000	64,679	1.0000	64,679	142,704,204	7,384,021	14,528,760
2038	46,603,528	2,411,432	2.2926	5,528,448	42,782,149	2,213,700	1.7969	3,977,797	1,250,000	64,679	1.0000	64,679	90,635,677	4,689,811	9,570,925
2039	40,663,625	2,104,080	2.3850	5,018,231	77,452,618	4,007,673	1.8477	7,404,977	1,250,000	64,679	1.0000	64,679	119,366,242	6,176,432	12,487,887
2040	37,417,177	1,936,097	2.4811	4,803,651	14,193,501	734,422	1.9000	1,395,402	1,250,000	64,679	1.0000	64,679	52,860,679	2,735,199	6,263,732
2041	23,327,583	1,207,052	2.5811	3,115,521	13,070,130	676,295	1.9538	1,321,345	1,250,000	64,679	1.0000	64,679	37,647,713	1,948,026	4,501,546
2042	13,956,921	722,180	2.6851	1,939,127	15,468,640	800,402	2.0091	1,608,088	1,250,000	64,679	1.0000	64,679	30,675,561	1,587,262	3,611,894
2043	6,722,862	347,865	2.7933	971,691	7,364,042	381,042	2.0659	787,194	1,250,000	64,679	1.0000	64,679	15,336,904	793,586	1,823,564
2044	354,798	18,359	2.9059	53,348	229,011	11,850	2.1244	25,174	1,250,000	64,679	1.0000	64,679	1,833,809	94,888	143,201
2045	346,451	17,927	3.0230	54,192	220,298	11,399	2.1845	24,901	1,250,000	64,679	1.0000	64,679	1,816,749	94,005	143,773
2046	346,451	17,927	3.1448	56,376	220,298	11,399	2.2463	25,606	1,250,000	64,679	1.0000	64,679	1,816,749	94,005	146,661
2047	346,451	17,927	3.2716	58,649	220,298	11,399	2.3099	26,330	1,250,000	64,679	1.0000	64,679	1,816,749	94,005	149,659
2048	354,798	18,359	3.4034	62,481	229,011	11,850	2.3753	28,147	1,250,000	64,679	1.0000	64,679	1,833,809	94,888	155,308
2049	346,451	17,927	3.5406	63,471	220,298	11,399	2.4425	27,842	1,250,000	64,679	1.0000	64,679	1,816,749	94,005	155,992
2050	346,451	17,927	3.6833	66,029	220,298	11,399	2.5116	28,630	1,250,000	64,679	1.0000	64,679	1,816,749	94,005	159,338
2051	346,451	17,927	3.8317	68,689	220,298	11,399	2.5827	29,440	1,250,000	64,679	1.0000	64,679	1,816,749	94,005	162,809
2052	354,798	18,359	3.9861	73,179	229,011	11,850	2.6558	31,471	1,250,000	64,679	1.0000	64,679	1,833,809	94,888	169,329
2053	442,138	22,878	4.1468	94,870	507,358	26,252	2.7310	71,696	1,250,000	64,679	1.0000	64,679	2,199,496	113,810	231,245
2054	537,824	27,829	4.3139	120,051	794,416	41,106	2.8082	115,434	1,250,000	64,679	1.0000	64,679	2,582,240	133,614	300,164
2055	537,824	27,829	4.4877	124,888	794,416	41,106	2.8877	118,701	1,250,000	64,679	1.0000	64,679	2,582,240	133,614	308,269
2056	594,014	30,736	4.6686	143,496	946,659	48,983	2.9694	145,452	1,250,000	64,679	1.0000	64,679	2,790,673	144,399	353,627
2057	489,981	25,353	4.8567	123,134	650,887	33,679	3.0535	102,839	1,250,000	64,679	1.0000	64,679	2,390,868	123,712	290,652
2058	633,510	32,780	5.0525	165,621	1,081,475	55,959	3.1399	175,707	1,250,000	64,679	1.0000	64,679	2,964,985	153,419	406,007
