

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

**IN THE MATTER OF SOUTHWESTERN)
PUBLIC SERVICE COMPANY'S)
APPLICATION FOR: (1) REVISION OF)
ITS RETAIL RATES UNDER ADVICE)
NOTICE NO. 292; (2) AUTHORIZATION)
AND APPROVAL TO ABANDON ITS)
PLANT X UNIT 3 GENERATING)
STATION; AND (3) OTHER)
ASSOCIATED RELIEF,)

SOUTHWESTERN PUBLIC SERVICE)
COMPANY,)

APPLICANT.)**

CASE NO. 20-00238-UT

DIRECT TESTIMONY

of

MICHAEL O. REMINGTON

on behalf of

SOUTHWESTERN PUBLIC SERVICE COMPANY

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GLOSSARY OF ACRONYMS AND DEFINED TERMS

<u>Acronym/Defined Term</u>	<u>Meaning</u>
ADMS	Advanced Distribution Management System
AGIS	Advanced Grid Intelligence & Security
Base Period	October 1, 2019 through September 30, 2020
CIP	Critical Infrastructure Protection
CLE	Continuing Legal Education
CRS	Customer Response System
DER	distribution energy resources
FERC	Federal Energy Regulatory Commission
IT	Information Technology
MDM	meter data management
MSBA	Minnesota State Bar Association
NERC	North American Electric Reliability Corporation
Operating Companies	Northern States Power Company, a Minnesota corporation; Northern States Power Company, a Wisconsin corporation; Public Service Company of Colorado, a Colorado corporation; and SPS
PC	personal computer
PTT	Productivity Through Technology
SOX	Sarbanes-Oxley Act of 2002

<u>Acronym/Defined Term</u>	<u>Meaning</u>
SPP	Southwest Power Pool
SPS	Southwestern Public Service Company, a New Mexico corporation
Test Year	Historical Test Year Period consisting of the Base Period and further incorporating all proper adjustments and capital additions
Total Company	Total SPS (before jurisdictional allocation)
VoIP	Voice Over Internet Protocol
WAM	Work and Asset Management
WAN	wide area network
WBS	Work Breakdown Structure
Xcel Energy	Xcel Energy Inc.
XES	Xcel Energy Services Inc.

LIST OF ATTACHMENTS

<u>Attachment</u>	<u>Description</u>
MOR-1	Total Company Amounts and Jurisdictional Percentages (<i>Filename: MOR-1.xlsx</i>)
MOR-2	Business Systems Capital Additions to Plant in Service: October 1, 2019 through September 30, 2020 (<i>Filename: MOR-2.xlsx</i>)
MOR-3	Business Systems Capital Additions to Plant in Service: October 1, 2020 through February 28, 2021 (<i>Filename: MOR-3.xlsx</i>)

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1 **I. WITNESS IDENTIFICATION AND QUALIFICATIONS**

2 **Q. Please state your name and business address.**

3 A. My name is Michael O. Remington. My business address is 414 Nicollet Mall,
4 Minneapolis, Minnesota 55401.

5 **Q. On whose behalf are you testifying in this proceeding?**

6 A. I am filing testimony on behalf of Southwestern Public Service Company, a New
7 Mexico corporation (“SPS”), which is a wholly-owned electric utility subsidiary of
8 Xcel Energy Inc. (“Xcel Energy”).

9 **Q. By whom are you employed and in what position?**

10 A. I am employed by Xcel Energy Services Inc. (“XES”), the service company
11 subsidiary of Xcel Energy, as Director of Information Technology (“IT”)
12 Operations.

13 **Q. Please briefly outline your responsibilities as Director of IT Operations.**

14 A. As Director of IT Operations, I lead a team of professionals that are responsible for
15 managing major incidents, monitoring IT infrastructure and applications, disaster
16 recovery planning, and operating several core IT service management processes.
17 In this testimony I represent the XES Business Systems organization, which
18 performs Xcel Energy’s shared IT functions. The key types of activities performed

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1 by Business Systems include all enterprise application development and
2 maintenance, management of IT infrastructure, data center operations and
3 architecture, and IT governance.

4 **Q. Please describe your educational background.**

5 A. I hold Bachelor of Arts degree from the University of Minnesota with a major in
6 Political Science and a Juris Doctorate from the Mitchell Hamline School of Law.

7 **Q. Please describe your professional experience.**

8 A. I have over 20 years of experience in the field of IT. I joined Xcel Energy in July
9 2008, after almost eight years at IBM Global Services where I filled IT roles under
10 contract for Xcel Energy. I began my career at Xcel Energy as a Senior Manager
11 of IT Service Management and served in that position continuously for 11 years.
12 My team was responsible for the administration of core IT service management
13 processes (change, problem, request fulfillment, configuration, and asset
14 management). We also ensured compliance and audit readiness for several North
15 American Electric Reliability Corporation (“NERC”) regulatory standards and
16 Sarbanes-Oxley Act of 2002 (“SOX”) controls. From October 2013 to January
17 2015, in addition to my role as Senior Manager of IT Service Management, I served
18 on temporary assignment in the General Counsel organization where I practiced

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1 law on behalf of Xcel Energy, including transactional work and equal employment
2 opportunity and safety investigations. In July 2019, I was promoted to Director of
3 IT Operations, my current position.

4 **Q. Have you attended or taken any special course or seminars relating to public**
5 **utilities?**

6 A. Yes. I have attended several Continuing Legal Education (“CLE”) courses on
7 topics related to public utilities and energy generally. Topics include the Public
8 Utility Regulatory Policies Act, federal energy policy, energy and eminent domain,
9 and regulatory models and regulated utilities. I have also presented CLEs,
10 including *Critical Infrastructure Protection - Cyber Security and the Bulk Electric*
11 *System*, and presented to the Mid-Continent Compliance Forum on *Tailoring*
12 *Enterprise Incident Management for CIP Compliance*.

13 **Q. Are you a member of any professional organizations?**

14 A. Yes. I am a member of the Minnesota State Bar Association (“MSBA”), where I
15 serve on the Technology Law Section Council, and am a former chair of the Legal
16 Technology Committee. I am also a member of the MSBA Public Utilities Law
17 Section.

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1 to provide, maintain, and secure the properties and facilities that are used by SPS
2 to provide safe and reliable electric utility service for its customers. The total
3 amount of costs for projects placed in service during the period of October 1, 2019
4 through September 30, 2020 is \$12,399,012 New Mexico retail (\$41,201,440 Total
5 Company) and placed into service or to be placed in service during the period
6 October 1, 2020 through February 28, 2021 is \$5,915,855 New Mexico retail
7 (\$19,581,724 Total Company). These costs were prudently incurred and consist of
8 reasonable and necessary capital projects related to software, hardware, systems
9 and related technology infrastructure investments, and cyber security solutions that
10 support Xcel Energy's business operations including those of SPS. These
11 investments are necessary to maintain existing IT system and infrastructure, to
12 replace aging technology, and to deploy efficiency solutions that enable the
13 organization to continue to provide customers with high levels of service. The
14 investments are also needed to prevent threats to the security of the IT systems. As
15 such, I recommend the New Mexico Public Regulation Commission approve SPS's
16 request to include in rate base \$18,314,868 (New Mexico retail) of new Business
17 Systems capital additions.

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1 **Q. How were New Mexico retail jurisdictional amounts in your testimony and**
2 **attachments calculated?**

3 A. Throughout this testimony, I quantify the asset amounts on a New Mexico retail
4 basis based upon the jurisdictional allocation percentages that SPS witness
5 Stephanie N. Niemi uses to develop the New Mexico retail revenue requirement
6 reflected in her Attachment SNN-6. Ms. Niemi is responsible for calculating
7 jurisdictional allocation percentages that apply to the various cost components in
8 the cost of service. My staff and I conferred with Ms. Niemi and her staff to
9 determine the New Mexico retail jurisdictional amounts presented in my testimony
10 and attachments. If the percentages used to allocate amounts to the New Mexico
11 retail jurisdiction change, those new allocation percentages will need to be applied
12 to the Total Company numbers to derive updated New Mexico retail amounts.
13 Attachment MOR-1 contains the Total Company numbers and the jurisdictional
14 percentages used to derive the New Mexico retail amounts in my testimony.

15 **Q. Were Attachments MOR-1 through MOR-3 prepared by you or under your**
16 **direct supervision and control?**

17 A. Yes. Attachment MOR-1 was prepared by my staff as well as Ms. Niemi and her
18 staff. Attachments MOR-2 and MOR-3 were prepared by my staff as well as SPS

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1 witness Mark P. Moeller and his staff, and the information in Attachments MOR-2
2 and MOR-3 is included in Mr. Moeller's Attachments MPM-2 and MPM-3. I have
3 reviewed my attachments, and I believe them to be accurate.

1 **III. THE RANKING, ESTIMATION, AND MANAGEMENT OF**
2 **BUSINESS SYSTEMS CAPITAL ADDITIONS**

3 **Q. Please generally describe the Business Systems organization and the work**
4 **Business Systems performs to support SPS's operations.**

5 A. As I mentioned above, the Business Systems organization within XES performs
6 Xcel Energy's shared IT functions across all Operating Companies, including SPS.
7 The key types of activities include all enterprise application development and
8 maintenance, management of IT infrastructure, data center operations and
9 architecture, and IT governance—all of which SPS needs to provide safe and
10 reliable electric service to its customers.