2059	489,981	25,353	5.2561	133,260	650,887	33,679	3.2287	108,740	1,250,000	64,679	1.0000	64,679	2,390,868	123,712	306,679
2060	450,484	23,310	5.4679	127,455	516,070	26,703	3.3201	88,658	1,250,000	64,679	1.0000	64,679	2,216,554	114,692	280,792
2061	537,824	27,829	5.6882	158,296	794,416	41,106	3.4141	140,340	1,250,000	64,679	1.0000	64,679	2,582,240	133,614	363,315
2062	537,824	27,829	5.9175	164,678	794,416	41,106	3.5107	144,310	1,250,000	64,679	1.0000	64,679	2,582,240	133,614	373,667
2063	489,981	25,353	6.1560	156,075	650,887	33,679	3.6100	121,582	1,250,000	64,679	1.0000	64,679	2,390,868	123,712	342,336
2064	546,170	28,261	6.4040	180,982	803,129	41,557	3.7122	154,267	1,250,000	64,679	1.0000	64,679	2,599,299	134,497	399,928
2065	537,824	27,829	6.6621	185,399	794,416	41,106	3.8173	156,913	1,250,000	64,679	1.0000	64,679	2,582,240	133,614	406,992
2066	489,981	25,353	6.9306	175,714	650,887	33,679	3.9253	132,201	1,250,000	64,679	1.0000	64,679	2,390,868	123,712	372,594
2067	537,824	27,829	7.2099	200,644	794,416	41,106	4.0364	165,920	1,250,000	64,679	1.0000	64,679	2,582,240	133,614	431,243
2068	546,170	28,261	7.5005	211,970	803,129	41,557	4.1506	172,485	1,250,000	64,679	1.0000	64,679	2,599,299	134,497	449,135
2069	489,981	25,353	7.8027	197,825	650,887	33,679	4.2681	143,746	1,250,000	64,679	1.0000	64,679	2,390,868	123,712	406,250
2070	537,824	27,829	8.1172	225,893	794,416	41,106	4.3889	180,410	1,250,000	64,679	1.0000	64,679	2,582,240	133,614	470,982
2071	537,824	27,829	8.4443	234,996	794,416	41,106	4.5131	185,515	1,250,000	64,679	1.0000	64,679	2,582,240	133,614	485,190
2072	546,170	28,261	8.7846	248,260	803,129	41,557	4.6408	192,856	1,250,000	64,679	1.0000	64,679	2,599,299	134,497	505,795
2073	537,824	27,829	9.1386	254,317	794,416	41,106	4.7721	196,161	1,250,000	64,679	1.0000	64,679	2,582,240	133,614	515,158
2074	537,824	27,829	9.5069	264,567	794,416	41,106	4.9072	201,715	1,250,000	64,679	1.0000	64,679	2,582,240	133,614	530,961
2075	869,646	44,999	9.8901	445,040	1,789,884	92,615	5.0460	467,335	1,250,000	64,679	1.0000	64,679	3,909,530	202,293	977,055
2076	546,170	28,261	10.2886	290,764	803,129	41,557	5.1888	215,630	1,250,000	64,679	1.0000	64,679	2,599,299	134,497	571,073
2077	537,824	27,829	10.7033	297,861	12,442,675	643,828	5.3357	3,435,273	1,250,000	64,679	1.0000	64,679	14,230,499	736,336	3,797,814
2078	(1,867,257)	(96,618)	11.1346	(1,075,808)	2,910,063	150,577	5.4867	826,171	0	-	1.0000	-	1,042,806	53,958	(249,638)
	$376,589,759	$19,486,088		$46,997,332	$403,883,049	$20,898,339		$42,286,922	$55,000,000	$2,845,895		$2,845,895	$835,472,807	$43,230,322	$92,130,149
	$1,320,100,794	$68,306,690		$162,266,541	$1,360,632,995	$70,403,970		$146,694,683	$111,250,000	$5,756,469		$5,756,469	$2,791,983,789	$144,467,129	$314,717,693