11 **Q. What are the key drivers of Business Systems' capital investment?**

12 A. There are three key drivers to IT investments: evolving cyber security threats;
13 replacing aging technology; and evolving business requirements. Business
14 Systems is in a phase of increased investment in IT infrastructure and is making
15 significant capital additions to serve these three objectives. Business Systems has
16 made these investments over the past few years and expects that this phase will
17 continue for the next several years as necessary improvements are made to address
18 cyber security, replace aging technology, and continue to meet evolving business
19 needs.

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1 **Q. How does Business Systems determine when an existing application or system**
2 **needs to be replaced or upgraded?**

3 A. Business Systems works with each of the business areas and Operating Companies
4 to identify short- and long-term technology needs. The needs typically are greater
5 than the organization's ability to fund them, so Business Systems evaluates and
6 prioritizes any proposed Business Systems investment. Business Systems strives
7 to maximize technology investment value by maintaining existing systems until the
8 risk and costs associated with keeping these aging technologies in place outweigh
9 the benefits.

10 **Q. Please describe the process for ranking and funding Business Systems capital**
11 **projects.¹**

12 A. Business Systems' budget development, project prioritization, and project
13 management leverages an established IT Governance process. A formal portfolio
14 prioritization process is conducted on a regular basis to determine which capital
15 projects are included in the budget. The project prioritization process is as follows:

¹ Business Systems' ranking and funding processes include Business Systems projects only. I am supporting a handful of projects that are managed by business areas outside of Business Systems for case efficiency. Those business areas follow all corporate budgeting policies and procedures and may have additional management/governance unique to their respective business areas, which ensure the capital additions are reasonable and necessary.

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1. IT works with each business area to determine its specific IT needs, and then these needs are prioritized based on a particular set of factors. Specifically, each Business Systems area is responsible for partnering with a specific business unit within the organization to determine that area's long-term strategic objectives and identify whether IT investments can enable achievement of those objectives. In turn, these priorities are converted into a proposed Business Systems budget.

The IT Governance process also monitors the end-to-end project implementation lifecycle for each proposed project, from its conception to in service, to help keep the project within budget and on schedule and that it performs as expected for the specified business objective. The IT Governance process also oversees any changes in project scope or budget at the corporate level based on overall Xcel Energy priorities and spending levels.
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 2. Project ideas are entered into a database and categorized by type. There are four categories: (1) Aging Technology; (2) Enhance Capabilities; (3) Cyber Security; and (4) Advanced Grid Intelligence & Security ("AGIS").
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 3. From the idea stage, project ideas are evaluated, ranked, and selected based on a common set of filters. This process weighs a multitude of criteria including: (1) the financial and non-financial benefits of a project; (2) the potential for other existing technologies to address the business need; and (3) the degree to which the project is needed to meet regulatory requirements or to ensure system reliability and security. This categorization process allows Business Systems to evaluate the benefits and risks associated with each project idea, and results in a list of ranked project ideas.
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 4. Once projects are ranked and selected, they are brought to the Xcel Energy Executive Committee to be prioritized and approved.

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1 **Q. How do legal requirements affect the ranking and selection of capital projects**
2 **to be funded?**

3 A. Legal requirements are built into the categories discussed above and also affect the
4 ranking of capital projects. Legal requirements that affect the ranking include
5 environmental requirements, recent system stability, and future regulatory
6 demands. For example, the NERC Critical Infrastructure Protection (“CIP”)
7 Standards CIP-002 through CIP-014 require that SPS and Xcel Energy comply with
8 physical and cyber security controls designed to protect critical infrastructure.
9 When there are legal requirements that affect capital projects, their ranking is
10 prioritized in the capital budget.

11 **Q. How does SPS ensure that Business Systems capital additions provide the**
12 **intended benefits?**

13 A. During the proposal process of each project, key success metrics based on the
14 category of the project are identified. These success metrics are reviewed during
15 project execution and at the close of the project. The sponsor of the project is
16 responsible for measuring and tracking the applicable economic, operational,
17 staffing, regulatory compliance, and any other benefits derived from the project.

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1 These formal reviews help the sponsor stay on track for delivery and attain the
2 project benefits.

3 **Q. Please generally describe how Business Systems develops cost estimates for**
4 **proposed capital additions.**

5 A. When a Business Systems project is in the initial stages of planning, we develop
6 cost and schedule estimates based on internal experience with similar
7 implementations. We then utilize a competitive bid process to ensure that Xcel
8 Energy receives quality service at a fair price, that business value is delivered
9 according to the agreed requirements, and that costs remain in line with the
10 approved budget.

11 **Q. Please explain how Business Systems capital costs are managed during a**
12 **specific project.**

13 A. After the estimates are developed, all projects follow a project flow process that
14 requires reviews and approvals at the budget, management, senior management,
15 and executive levels. After these approvals, projects are reviewed on a monthly
16 basis to compare the monthly budget to actual expenditures. Accordingly, on a
17 monthly basis, Business Systems evaluates deviations to determine whether costs
18 are appropriate. In addition, Business Systems develops action plans to mitigate

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1 variations in actual to budgeted expenditures. These mitigation plans may either
2 reduce or delay other expenditures to support the overall authorized budget. If
3 authorized budget adjustments are required, they are identified and approved at an
4 appropriate level of management.

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1 **IV. BUSINESS SYSTEMS CAPITAL ADDITIONS**

2 **Q. As part of this rate case, is SPS asking to include Business Systems capital**
3 **additions in its rate base?**

4 A. Yes. SPS is asking to include in rate base Business Systems capital additions that
5 have closed or are expected to close to plant-in-service for the period of October 1,
6 2019 through February 28, 2021. SPS has included these capital additions in its
7 Test Year² rate base. In Subsection A below, I address the capital additions that
8 have closed to plant-in-service during the period of October 1, 2019 through
9 September 30, 2020. In Subsection B, I discuss the capital additions that have
10 closed to plant-in-service or are expected to close to plant-in-service during the
11 period of October 1, 2020 through February 28, 2021. All of these Business
12 Systems capital additions support SPS's ability to provide safe and reliable electric
13 service to its customers.

² The Test Year is the Historical Test Year Period consisting of the Base Period (October 1, 2019 through September 30, 2020) and further incorporating all proper adjustments and capital additions.

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1 **A. Business Systems Capital Additions for the Period October**
2 **1, 2019 through September 30, 2020**

3 **Q. What is the dollar amount of the Business Systems capital additions that SPS**
4 **is requesting in this case for the period of October 1, 2019 through September**
5 **30, 2020?**

6 A. SPS is requesting \$12,399,012 on a New Mexico retail basis (\$41,201,440 Total
7 Company) in Business Systems capital additions for the period of October 1, 2019
8 through September 30, 2020. This amount consists of general plant capital
9 additions of \$7,991,833 and intangible plant additions of \$4,407,179 on a New
10 Mexico retail basis.

11 **Q. Have you prepared a list of SPS's requested Business Systems capital additions**
12 **closed to plant-in-service during the period of October 1, 2019 through**
13 **September 30, 2020?**

14 A. Yes. Attachment MOR-2 is a list of SPS's requested Business Systems capital
15 additions for the period from October 1, 2019 through September 30, 2020.
16 Attachment MOR-2 provides the following information:

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Table MOR-1
Capital Asset Information Listed in Attachment MOR-2

Column A	Asset Class	Identifies the type of asset.
Column B	Witness	Identifies the witness supporting the project.
Column C	Project Category	Provides the project category that is descriptive of the project's type.
Column D	WBS Level 2 Number	Provides the Work Breakdown Structure ("WBS") Level 2 number for the project.
Column E	Project Description (WBS Level 2 Description)	Provides a short title for the WBS Level 2 number for the project.
Column F	Additions to Plant-in-Service (October 1, 2019 – September 30, 2020) Total Company	Provides the Total Company dollar amount for the plant additions for the period October 1, 2019 through September 30, 2020.
Column G	Additions to Plant-in-Service (October 1, 2019 – September 30, 2020) NM Retail	Provides the New Mexico Retail dollar amount for the plant additions for the period October 1, 2019 through September 30, 2020.

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1 **Q. Please describe the Business Systems capital additions placed in service for the**
2 **period of October 1, 2019 through September 30, 2020 as shown on**
3 **Attachment MOR-2.**

4 A. As shown in Table MOR-2 below, the plant additions for this period fall within the
5 following categories: (1) Aging Technology; (2) Enhance Capabilities; (3) Cyber
6 Security; and (4) AGIS. Although each project is assigned to one category, its
7 purpose may relate to one or more categories. Business Systems investments are
8 primarily enterprise-wide systems that are used by all of the Operating Companies,
9 including SPS.

10 **Table MOR-2***
11 **Business Systems – Capital Investment**
12 **for the period October 1, 2019 through September 30, 2020**

Project Category	Business Systems Capital Additions (NM retail)	Business Systems Capital Additions (Total Company)
Aging Technology	\$9,512,373	\$31,642,135
Enhance Capabilities	\$2,058,830	\$6,848,530
Cyber Security	\$490,649	\$1,632,105
AGIS	\$337,160	\$1,078,669
Total	\$12,399,012	\$41,201,440

13 *There may be differences between the sum of the individual category amounts
14 and Total amounts due to rounding.

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1 **Q. In SPS’s last rate case, Business Systems capital additions included a project**
2 **category referred to as “Productivity Through Technology” (“PTT”). Why**
3 **does that category no longer appear in your testimony?**

4 A. The PTT category related to capital investments made as part of a specific initiative
5 to improve business processes and systems throughout Xcel Energy by addressing
6 needed technological changes. The PTT initiative focused on replacing Xcel
7 Energy’s General Ledger system, as well as several different work and asset
8 management programs across business areas to create an integrated, modernized
9 Work and Asset Management (“WAM”) system. The majority of the investments
10 in the PTT initiative were undertaken in 2014 through 2015, with some preliminary
11 work in 2013 and some post-implementation follow-up after 2015. With the
12 completion of the PTT initiative, Business Systems eliminated this category as an
13 option for capital projects in late 2019. Needed updates to or continuous
14 improvement associated with the WAM system are now reflected in other
15 categories, such as “Enhance Capabilities.”

16 **Q. Please describe the types of projects included in the “Aging Technology”**
17 **category.**

18 A. This category of investment includes projects that were necessary to upgrade or
19 replace aging software, hardware, systems, and related technology infrastructure,

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1 which are required to ensure efficient and reliable business operations. This
2 category of investment includes upgrades of the critical systems that are used across
3 Xcel Energy such as desktop operating systems, productivity suites, and other
4 infrastructure systems used throughout the organization. For example, capital
5 additions in this category include planned replacements and upgrades of computer
6 hardware platforms (e.g., desktop computers and laptops, mobile data terminals),
7 radio and microwave systems, network components, and applications. This
8 category also includes projects related to software license renewals and expanded
9 licensing for existing software.

10 SPS's portion of the total investment in this category amounts to \$9,512,373
11 on a New Mexico retail basis (\$31,642,135 Total Company) during the period.

12 Projects included in this category are:

- 13 • **SPS Trunked Repeaters (Quantar) - \$2,980,111 NM Retail (\$9,913,096**
14 **Total Company)** (WBS Level 2 No. D.0001839.371). This project
15 involved replacing equipment in SPS's private radio system. This private
16 radio system is critical to SPS operations especially in times of storm
17 restoration when public networks are not available. Replacing the repeaters
18 eliminates risk to operations, customer satisfaction metrics, regulatory
19 affairs, and financial performance from an extended radio system outage
20 and lack of communications with field personnel and expand capability to
21 support mobile and fixed data applications to enable increased productivity
22 and safe operations.

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- 1 • **WAN SPS - \$2,898,490 NM Retail (\$9,641,590 Total Company)** (WBS
2 Level 2 No. D.0001822.008, D.0001822.010, D.0001822.058,
3 D.0002014.001, D.0002014.002, D.0002014.003, D.0002014.004,
4 D.0002014.005, D.0002014.006, D.0002014.007, D.0002014.008,
5 D.0002014.009, D.0002014.010, D.0002014.012, D.0002014.013,
6 D.0002014.014). These projects involved wide area network (“WAN”)
7 reliability and capacity improvements for distribution and transmission
8 substations, energy supply sites, service centers, and third parties. They
9 address business needs related to increased substation communications
10 reliability; high-speed digital access for operations, maintenance, and
11 security; and the ability to analyze data to improve reliability and
12 operations.
- 13 • **IT INFS Network Refresh - \$882,701 NM Retail (\$2,936,234 Total**
14 **Company)** (WBS Level 2 No. D.0002192.004, D.0002192.017,
15 D.0001839.063). This project involved replacing network components on
16 a regular schedule based on vendor support and end-of-life guidelines to
17 ensure continued network reliability, meet NERC communications
18 requirements, reduce safety concerns, and minimize replacement costs.
- 19 • **Next Generation Desktop - \$719,91009 NM Retail (\$2,394,721 Total**
20 **Company)** (WBS Level 2 No. D.0001805.016, D.0001805.020). This
21 project involved purchasing the licenses necessary to move desktop and
22 mobile computing devices throughout Xcel Energy to the most current
23 operating system, Windows 10, and to move from the Office 2010 suite of
24 applications to Office 365. The legacy operating system was near the end
25 of its useful life, and vendor support ended in January 2020. A current,
26 supported operating system is essential for avoiding security vulnerabilities
27 and enables new business capabilities and efficiencies, such as mobile and
28 tablet technologies across our business.
- 29 • **10G Backhaul - \$550,145 NM Retail (\$1,830,011 Total Company)** (WBS
30 Level 2 No. D.0002018.004). Xcel Energy’s previous corporate
31 communications backbone had insufficient capacity for the increasing loads
32 introduced by the new WAM system. This project involved upgrading
33 network bandwidth to 10G to address capacity concerns.

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- 1 • **Planned PC Refresh - \$202,356 NM Retail (\$673,122 Total Company)**
2 (WBS Level 2 No. D.0002193.004, D.0002193.008, D.0002354.004,
3 D.0001821.311). These projects involved the planned or scheduled
4 replacement of aging personal computers (“PC”), including laptops and
5 desktops, when they reached the end of their useful lives, and investment
6 necessary to purchase PCs for new personnel or as replacements for lost or
7 damaged computers as the need arose.

- 8 • **Vegetation Management Crew Management - \$174,869 NM Retail**
9 **(\$581,689 Total Company)** (WBS Level 2 No. D.0002081.011). This
10 project involved deployment of a geospatial crew application to receive,
11 track, record complete, and close out of work set up for contract vegetation
12 management crews. The application increases NERC compliance, provides
13 effective management of hazardous trees in rights-of-way, increases
14 execution of strategic forecasting, reduces dual data entry, and increases
15 reporting capabilities.

- 16 • **Oracle Licenses - \$146,528 NM Retail (\$487,413 Total Company)** (WBS
17 Level 2 No. D.0002265.004). This project involved upgrading the Oracle
18 database versions in use across Xcel Energy. Several versions that were in
19 service were at the end of their useful lives and were no longer supported
20 by the vendor. Key systems supported by Oracle include Business Objects,
21 Enterprise Service Bus, the Xcel Energy website, and generation
22 management tools.

- 23 • **PCI SPP Settlement Upgrade - \$137,872 NM Retail (\$458,619 Total**
24 **Company)** (WBS Level 2 No. D.0002244.001). The Southwest Power
25 Pool (“SPP”) replaced their current market and transmission settlement
26 systems with a single, custom-designed system that required all SPP
27 members, including SPS, to upgrade. This project implemented that
28 necessary system.

29 Combined, these projects account for 91.39% of the total capital additions
30 in this category. The remaining projects are similar in nature in that they are
31 necessary to repair or replace aging technology, which is essential to ensuring

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1 efficient and reliable business operations that support SPS's provision of electric
2 service.

3 **Q. Please describe the types of projects included in the "Enhance Capabilities"**
4 **category.**

5 A. This category of projects includes the implementation of new software, upgrades
6 to existing software systems, and necessary hardware upgrades to support software
7 investments. These investments are needed to enhance production and training
8 environments to meet regulatory requirements, efficiently manage assets, improve
9 project management and workflow, enable continued system stability, meet
10 evolving legal and compliance requirements, maintain and improve business
11 operations, and protect SPS and Xcel Energy information. These investments
12 impact many of the operational functions of Xcel Energy including power plants,
13 transmission operations, facility management, IT operations management,
14 construction project management, and customer care needs.

15 SPS's portion of the total investment in this category amounts to \$2,058,830
16 on a New Mexico retail basis (\$6,848,530 Total Company) during the period.

17 Projects included in this category are:

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- 1 • **ESB Environment Refresh - \$659,218 NM Retail (\$2,192,834 Total**
2 **Company)** (WBS Level 2 No. D.0001839.628). This project involved
3 enhancing monitoring capabilities, managing quality issues, and managing
4 system issues necessary to reduce data integrity occurrences and promote a
5 series of process and controls. It increases customer satisfaction, maximizes
6 online availability, maintains or enhances system processing times,
7 decreases data scrubs and system risk associate with them, and increases
8 system and manual data process efficiencies.
- 9 • **eSOMS Project - \$244,900 NM Retail (\$814,639 Total Company)** (WBS
10 Level 2 No. D.0001804.393, D.0002270.004). This project upgraded the
11 Electric Shift Operations Management System. This software and
12 associated business processes prevent accidental startup of hazardous
13 equipment while a worker is in direct contact with the isolated equipment.
14 The project is needed for personal safety and to align with industry
15 standards to ensure that dangerous systems are properly shut off and not
16 able to re-start until the work on the isolated equipment is complete and all
17 workers involved are individually accounted for.
- 18 • **Transmission Asset Health Analytics - \$238,423 NM Retail (\$793,095**
19 **Total Company)** (WBS Level 2 No. D.0001728.007). This project
20 involved costs associated with developing a system that provides the
21 analytics for maintaining and replacing transmission assets. The system
22 combines different types of data and explores capabilities to perform data
23 mining, predictive modeling, and advanced analysis.
- 24 • **PTT Continuous Improvements - \$148,093 NM Retail (\$492,621 Total**
25 **Company)** (WBS Level 2 No. D.0001787.009, D.0001787.014,
26 D.0001787.021). This stabilize and optimize project builds upon the
27 existing Enterprise Resource Plan system by delivering new functionality
28 and refreshes to specific areas of application. This release included updates
29 for dispatching, scheduling, and materials inventory.
- 30 • **Satellite - \$145,665 NM Retail (\$484,543 Total Company)** (WBS Level 2
31 No. D.0002015.002, D.0002015.003). This project involved implementing
32 reliable satellite connections in all Xcel Energy regions and enables