EXTERNAL FUND CALCULATION

Monticello

External Levelized

	Beginning Balance	Assumed Interest	Decommissioning Payment	Annuity	Ending Balance
2020	$48,017,552	1,125,228	-	$ 138,256	49,281,037
2021	49,281,037	2,326,417	-	857,464	52,464,918
2022	52,464,918	2,475,423	-	857,464	55,797,804
2023	55,797,804	2,631,402	-	857,464	59,286,670
2024	59,286,670	2,794,681	-	857,464	62,938,815
2025	62,938,815	2,965,601	-	857,464	66,761,880
2026	66,761,880	3,144,521	-	857,464	70,763,865
2027	70,763,865	3,331,814	-	857,464	74,953,142
2028	74,953,142	3,527,872	-	857,464	79,338,478
2029	79,338,478	3,733,105	-	857,464	83,929,047
2030	83,929,047	3,218,373	($2,489,566)	643,098	85,300,952
2031	85,300,952	3,258,496	($9,800,589)	-	78,758,859
2032	78,758,859	3,008,588	($15,386,854)	-	66,380,593
2033	66,380,593	2,535,739	(15,758,289)	-	53,158,043
2034	53,158,043	2,030,637	(9,957,905)	-	45,230,775
2035	45,230,775	1,727,816	(18,829,936)	-	28,128,654
2036	28,128,654	1,074,515	(7,333,462)	-	21,869,707
2037	21,869,707	835,423	(5,231,794)	-	17,473,336
2038	17,473,336	667,481	(4,107,403)	-	14,033,415
2039	14,033,415	536,076	(104,309)	-	14,465,182
2040	14,465,182	552,570	(110,825)	-	14,906,927
2041	14,906,927	569,445	(112,181)	-	15,364,191
2042	15,364,191	586,912	(116,341)	-	15,834,763
2043	15,834,763	604,888	(120,657)	-	16,318,993
2044	16,318,993	623,386	(128,218)	-	16,814,161
2045	16,814,161	642,301	(129,791)	-	17,326,672
2046	17,326,672	661,879	(134,617)	-	17,853,933
2047	17,853,933	682,020	(139,630)	-	18,396,324
2048	18,396,324	702,740	(509,969)	-	18,589,094
2049	18,589,094	710,103	(150,229)	-	19,148,968
2050	19,148,968	731,491	(1,022,583)	-	18,857,875
2051	18,857,875	720,371	(1,056,345)	-	18,521,901
2052	18,521,901	707,537	(1,628,870)	-	17,600,569
2053	17,600,569	672,342	(2,091,116)	-	16,181,794
2054	16,181,794	618,145	(1,306,809)	-	15,493,130
2055	15,493,130	591,838	(2,083,648)	-	14,001,319
2056	14,001,319	534,850	(2,459,862)	-	12,076,308
2057	12,076,308	461,315	(189,473)	-	12,348,150
2058	12,348,150	471,699	(196,642)	-	12,623,207
2059	12,623,207	482,207	(204,083)	-	12,901,330
2060	12,901,330	492,831	(217,397)	-	13,176,764
2061	13,176,764	503,352	(219,836)	-	13,460,280
2062	13,460,280	514,183	(228,173)	-	13,746,290
2063	13,746,290	525,108	(236,829)	-	14,034,569
2064	14,034,569	536,121	(252,305)	-	14,318,384
2065	14,318,384	546,962	(255,154)	-	14,610,192
2066	14,610,192	558,109	(264,850)	-	14,903,451
2067	14,903,451	569,312	(274,921)	-	15,197,842
2068	15,197,842	580,558	(292,921)	-	15,485,479
2069	15,485,479	591,545	(296,243)	-	15,780,781
2070	15,780,781	602,826	(307,528)	-	16,076,079
2071	16,076,079	614,106	(319,246)	-	16,370,940
2072	16,370,940	625,370	(340,182)	-	16,656,128
2073	16,656,128	636,264	(344,060)	-	16,948,332
2074	16,948,332	647,426	(357,194)	-	17,238,564
2075	17,238,564	658,513	(370,836)	-	17,526,241
2076	17,526,241	669,502	(395,193)	-	17,800,551
2077	17,800,551	679,981	(399,725)	-	18,080,807
2078	18,080,807	690,687	(1,093,788)	-	17,677,706
2079	17,677,706	675,288	(1,273,342)	-	17,079,652
2080	17,079,652	652,443	(1,183,807)	-	16,548,288
2081	16,548,288	632,145	(1,213,192)	-	15,967,241
2082	15,967,241	609,949	(1,255,905)	-	15,321,284
2083	15,321,284	585,273	(1,461,047)	-	14,445,510
2084	14,445,510	551,818	(1,359,813)	-	13,637,516
2085	13,637,516	520,953	(1,393,574)	-	12,764,895
2086	12,764,895	487,619	(1,442,824)	-	11,809,690
2087	11,809,690	451,130	(1,677,299)	-	10,583,521
2088	10,583,521	404,291	(2,877,571)	-	8,110,240
2089	8,110,240	309,811	(1,601,597)	-	6,818,455
2090	6,818,455	260,465	(1,050,972)	-	6,027,948
2091	6,027,948	230,268	(6,258,215)	-	0