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- 1 dynamic network addressing for satellite connections that have already been
2 deployed. This upgrade and expansion of satellite capabilities enables
3 automated emergency cut-over and improves performance.
- 4 • **Business Systems Resiliency Project - \$120,366 NM Retail (\$400,386**
5 **Total Company)** (WBS Level 2 No. D.0002364.006). This project built
6 on the Customer Response System and other key domain critical areas
7 across Xcel Energy. It included gaining an understanding of incident root
8 causes and defined improvement opportunities and initial
9 sequencing/roadmap to drive increased stability and resiliency in the future.
 - 10 • **Network Automation Platform Implementation - \$103,292 NM Retail**
11 **(\$343,591 Total Company)** (WBS Level 2 No. D.0002185.006). This
12 project provided the Network organization an automation platform that is
13 highly scalable and flexible in terms of integration. The platform increases
14 reliability and stability of network assets and lowers time to implement
15 changes in network and assist in removing human error.
 - 16 • **Network Inventory and Planning Solution - \$96,453 NM Retail**
17 **(\$320,843 Total Company)** (WBS Level 2 No. D.0001796.025,
18 D.0001796.034, D.0001796.045, D.0001796.050). This project created a
19 central repository that can house the inventory of all network assets. This
20 inventory will include wireless networks, fiber, physical locations, WAN
21 circuits, network hardware components, etc. In addition, the system
22 provides geospatial visualization of the entire communications network and
23 provides real-time network monitoring for enhanced network reliability and
24 security.
 - 25 • **Enterprise Operational Monitoring - \$94,807 NM Retail (\$315,369**
26 **Total Company)** (WBS Level 2 No. D.0002045.015). This project
27 supported several corporate initiatives (hardware and software) that enabled
28 additional monitoring of existing and new critical systems for Xcel Energy
29 employees and customers.
 - 30 • **UNIX Configuration Manager – \$62,474 NM Retail (\$207,815 Total**
31 **Company)** (WBS Level 2 No. D 0002135.004). This project involved the
32 acquisition and implementation of DevOps tooling (combination of

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1 software development and IT operations) to enable agile workflows in
2 platform and cloud services. It provides a unified tooling platform for
3 security compliance configuration management, validation of current
4 security stances and errata, and audit reporting for Windows and UNIX.

5 Combined, these projects account for 92.95% of the total capital additions
6 in this category. The remaining projects are similar in nature in that they involve
7 the implementation or upgrade of existing software, hardware, or systems that are
8 needed to improve business operations and to protect SPS and Xcel Energy
9 information.

10 **Q. How do you differentiate between the Enhance Capabilities investments and**
11 **the Aging Technology investments?**

12 A. As noted above, some of the investments overlap between categories. That said,
13 the projects in the Aging Technology category typically involve the replacement of
14 assets that were already in service, while the projects in the Enhance Capabilities
15 category typically involve implementing systems that significantly add to business
16 capability or efficiency. Close calls in deciding which category is appropriate often
17 involve application upgrades. In some cases, the primary reason for an upgrade is
18 the age of the existing application. In other cases, the upgraded application enables
19 new functionality and capability. In many cases both issues drive the need for the
20 capital investment.

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1 **Q. Please describe the types of projects included in the “Cyber Security”**
2 **category.**

3 A. Projects in this category include solutions required to meet regulatory requirements,
4 such as the NERC CIP Standards, and to protect SPS and Xcel Energy’s computing
5 environment. Accordingly, these projects assist SPS in establishing and
6 maintaining the proper tools to protect the integrity and confidentiality of its data
7 and its systems.

8 SPS’s portion of the total investment in this category amounts to \$490,649
9 on a New Mexico retail basis (\$1,632,105 Total Company). Projects included in
10 this category are:

- 11 • **Security Camera Upgrade - \$133,755 NM Retail (\$444,926 Total**
12 **Company)** (WBS Level 2 Nos. D.0001840.114, D.0001840.116,
13 D.0002123.008, D.0001804.126). These projects are part of a security
14 camera upgrade effort, which replaced analog cameras with digital cameras,
15 including the necessary software and cabling. The legacy security camera
16 system was reaching the end of its useful life and did not provide the
17 required level of security observation. The new system allows security
18 personnel to work more efficiently.
- 19 • **OT Monitoring - \$82,772 NM Retail (\$275,334 Total Company)** (WBS
20 Level 2 Nos. D.0002165.010, D.0002165.007). This project implemented
21 an operating technology monitoring resource. The monitoring resource
22 supports and improves Xcel Energy’s threat detection, incident response,
23 and vulnerability identification and case management/workflow
24 procedures.

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- 1 • **SailPoint Phase 4 - \$68,454 NM Retail (\$227,707 Total Company Total**
2 **Company)** (WBS Level 2 No. D.0002001.020). This project involved
3 enhancements to the SailPoint identity and access management tool,
4 including bringing more entitlements (software and access) into the system.
5 The expansion of SailPoint enhances Xcel Energy’s Identity and Access
6 Management, which supports compliance with SOX, Federal Energy
7 Regulatory Commission (“FERC”), and NERC reliability standards.
8 Generally, this project has identified a total of 100 needed applications and
9 we are able to address an average of 12–15 per year. In the last five years,
10 we’ve addressed 65 applications with 35 remaining for 2021 (phases 5-6).
- 11 • **Multi-Factor Authentication – Initiation - \$68,183 NM Retail (\$226,806**
12 **Total Company)** (WBS Level 2 No. D.0002202.006). This project
13 involved implementing a multi-method, multi-level process for
14 authentication of Xcel Energy users that evaluates assurance, network
15 quality, managed/unmanaged devices, device type, and frequency of use to
16 a select pathway for validation and verification. It provides a more robust
17 and adaptable method for protecting Xcel Energy data, intellectual property,
18 and operational information. Without multi-factor authentication, Xcel
19 Energy is more susceptible to malicious (passive and aggressive) intrusion
20 to networks, data sources, and IT.
- 21 • **Virtual Emergency Operations Center - \$46,254 NM Retail (\$153,862**
22 **Total Company)** (WBS Level 2 No. D.0002189.006). This project
23 involved identifying and implementing a commercial Virtual Emergency
24 Operations Center software solution to effectively handle emergency
25 situations (from day-to-day incidents to large scale, major incidents). The
26 solution provides a complete command and control center allowing SPS to
27 more efficiently consolidate information, coordinate assets, and act
28 effectively. With this solution, SPS can manage all aspects of emergency
29 management procedures, share situational awareness among stakeholders,
30 and coordinate responses and communication.
- 31 • **eGRC Enterprise Security - Phase 3 - \$29,770 NM Retail (\$99,028 Total**
32 **Company)** (WBS Level 2 Nos. D.0002101.018, D.0002101.012,
33 D.0002101.006). This initiative added risk management functionality in the

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1 areas of vendor management; disaster recovery plans; application risk
2 assessments; policy, control, and risk framework; and discrepancy
3 reporting. It further reduces cyber security risk and the likelihood and
4 severity of a future cyber event, improves the allocation of resources to the
5 highest priority risks, and improves productivity around each of the
6 processes addressed.

- 7 • **Enterprise Database Security Phase II - \$24,518 NM Retail (\$81,556**
8 **Total Company)** (WBS Level 2 No. D.0002008.012). This project
9 involved enhancing the control and logging of access to structured data
10 assets. This phase of the project focused on data encryption, masking,
11 protection, best practices, and governance processes to enforce security
12 policies and demonstrate compliance.

13 Combined, these projects account for 92.47% of the total capital additions
14 in this category. The remaining projects are similar in nature in that they are
15 necessary to meet regulatory requirements and protect SPS's and Xcel Energy's
16 computing environment.

17 **Q. Please describe the types of projects included in the Advanced Grid**
18 **Intelligence & Security or "AGIS" category.**

19 A. The Advanced Grid Intelligence & Security category captures Xcel Energy's work
20 to build an advanced electric grid that is more resilient and provides more tools and
21 options for customers. In the future, the AGIS category for SPS is expected to also
22 include investment associated with advanced metering infrastructure. That is not,
23 however, part of this case.

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1 SPS's portion of the total investment in this category amounts to \$337,160
2 on a New Mexico retail basis (\$1,078,669 Total Company). The project included
3 in this category is:

- 4 • **Advanced Distribution Management System Data- \$337,160 NM Retail**
5 **(\$1,078,669 Total Company)** (WBS Level 2 No. D.0001723.048). The
6 Advanced Distribution Management System ("ADMS") provides an
7 integrated operating and decision software support system to assist control
8 room, field personnel, and engineers with the monitoring, control, and
9 optimization of the electric distribution system. This ADMS data project
10 involved collecting and reviewing information about the electric
11 distribution assets to ensure that the information available complies with the
12 necessary level of detail needed for ADMS.

13 This project accounts for 100% of the total capital additions in this category.

14 **Q. Are the Business Systems capital additions for the period of October 1, 2019**
15 **through September 30, 2020 presented in Attachment MOR-2 reasonable and**
16 **necessary?**

17 A. Yes. As discussed in my testimony above, the Business Systems capital additions
18 presented in Attachment MOR-2 are reasonable and necessary to efficiently
19 manage business operations, protect SPS and Xcel Energy data and information,
20 meet evolving regulatory and legal requirements, keep current with technology,
21 maintain the stability and reliability of the existing IT systems, and provide the
22 tools required to effectively and safely provide service to SPS's retail customers.
23 The rigorous processes (discussed in Section III) that are followed in evaluating,

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1 selecting, and monitoring the execution and implementation of capital projects
2 ensures that the additions are reasonable and necessary and that the costs are
3 prudently incurred to provide safe and reliable utility service to SPS customers.

4 **B. Business Systems Capital Additions for the Period October**
5 **1, 2020 through February 28, 2021**

6 **Q. Please describe the Business Systems capital additions SPS is requesting to**
7 **include in its rate base for the period of October 1, 2020 through February 28,**
8 **2021.**

9 A. The capital additions that have been or will be placed in service during the period
10 of October 1, 2020 through February 28, 2021 are similar to the projects that were
11 closed to plant-in-service during the period of October 1, 2019 through September
12 30, 2020 and that are discussed in the previous section of my testimony. As with
13 the projects discussed above, these projects support SPS's ability to provide safe
14 and reliable electric service to its customers.

15 **Q. What is the dollar amount of the Business Systems capital additions for the**
16 **period of October 1, 2020 through February 28, 2021 that SPS is requesting to**
17 **include in rate base?**

18 A. SPS is requesting \$5,915,855 on a New Mexico retail basis (\$19,581,724 Total
19 Company) in Business Systems capital additions for the period of October 1, 2020
20 through February 28, 2021. This amount consists of general plant capital additions

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1 of \$2,247,953 and intangible plant capital additions of \$3,667,902 on a New
2 Mexico retail basis.

3 **Q. Have you prepared a list of SPS's requested Business Systems capital additions**
4 **closed or expected to close to plant-in-service during the period of October 1,**
5 **2020 through February 28, 2021?**

6 A. Yes. Attachment MOR-3 provides all of the Business Systems capital additions
7 that closed or are expected to be closed to plant-in-service during this time period.
8 Attachment MOR-3 provides the following information:

9 **Table MOR-3**
10 **Capital Asset Information Listed in Attachment MOR-3**

Column A	Asset Class	Identifies the type of asset.
Column B	Witness	Identifies the witness supporting the project.
Column C	Project Category	Provides the project category that is descriptive of the project's type.
Column D	Project Description	Provides a short title that describes the project.
Column E	Additions to Plant-in-Service (October 1, 2020 – February 28, 2021) Total Company	Provides the Total Company dollar amount for the plant additions for the period October 1, 2020 through February 28, 2021.
Column F	Additions to Plant-in-Service (October 1, 2020 – February 28, 2021) NM Retail	Provides the New Mexico Retail dollar amount for the plant additions for the period October 1, 2020 through February 28, 2021.

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1 **Q. Please describe the Business Systems capital additions placed in service for the**
2 **period of October 1, 2020 through February 28, 2021.**

3 A. The capital additions that have been or will be placed into service between October
4 1, 2020 through February 28, 2021 are similar to the projects that were closed
5 during the period of October 1, 2019 through September 30, 2020 and that are
6 discussed in the previous section of my testimony. The table below shows the
7 project categories and amounts.

8 **Table MOR-4**
9 **Business Systems – Capital Investment**
10 **for the period October 1, 2020 through February 28, 2021**

Project Category	Business Systems Capital Additions (NM retail)	Business Systems Capital Additions (Total Company)
Aging Technologies	\$3,638,459	\$12,091,543
Enhance Capabilities	\$1,489,708	\$4,952,046
Cyber Security	\$595,790	\$1,981,846
AGIS	\$652,543	\$2,088,587
Emergent Demand	\$245,280	\$815,905
Savings Target	-\$705,925	-\$2,348,203
Total	\$5,915,855	\$19,581,724

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1 **Q. Please describe the types of projects included in the “Aging Technology”**
2 **category.**

3 A. The general description of the Aging Technology category is provided in the
4 previous subsection of this testimony. That description also applies to the projects
5 included for the period October 1, 2020 through February 28, 2021 identified as
6 Aging Technology on Attachment MOR-3. The total planned investment in this
7 category is \$3,638,459 on a New Mexico retail basis (\$12,091,543 Total Company)
8 during the period. The projects included in this category are:

- 9 • **WAN SPS - \$583,362 NM Retail (\$1,940,506 Total Company).** Please
10 see project description in Section IV.A above.
- 11 • **Planned PC Refresh - \$466,669 NM Retail (\$1,552,337 Total**
12 **Company).** Please see project description in Section IV.A above.
- 13 • **Facility IT Investments - \$456,734 NM Retail (\$1,519,289 Total**
14 **Company).** New service centers or offices are built as needed to support
15 growing or expanding communities. Facility IT investments represent the
16 necessary IT network infrastructure needed to connect these sites. This
17 includes the construction of main distribution frames, intermediate
18 distribution frames, cabling to connect workstations and phones,
19 deployment of wireless access points, and the installation of any routers,
20 switches and/or firewalls to secure the site.
- 21 • **SPS Trunked Repeaters (Quantar) - \$251,386 NM Retail (\$836,216**
22 **Total Company).** Please see project description in Section IV.A above.
- 23 • **IT INFS Network Refresh - \$217,882 NM Retail (\$724,768 Total**
24 **Company).** Please see project description in Section IV.A above.

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- 1 • **VoIP Refresh - \$209,329 NM Retail (\$696,317 Total Company).** This
2 project involves refreshing sites to Voice Over Internet Protocol (“VoIP”)
3 Systems PBX Corporate IP Standards. VoIP is a technology that allows for
4 voice/ telephone communications to take place by using internet
5 connection. This project addresses the systems that are in need of
6 replacement (refresh by replacement) and the modern technologies that will
7 be supported by this work effort improve the interface with customers.
- 8 • **Kafka Data Streaming - \$178,880 NM Retail (\$595,029 Total**
9 **Company).** Kafka will provide new strategic data streaming capabilities to
10 replace the existing, disconnected enterprise integration solutions. The new
11 platform will provide a broad support for numerous types of integrations
12 performed by overlapping technologies today enabling a robust digital
13 transformation.
- 14 • **F5 Renewal - \$153,937 NM Retail (\$512,060 Total Company).** The
15 project involves an upgrade that will focus on the delivery, security,
16 performance, and availability of web applications, as well as the availability
17 of servers, cloud resources, data storage devices, and other networking
18 components
- 19 • **Meridium Upgrade - \$146,758 NM Retail (\$488,179 Total Company).**
20 Meridium is an asset management tool used for improving power plant
21 reliability, inspection and generation analysis. This project will upgrade
22 legacy Meridium to the latest version, as the prior version is outdated. This
23 initiative will provide performance improvements which will allow Xcel to
24 optimize asset decision making and spending.
- 25 • **Active Directory Upgrade - \$121,388 NM Retail (\$403,788 Total**
26 **Company).** This project involves the replacement of the Microsoft Active
27 Directory infrastructure at 28 sites across Xcel Energy, as well as an
28 upgrade of the Active Directory software to the most recent version. Active
29 Directory authenticates and authorizes users and computers in a Microsoft
30 Windows domain. It also assigns and enforces security policies for all
31 computers that are members of the domain.

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- 1 • **Emptoris Contract Management Replacement - \$113,947 NM Retail**
2 **(\$379,036 Total Company)**. This project involves replacing the hosted
3 Emptoris application due to vendor IBM ending support in 2020. Emptoris
4 is the Supply Chain organization’s application for creating contracts with
5 suppliers and sending requests for proposal to suppliers.
- 6 • **Technology License - \$111,235 NM Retail (\$370,015 Total Company)**.
7 To ensure adequate coverage, the Company will purchase additional
8 licenses to support new and increasing numbers of licenses for common
9 systems, such as Microsoft and Oracle, with users usually not tied to
10 specific projects. Prior year true ups were completed for Microsoft and
11 Oracle. Updating software licenses ensures that system devices are not over
12 purchased and are running up-to-date licensed software, which decreases
13 support costs and increases the Company’s cyber security profile.
- 14 • **CRS Tech Stack Upgrade and Win 10 - \$90,416 NM Retail (\$289,266**
15 **Total Company)**. This project refreshes the Customer Response System
16 (“CRS”) technical stack with current, supported versions of Oracle, AIX,
17 Internet Explorer, Windows, Genero, Weblogic, Perl, and Java, to ensure a
18 fully supported and healthy customer information system.
- 19 • **Rational License Purchase - \$79,680 NM Retail (\$265,050 Total**
20 **Company)**. This project involves the purchase of Rational licenses. IBM’s
21 Rational tool facilitates software application development, testing, and
22 defect tracking. The tool is used by Business Systems and technology
23 vendors to deliver software solutions to Xcel Energy.
- 24 • **Oracle Java 3 Licensing 3 Year - \$66,551 NM Retail (\$221,378 Total**
25 **Company)**. This project involves costs associated with a prepaid purchase
26 of Oracle Java licenses; Java is a software platform (as well as programming
27 language) that allows for application software development and
28 deployment.
- 29 • **eGRC Phase IV - SOX and Corp Compliance - \$59,210 NM Retail**
30 **(\$196,956 Total Company)**. This project is Phase 4 of the project describe
31 above in Section IV.A. It will build additional business functions into the

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1 RSA Archer toolset for compliance areas such as SOX, Gas Compliance,
2 and Corporate Compliance.

3 • **Adobe Flash Remediation - \$58,492 NM Retail (\$194,569 Total**
4 **Company)**. Adobe Flash will be discontinued December 31, 2020, and
5 browsers currently supporting Flash will drop support as well. This
6 program will remediate Flash for the applications identified using this
7 technology so they will continue to function correctly.

8 Combined, these projects account for 92.5% of the total capital additions in
9 this category. The remaining projects are similar in nature in that they repair or
10 replace aging technology, which is essential to ensuring efficient and reliable
11 business operations.