EXTERNAL FUND CALCULATION

Prairie Island Unit 1

External Levelized

	Beginning Balance	Assumed Interest	Decommissioning Payment	Annuity	Ending Balance
2020	31,883,878	744,489	-	$ -	32,628,366
2021	32,628,366	1,539,059	-	655,843	34,823,268
2022	34,823,268	1,641,561	-	655,843	37,120,671
2023	37,120,671	1,748,849	-	655,843	39,525,363
2024	39,525,363	1,861,148	-	655,843	42,042,354
2025	42,042,354	1,978,692	-	655,843	44,676,889
2026	44,676,889	2,101,725	-	655,843	47,434,456
2027	47,434,456	2,230,503	-	655,843	50,320,802
2028	50,320,802	2,365,295	-	655,843	53,341,940
2029	53,341,940	2,506,383	-	655,843	56,504,166
2030	56,504,166	2,654,058	-	655,843	59,814,067
2031	59,814,067	2,808,631	-	655,843	63,278,541
2032	63,278,541	2,970,422	-	655,843	66,904,805
2033	66,904,805	2,369,495	($3,024,974)	439,415	66,688,742
2034	66,688,742	2,354,113	($9,282,044)	-	59,760,810
2035	59,760,810	2,109,557	($13,953,144)	-	47,917,222
2036	47,917,222	1,691,478	(12,163,507)	-	37,445,193
2037	37,445,193	1,321,815	(7,746,004)	-	31,021,005
2038	31,021,005	1,095,041	(3,397,586)	-	28,718,460
2039	28,718,460	1,013,762	(11,823,480)	-	17,908,742
2040	17,908,742	632,179	(5,476,550)	-	13,064,371
2041	13,064,371	461,172	(3,100,003)	-	10,425,540
2042	10,425,540	368,022	(2,778,591)	-	8,014,971
2043	8,014,971	282,928	(1,420,662)	-	6,877,238
2044	6,877,238	242,766	(143,201)	-	6,976,803
2045	6,976,803	246,281	(143,773)	-	7,079,312
2046	7,079,312	249,900	(146,661)	-	7,182,551
2047	7,182,551	253,544	(149,659)	-	7,286,436
2048	7,286,436	257,211	(155,308)	-	7,388,340
2049	7,388,340	260,808	(155,992)	-	7,493,156
2050	7,493,156	264,508	(159,338)	-	7,598,326
2051	7,598,326	268,221	(162,809)	-	7,703,738
2052	7,703,738	271,942	(169,329)	-	7,806,351
2053	7,806,351	275,564	(231,244)	-	7,850,671
2054	7,850,671	277,129	(300,164)	-	7,827,636
2055	7,827,636	276,316	(308,269)	-	7,795,683
2056	7,795,683	275,188	(353,627)	-	7,717,243
2057	7,717,243	272,419	(290,652)	-	7,699,010
2058	7,699,010	271,775	(406,007)	-	7,564,777
2059	7,564,777	267,037	(306,679)	-	7,525,135
2060	7,525,135	265,637	(280,792)	-	7,509,980
2061	7,509,980	265,102	(363,315)	-	7,411,767
2062	7,411,767	261,635	(373,667)	-	7,299,735
2063	7,299,735	257,681	(342,336)	-	7,215,079
2064	7,215,079	254,692	(399,928)	-	7,069,843
2065	7,069,843	249,565	(406,992)	-	6,912,417
2066	6,912,417	244,008	(372,594)	-	6,783,831
2067	6,783,831	239,469	(431,243)	-	6,592,057
2068	6,592,057	232,700	(449,135)	-	6,375,622
2069	6,375,622	225,059	(406,250)	-	6,194,432
2070	6,194,432	218,663	(470,982)	-	5,942,113
2071	5,942,113	209,757	(485,190)	-	5,666,680
2072	5,666,680	200,034	(505,795)	-	5,360,918
2073	5,360,918	189,240	(515,158)	-	5,035,000
2074	5,035,000	177,736	(530,961)	-	4,681,775
2075	4,681,775	165,267	(977,055)	-	3,869,987
2076	3,869,987	136,611	(571,073)	-	3,435,525
2077	3,435,525	121,274	(3,797,925)	-	(241,126)
2078	(241,126)	(8,512)	249,638	-	0