12 **Q. Please describe the types of projects included in the “Enhance Capabilities”**
13 **category.**

14 A. The general description of the Enhance Capabilities category is provided in the
15 previous subsection of this testimony, and that description also applies to the
16 projects included for the period October 1, 2020 through February 28, 2021
17 identified as Enhance Capabilities on Attachment MOR-3. The total planned
18 investment in this category is \$1,489,708 on a New Mexico retail basis (\$4,952,046
19 Total Company) during the period. The projects included in this category are:

20 • **Satellite - \$211,886 NM Retail (\$704,820 Total Company)**. Please see
21 project description in Section IV.A above.

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- 1 • **Monitoring and Diagnostics Center On-line Thermal Performance**
2 **Project - \$163,520 NM Retail (\$543,935 Total Company)**. This project
3 involves implementing an on-line, thermal monitoring program using plant
4 operational data gathered via the OSiSoft Process Information (data
5 platform) and other systems. It will transition Xcel Energy from a time-
6 based maintenance program to a condition-based maintenance program.
- 7 • **Application Performance Monitoring - \$156,719 NM Retail (\$521,312**
8 **Total Company)**. The project involves deploying an application
9 performance monitoring tool to improve visibility into issues affecting
10 critical customer-impacting applications and provide insight into root
11 causes.
- 12 • **Digital Channel Platform - \$156,007 NM Retail (\$518,944 Total**
13 **Company)**. This project will build out, enhance, and redesign several
14 components of customers' digital interactions with SPS. This work
15 includes enhancing and modernizing online digital platforms and
16 underlying technologies, including the mobile application. It also involves
17 enhancing contact center capabilities.
- 18 • **New Wind Farms - \$113,286 NM Retail (\$376,838 Total Company)**.
19 This project involves connecting three wind power farms to corporate and
20 SCADA networks with standard hardware for management of the power
21 source.
- 22 • **PTT Continuous Improvements - \$113,234 NM Retail (\$376,665 Total**
23 **Company)**. Please see project description in Section IV.A above.
- 24 • **Telecom Expense Management - \$100,799 NM Retail (\$335,301 Total**
25 **Company)**. This project includes costs for preparing to change network
26 services vendors. It includes auditing telecom invoices and processing
27 invoice payments, and managing the provisioning and full installation of
28 new network circuits, transferring third-party treasury service to the new
29 vendor, and migrating asset management to the corporate IT Service
30 Management processes and tools.

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- 1 • **Software Asset Management - \$88,128 NM Retail (\$293,150 Total**
2 **Company)**. This project involves identifying and implementing a software
3 asset management solution to support compliance with vendor agreements,
4 minimize maintenance costs, streamline application life cycle, and improve
5 cyber risk posture through effective patching and access management.

- 6 • **XE1 Wave 5 – Distribution Software - \$81,323 NM Retail (\$270,513**
7 **Total Company)**. This project involves the development and
8 implementation of a digital/technology solution to support distribution
9 scheduling.

- 10 • **General Counsel Document Management - \$63,675 NM Retail**
11 **(\$211,811 Total Company)**. This project involves implementing an
12 integrated document management solution for legal services to manage
13 content related to legal matters.

- 14 • **Data Discovery - \$62,482 NM Retail (\$207,840 Total Company)**. This
15 project involves implementing a software tool that will help address the
16 challenges with data discovery, compliance activities, and storage
17 optimization.

- 18 • **RPA (Robotic Process Automation) Release - \$52,188 NM Retail**
19 **(\$173,600 Total Company)**. This project uses the Blue Prism platform to
20 develop software bots which automatically execute routine tasks and
21 processes that are currently performed manually by departments across the
22 company. These bots deliver value by automatically executing routine,
23 non-value-add tasks consistently, accurately, quickly and reliably, which
24 frees up time for employees to focus on value-add activities.

25 Combined, these projects account for 91.57% of the total capital additions
26 in this category. The remaining projects are similar in nature in that they will
27 involve the implementation or upgrade of existing software, hardware, and systems
28 that are needed to improve business operations.

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1 **Q. Please describe the types of projects included in the “Cyber Security”**
2 **category.**

3 **A.** The general description of the Cyber Security category is provided in the previous
4 subsection of this testimony, and that description also applies to the projects
5 included for the period October 1, 2020 through February 28, 2021 identified as
6 Cyber Security on Attachment MOR-3. The total planned investment in this
7 category is \$595,790 on a New Mexico retail basis (\$1,981,846 Total Company)
8 during the period. The projects included in this category are:

- 9 • **Email Advanced Threat Protection - \$215,087 NM Retail (\$715,471**
10 **Total Company).** This project involves protecting the organization against
11 unknown malware and viruses by securing email. Security threats are
12 always changing and increasing in number, so updated tools are needed to
13 keep up with changes.
- 14 • **Host Intrusion Prevention for Servers - \$153,652 NM Retail (\$511,111**
15 **Total Company).** This project increases security efforts against cyber
16 attacks within Xcel Energy’s Business System infrastructure server
17 environment. It will minimize the risk of cyber attacks to servers from
18 external sources and will provide anti-virus protection to virtual servers.
- 19 • **OT Monitoring - \$84,648 NM Retail (\$281,576 Total Company).** Please
20 see project description in Section IV.A above.
- 21 • **Enterprise Database Security Phase II - \$43,390 NM Retail (\$144,333**
22 **Total Company).** Please see project description in Section IV.A above.
- 23 • **Cloud - SAST_DAST - \$39,769 NM Retail (\$132,288 Total Company).**
24 This project involves static and dynamic application testing to improve the

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1 security for on-premise and hosted applications currently in use and future
2 applications at Xcel Energy. These tools are needed to perform
3 vulnerability scans.

4 Combined, these projects account for 96.6% of the total capital additions in
5 this category. The remaining projects are similar in nature in that they are necessary
6 to meet regulatory requirements and protect SPS's and Xcel Energy's computing
7 environment.

8 **Q. Please describe the types of projects included in the "AGIS" category.**

9 A. The general description of the AGIS category is provided in the previous subsection
10 of this testimony, and that description also applies to the projects included for the
11 period October 1, 2020 through February 28, 2021 identified as AGIS on
12 Attachment MOR-3. The total planned investment in this category is \$652,543 on
13 a New Mexico retail basis (\$2,088,587 Total Company) during the period. The
14 projects included in this category are:

- 15 • **SPS Planning and Forecasting Tool - \$315,348 NM Retail (\$1,008,886**
16 **Total Company).** The Planning and Forecasting tool is a new tool that will
17 enable SPS to efficiently expand its distribution planning capabilities to
18 incorporate distribution energy resources ("DER"), enhance its load
19 forecasting capabilities, and better integrate and align with other SPS
20 planning tools and processes. SPS's distribution planning team will utilize
21 this new capability to study various forecasts and DER adoption scenarios
22 resulting in improved distribution plans.

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- 1 • **AGIS Meter Data Mgmt (MDM) SW SPS - \$224,765 NM Retail**
2 **(\$719,086 Total Company)**. This system provides capabilities to validate,
3 edit, and estimate meter readings that are integrated with other enterprise
4 systems. The legacy meter data management (“MDM”) system is being
5 replaced to provide a scalable, consistent product capability for Xcel Energy
6 processes. This project includes the preparatory configuration of the new
7 MDM to support all of the NM rates, and the eventual transition of all
8 current New Mexico Interval Billed rates to the new MDM prior to
9 decommissioning the current MDM which is on extended support,
10 scheduled to end December 2021.
- 11 • **Advanced Distribution Management System Data - \$105,192 NM**
12 **Retail (\$336,540 Total Company)**. Please see project description in
13 Section IV.A above.

14 Combined, these projects account for 99% of the total capital additions in
15 this category. The remaining projects are similar in nature in that they support Xcel
16 Energy’s efforts to build an advanced electric grid.

17 **Q. You include in the October 1, 2020 through February 28, 2021 period two**
18 **categories (Emergent Demand and Savings Target) that are not included in**
19 **the Base Period (October 1, 2019 through September 30, 2020) discussion**
20 **above. Please explain what the “Emergent Demand” category refers to.**

21 **A.** The Emergent Demand category is a capital investment account created to ensure
22 that Business Systems is able to meet unanticipated aging technology, cyber
23 security threats, and efficiency needs that inevitably emerge each year. Given the
24 ever-changing nature of technology and emerging cyber security risks, it is not

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1 possible to identify all projects that may arise or become critical in a given year.
2 For instance, Business Systems may identify a risk associated with existing
3 technology that needs to be addressed earlier than initially planned. In other
4 instances, Business Systems might begin to implement a new software and then
5 learn of a new function that is cost-effective to adopt at the same time the project
6 is implemented. The Emergent Demand account allows Business Systems to
7 address these types of issues without unnecessarily delaying or cancelling
8 previously planned projects or otherwise absorbing unplanned work and costs.

9 **Q. Why does the Emergent Demand category not appear in the Base Period?**

10 A. The Emergent Demand category is used for forecasted data only. It is not needed
11 for the Base Period data because once Emergent Demand projects arise and dollars
12 are actually invested, the additions are accounted for in one of the four Business
13 Systems categories: (1) Aging Technology, (2) Enhance Capabilities, (3) Cyber
14 Security, or (4) AGIS.

15 **Q. What investment amount associated with Emergent Demand during the**
16 **October 1, 2020 and February 28, 2021 period does SPS seek to include in rate**
17 **base?**

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1 A. SPS's portion of the total investment in this category amounts to \$245,280 on a
2 New Mexico retail basis (\$815,905 Total Company) during the update period. This
3 amount is based on forecasted business priorities for this time period, balanced by
4 the overall business area capital spending guidelines.