EXTERNAL FUND CALCULATION

Prairie Island Unit 2

External Levelized

	Beginning Balance	Assumed Interest	Decommissioning Payment	Annuity	Ending Balance
2020	34,101,997	806,512	-	$ -	34,908,509
2021	34,908,509	1,659,993	-	372,971	36,941,473
2022	36,941,473	1,756,152	-	372,971	39,070,596
2023	39,070,596	1,856,860	-	372,971	41,300,427
2024	41,300,427	1,962,331	-	372,971	43,635,728
2025	43,635,728	2,072,791	-	372,971	46,081,490
2026	46,081,490	2,188,475	-	372,971	48,642,936
2027	48,642,936	2,309,632	-	372,971	51,325,538
2028	51,325,538	2,436,519	-	372,971	54,135,028
2029	54,135,028	2,569,408	-	372,971	57,077,406
2030	57,077,406	2,708,582	-	372,971	60,158,959
2031	60,158,959	2,854,340	-	372,971	63,386,269
2032	63,386,269	3,006,991	-	372,971	66,766,231
2033	66,766,231	3,166,863	-	372,971	70,306,066
2034	70,306,066	2,423,853	($1,223,206)	309,566	71,816,279
2035	71,816,279	2,470,480	($8,052,082)	-	66,234,677
2036	66,234,677	2,278,473	($15,053,198)	-	53,459,952
2037	53,459,952	1,839,022	(14,528,760)	-	40,770,214
2038	40,770,214	1,402,495	(9,570,925)	-	32,601,785
2039	32,601,785	1,121,501	(12,487,887)	-	21,235,399
2040	21,235,399	730,498	(6,263,732)	-	15,702,165
2041	15,702,165	540,154	(4,501,546)	-	11,740,774
2042	11,740,774	403,883	(3,611,894)	-	8,532,762
2043	8,532,762	293,527	(1,823,564)	-	7,002,725
2044	7,002,725	240,894	(143,201)	-	7,100,418
2045	7,100,418	244,254	(143,773)	-	7,200,899
2046	7,200,899	247,711	(146,661)	-	7,301,950
2047	7,301,950	251,187	(149,659)	-	7,403,478
2048	7,403,478	254,680	(155,308)	-	7,502,850
2049	7,502,850	258,098	(155,992)	-	7,604,956
2050	7,604,956	261,610	(159,338)	-	7,707,228
2051	7,707,228	265,129	(162,809)	-	7,809,548
2052	7,809,548	268,648	(169,329)	-	7,908,867
2053	7,908,867	272,065	(231,245)	-	7,949,688
2054	7,949,688	273,469	(300,164)	-	7,922,993
2055	7,922,993	272,551	(308,269)	-	7,887,275
2056	7,887,275	271,322	(353,627)	-	7,804,971
2057	7,804,971	268,491	(290,652)	-	7,782,809
2058	7,782,809	267,729	(406,007)	-	7,644,531
2059	7,644,531	262,972	(306,679)	-	7,600,823
2060	7,600,823	261,468	(280,792)	-	7,581,500
2061	7,581,500	260,804	(363,315)	-	7,478,988
2062	7,478,988	257,277	(373,667)	-	7,362,598
2063	7,362,598	253,273	(342,336)	-	7,273,535
2064	7,273,535	250,210	(399,928)	-	7,123,816
2065	7,123,816	245,059	(406,992)	-	6,961,884
2066	6,961,884	239,489	(372,594)	-	6,828,778
2067	6,828,778	234,910	(431,243)	-	6,632,445
2068	6,632,445	228,156	(449,135)	-	6,411,467
2069	6,411,467	220,554	(406,250)	-	6,225,771
2070	6,225,771	214,167	(470,982)	-	5,968,956
2071	5,968,956	205,332	(485,190)	-	5,689,098
2072	5,689,098	195,705	(505,795)	-	5,379,007
2073	5,379,007	185,038	(515,158)	-	5,048,887
2074	5,048,887	173,682	(530,961)	-	4,691,608
2075	4,691,608	161,391	(977,055)	-	3,875,944
2076	3,875,944	133,332	(571,073)	-	3,438,204
2077	3,438,204	118,274	(3,797,814)	-	(241,336)
2078	(241,336)	(8,302)	249,638	-	0