5 **Q. Please explain what the "Savings Target" category refers to.**

6 A. The Savings Target category is unique to the October 1, 2020 through February 28,
7 2021 period as well. The Xcel Energy Executive Committee initially approved
8 project investment during this period that was more than the total amount ultimately
9 budgeted to Business Systems. As a result, Business Systems plans to reduce the
10 initially approved total investment for this period by the Savings Target (\$705,925
11 NM Retail, \$2,348,203 Total Company). Because Business Systems had not at the
12 time of this filing identified the specific projects from which these savings will be
13 realized, SPS is reducing the total amount of investment requested to be placed into
14 rate base for this period by the Savings Target. Ultimately, while Xcel Energy
15 cannot be certain these savings will be realized between October 1, 2020 and
16 February 28, 2021, it is reducing its overall Business Systems capital addition
17 request in this case to facilitate budget reconciliation and reflect the savings goal.

18 **Q. Are the Business Systems capital additions for the period presented in**
19 **Attachment MOR-3 reasonable and necessary?**

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1 A. Yes. As discussed in my testimony, the Business Systems capital additions
2 presented in Attachment MOR-3 are reasonable and necessary to efficiently
3 manage business operations, protect SPS and Xcel Energy data and information,
4 meet evolving regulatory and legal requirements, keep current with technology,
5 maintain the stability and reliability of the existing IT systems, and provide the
6 tools required to effectively and safely provide service to SPS's retail customers.
7 The rigorous processes that are followed in evaluating, selecting, and monitoring
8 the execution and implementation of capital projects ensure that the additions are
9 reasonable and necessary and that the costs are prudently incurred to provide safe
10 and reliable service to SPS's customers.

11 **Q. Does this conclude your pre-filed direct testimony?**

12 A. Yes.

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

**IN THE MATTER OF SOUTHWESTERN)
PUBLIC SERVICE COMPANY’S)
APPLICATION FOR: (1) REVISION OF)
ITS RETAIL RATES UNDER ADVICE)
NOTICE NO. 292; (2) AUTHORIZATION) CASE NO. 20-00238-UT
AND APPROVAL ABANDON ITS)
PLANT X UNIT 3 GENERATING)
STATION UNITS; AND (3) OTHER)
ASSOCIATED RELIEF,)
)
SOUTHWESTERN PUBLIC SERVICE)
COMPANY,)
)
APPLICANT.)
)
)**

VERIFICATION

On this day, December 26, 2020, I, Michael O. Remington, swear and affirm under penalty of perjury under the law of the State of New Mexico, that my testimony contained in Direct Testimony of Michael O. Remington is true and correct.

/s/ Michael O. Remington

MICHAEL O. REMINGTON

Southwestern Public Service Company
Total Company Amounts and Jurisdictional Percentages

Line No.	Witness	Description	Page No.	Line No.	Total Company Amount	Number Scale	Allocator (Name)	TY Allocator (%)	NM Amount
1	Remington	Business Systems Capital Additions September 1, 2019 through February 28, 2021	4	1	60,783,164	Dollars	(1)	(1)	18,314,868
2	Remington	Business Systems Capital Additions September 1, 2019 through February 28, 2021	4	20 & 21	60,783,164	Dollars	(1)	(1)	18,314,868
3	Remington	Business Systems Capital Additions October 1, 2019 through September 30, 2020	5	4	41,201,440	Dollars	LABXAG	(1)	12,399,012
4	Remington	Business Systems Capital Additions October 1, 2020 through February 28, 2021	5	6 & 7	19,581,724	Dollars	(1)	(1)	5,915,855
5	Remington	Business Systems Capital Additions October 1, 2019 through September 30, 2020	15	6	41,201,440	Dollars	LABXAG	(1)	12,399,012
6	Remington	Business Systems General Plant Capital Additions	15	9	26,584,184	Dollars	LABXAG	30.06%	7,991,834
7	Remington	Business Systems Intangible Plant Capital Additions	15	9	14,617,256	Dollars	(1)	(1)	4,407,179
8	Remington	Aging Technology	17	Table MOR-2	31,642,135	Dollars	LABXAG	30.06%	9,512,373
9	Remington	Enhance Capabilities	17	Table MOR-2	6,848,530	Dollars	(1)	(1)	2,058,830
10	Remington	Cyber Security	17	Table MOR-2	1,632,105	Dollars	LABXAG	30.06%	490,649
11	Remington	AGIS	17	Table MOR-2	1,078,669	Dollars	CUST-RET	31.26%	337,160
12	Remington	Total	17	Table MOR-2	41,201,439	Dollars	(1)	(1)	12,399,012
13	Remington	Aging Technology	19	10 & 11	31,642,135	Dollars	LABXAG	30.06%	9,512,373
14	Remington	SPS Trunked Repeaters (Quantar)	19	13	9,913,096	Dollars	LABXAG	30.06%	2,980,111
15	Remington	WAN SPS	20	1	9,641,590	Dollars	LABXAG	30.06%	2,898,490
16	Remington	IT INFS Network Refresh	20	13	2,936,234	Dollars	LABXAG	30.06%	882,701
17	Remington	Next Generation Desktop	20	19	2,394,721	Dollars	LABXAG	30.06%	719,910
18	Remington	10G Backhaul	20	29	1,830,011	Dollars	LABXAG	30.06%	550,145
19	Remington	Planned PC Refresh	21	1	673,122	Dollars	LABXAG	30.06%	202,356
20	Remington	Vegetation Management Crew Management	21	8 & 9	581,689	Dollars	LABXAG	30.06%	174,869
21	Remington	Oracle Licenses	21	16	487,413	Dollars	LABXAG	30.06%	146,528
22	Remington	PCI SPP Settlement Upgrade	21	23	458,619	Dollars	LABXAG	30.06%	137,872
23	Remington	Enhance Capabilities	22	15 & 16	6,848,530	Dollars	(1)	(1)	2,058,830
24	Remington	ESR Environment Refresh	23	1	2,192,834	Dollars	LABXAG	30.06%	659,218
25	Remington	eSOMS Project	23	9	814,639	Dollars	LABXAG	30.06%	244,900
26	Remington	Transmission Asset Health Analytics	23	18	793,095	Dollars	LABXAG	30.06%	238,423
27	Remington	PTT Phase 3 (WAM)	23	24	492,621	Dollars	LABXAG	30.06%	148,094
28	Remington	Satellite	23	30	484,543	Dollars	LABXAG	30.06%	145,665
29	Remington	Business Systems Resiliency Project	24	4	400,386	Dollars	LABXAG	30.06%	120,365
30	Remington	Network Automation Platform Implementation	24	10 & 11	343,591	Dollars	LABXAG	30.06%	103,292
31	Remington	Network Inventory and Planning Solution	24	16 & 17	320,843	Dollars	LABXAG	30.06%	96,453
32	Remington	Enterprise Operational Monitoring	24	25	315,369	Dollars	LABXAG	30.06%	94,807
33	Remington	UNIX Configuration Manager	24	30	207,815	Dollars	LABXAG	30.06%	62,474
34	Remington	Cyber Security	26	8 & 9	1,632,105	Dollars	LABXAG	30.06%	490,649
35	Remington	Security Camera Upgrade	26	11	444,926	Dollars	LABXAG	30.06%	133,755
36	Remington	OT Monitoring	26	19	275,334	Dollars	LABXAG	30.06%	82,773
37	Remington	SailPoint Phase 4	27	1	227,707	Dollars	LABXAG	30.06%	68,454
38	Remington	Multi-Factor Authentication	27	11	226,806	Dollars	LABXAG	30.06%	68,184
39	Remington	Virtual Emergency Operations Center	27	21	153,862	Dollars	LABXAG	30.06%	46,255
40	Remington	eGRC Enterprise Security - Phase 3	27	31	99,028	Dollars	LABXAG	30.06%	29,770
41	Remington	Enterprise Database Security Phase II	28	7	81,556	Dollars	LABXAG	30.06%	24,518
42	Remington	AGIS	29	1 & 2	1,078,669	Dollars	CUST-RET	31.26%	337,160
43	Remington	Advanced Distribution Management System	29	4 & 5	1,078,669	Dollars	CUST-RET	31.26%	337,160
44	Remington	Business Systems Capital Additions October 1, 2020 through February 28, 2021	30	18	19,851,724	Dollars	(1)	(1)	5,915,855
45	Remington	Business Systems General Plant Capital Additions	31	1	7,477,633	Dollars	(1)	(1)	2,247,953
46	Remington	Business Systems Intangible Plant Capital Additions	31	1	12,104,090	Dollars	(1)	(1)	3,667,902
47	Remington	Aging Technologies	32	Table MOR-4	12,091,543	Dollars	(1)	(1)	3,638,459
48	Remington	Enhance Capabilities	32	Table MOR-4	4,952,046	Dollars	(1)	(1)	1,489,708
49	Remington	Cyber Security	32	Table MOR-4	1,981,846	Dollars	LABXAG	30.06%	595,791

Southwestern Public Service Company
Total Company Amounts and Jurisdictional Percentages

Line No.	Witness	Description	Page No.	Line No.	Total Company Amount	Number Scale	Allocator (Name)	TY Allocator (%)	NM Amount
50	Remington	AGIS	32	Table MOR-4	2,088,587	Dollars	(1)	(1)	652,543
51	Remington	Emergent Demand	32	Table MOR-4	815,905	Dollars	LABXAG	30.06%	245,280
52	Remington	Savings Target	32	Table MOR-4	(2,348,203)	Dollars	LABXAG	30.06%	(705,925)
53	Remington	Total	32	Table MOR-4	19,581,724	Dollars	(1)	(1)	5,915,855
54	Remington	Aging Technologies	33	7	12,091,543	Dollars	(1)	(1)	3,638,459
55	Remington	WAN SPS	33	9	1,940,506	Dollars	LABXAG	30.06%	583,362
56	Remington	Planned PC Refresh	33	11	1,552,337	Dollars	LABXAG	30.06%	466,609
57	Remington	Facility IT Investments	33	13	1,519,289	Dollars	LABXAG	30.06%	456,734
58	Remington	SPS Trunked Repeaters (Quantar)	33	21	836,216	Dollars	LABXAG	30.06%	251,386
59	Remington	IT INFS Network Refresh	33	23	724,768	Dollars	LABXAG	30.06%	217,882
60	Remington	VoIP Refresh	34	1	696,317	Dollars	LABXAG	30.06%	209,329
61	Remington	Kafka Data Streaming	34	8	595,029	Dollars	LABXAG	30.06%	178,880
62	Remington	F5 Renewal	34	14	512,060	Dollars	LABXAG	30.06%	153,937
63	Remington	Meridium Upgrade	34	19	488,179	Dollars	LABXAG	30.06%	146,758
64	Remington	Active Directory Upgrade	34	25	403,788	Dollars	LABXAG	30.06%	121,388
65	Remington	Emporis Contract Management Replacement	35	1 & 2	379,036	Dollars	LABXAG	30.06%	113,947
66	Remington	Technology License	35	6	370,015	Dollars	LABXAG	30.06%	111,235
67	Remington	CRS Tech Stack Upgrade and Win 10	35	14	289,266	Dollars	CUST-RET	31.26%	90,416
68	Remington	Rational License Purchase	35	19	265,050	Dollars	LABXAG	30.06%	79,680
69	Remington	Oracle Java 3 Licensing 3 Year	35	24	221,378	Dollars	LABXAG	30.06%	66,551
70	Remington	eGRC Phase IV - SOX and Corp Compliance	35	29 & 30	196,956	Dollars	LABXAG	30.06%	59,210
71	Remington	Adobe Flash Remediation	36	3	194,569	Dollars	LABXAG	30.06%	58,492
72	Remington	Enhance Capabilities	36	18	495,204	Dollars	(1)	(1)	1,489,708
73	Remington	Satellite	36	20	704,820	Dollars	LABXAG	30.06%	211,886
74	Remington	Monitoring and Diagnostics Center On-line Thermal Performance Project	37	2	543,935	Dollars	LABXAG	30.06%	163,520
75	Remington	Application Performance Monitoring	37	7	521,312	Dollars	LABXAG	30.06%	156,719
76	Remington	Digital Channel Platform	37	12	518,944	Dollars	LABXAG	30.06%	156,007
77	Remington	New Wind Farms	37	18	376,838	Dollars	LABXAG	30.06%	113,286
78	Remington	PTT Continuous Improvements	37	22	376,665	Dollars	LABXAG	30.06%	113,234
79	Remington	Telecom Expense Management	37	24	335,301	Dollars	LABXAG	30.06%	100,799
80	Remington	Software Asset Management	38	1	293,150	Dollars	LABXAG	30.06%	88,128
81	Remington	XEI Wave 5 - Distribution Software	38	6	270,513	Dollars	LABXAG	30.06%	81,323
82	Remington	General Counsel Document Management	38	10	211,811	Dollars	LABXAG	30.06%	63,675
83	Remington	Data Discovery	38	14	207,840	Dollars	LABXAG	30.06%	62,482
84	Remington	RPA (Robotic Process Automation) Release	38	18 & 19	173,600	Dollars	LABXAG	30.06%	52,188
85	Remington	Cyber Security	39	7	1,981,846	Dollars	LABXAG	30.06%	595,790
86	Remington	Email Advanced Threat Protection	39	9	715,471	Dollars	LABXAG	30.06%	215,087
87	Remington	Host Intrusion Prevention for Servers	39	14	511,111	Dollars	LABXAG	30.06%	153,652
88	Remington	OT Monitoring	39	19	281,576	Dollars	LABXAG	30.06%	84,648
89	Remington	Enterprise Database Security Phase II	39	21	144,333	Dollars	LABXAG	30.06%	43,390
90	Remington	Cloud - SAST_DAST	39	23	132,288	Dollars	LABXAG	30.06%	39,769
91	Remington	AGIS	40	1 & 2	2,088,587	Dollars	(1)	(1)	652,543
92	Remington	SPS Planning and Forecasting Tool	40	15	1,008,886	Dollars	CUST-RET	31.26%	315,348
93	Remington	AGIS Meter Data Mgmt (MDM) SW SPS	41	1	719,086	Dollars	CUST-RET	31.26%	224,765
94	Remington	Advanced Distribution Management System Data	41	11 & 12	336,540	Dollars	CUST-RET	31.26%	105,192
95	Remington	Emergent Demand	43	1 & 2	815,905	Dollars	LABXAG	30.06%	245,280
96	Remington	Savings Target	43	10 & 11	(2,348,203)	Dollars	LABXAG	30.06%	(705,925)

(1) The primary allocator used is LABXAG (30.06%) with a few projects allocated by CUST-RET (31.26%).

Southwestern Public Service Company

Business Systems Capital Additions to Plant in Service: October 1, 2019 through September 30, 2020

(A)	(B)	(C)	(D)	(E)	(F)	(G)	
Line No.	Asset Class	Witness	Project Category	WBS Level 2	Project Description (WBS Level 2 Description)	Additions to Plant-in-Service (October 1, 2019 - September 30, 2020)	Additions to Plant-in-Service (October 1, 2019 - September 30, 2020)
1	Electric General	Remington	Aging Technology	D.0001859.371	Purch SPS Quantum Repeater HW	9,913,096	2,980,111
2	Electric General	Remington	Aging Technology	D.0002192.017	ITC - Purch ITINFS Valkyrie HW SPS	4,152,825	1,248,437
3	Electric General	Remington	Aging Technology	D.0002014.012	ITC-Purch WAN Circuit HW TX	3,743,287	1,125,321
4	Electric General	Remington	Aging Technology	D.0002014.013	ITC-Purch WAN Circuit HW NM	1,909,667	574,091
5	Electric General	Remington	Aging Technology	D.0002018.004	Purch 10GBackhaul HW SPS-BSPRJ000011	1,830,011	550,145
6	Electric General	Remington	Aging Technology	D.0002014.003	ITC-Purch WAN Generator TX	1,196,499	359,696
7	Electric General	Remington	Aging Technology	D.0002014.009	ITC-Purch WAN Generator NM	709,967	213,433
8	Electric General	Remington	Aging Technology	D.0002014.001	Purch WAN HW SPS-BSPRJ0001170	681,794	204,963
9	Electric General	Remington	Aging Technology	D.0002014.014	ITC - WAN Routine HW SPS	466,979	140,385
10	Electric General	Remington	Aging Technology	D.0002203.008	ITC-Purch PTT Mobile HW SPS	398,059	119,666
11	Electric General	Remington	Aging Technology	D.0002354.004	ITC-PC Refreshes-Routine HW-SPS	371,109	111,564
12	Electric General	Remington	Cyber Security	D.0001840.114	Purch Sec Camera HW TX	367,337	110,430
13	Electric General	Remington	Aging Technology	D.0002014.002	Purch WAN HW NM	315,000	94,697
14	Electric General	Remington	Enhance Capabilities	D.0002015.002	Purch-Satellite Network HW SPS	294,919	88,660
15	Electric General	Remington	Enhance Capabilities	D.0002015.003	Purch Satellite HW NM SPS	189,624	57,005
16	Electric General	Remington	Aging Technology	D.0002193.004	ITC-Purch 2019 Plan PC HW SPS	189,356	56,925
17	Electric General	Remington	Aging Technology	D.0002014.010	ITC-Purch WAN Generator SC NM	176,675	53,113
18	Electric General	Remington	Aging Technology	D.0001822.058	Purch Sub Frame BAU Sites NM SPS	167,463	50,343
19	Electric General	Remington	Aging Technology	D.0002194.004	ITC-Purch 2019 Plan Server HW SPS	157,738	47,420
20	Electric General	Remington	Aging Technology	D.0002193.008	ITC-Purch 2019 Printer SPS	111,836	33,621
21	Electric General	Remington	Aging Technology	D.0002014.004	ITC- WAN Generator Borger SC TX	70,581	21,218
22	Electric General	Remington	Aging Technology	D.0002014.007	ITC- WAN Generator Plainview SC TX	64,213	19,304
23	Electric General	Remington	Aging Technology	D.0002014.006	ITC- WAN Generator Levelland SC TX	55,971	16,826
24	Electric General	Remington	Aging Technology	D.0002014.005	ITC- WAN Generator Hereford SC TX	46,992	14,127
25	Electric General	Remington	Aging Technology	D.0002016.017	Purch T&D MPLS - Unplanned (2017)N	36,828	11,071
26	Electric General	Remington	Cyber Security	D.0001840.116	Purch Sec Camera HW NM	32,014	9,624
27	Electric General	Remington	Aging Technology	D.0001822.010	Purch Sub Frame Relay Equip SP	28,871	8,679
28	Electric General	Remington	Aging Technology	D.0002191.004	ITC-Purch 2019 EMS Ref HW SPS	28,801	8,658
29	Electric General	Remington	Enhance Capabilities	D.0002270.004	ITC - eSOMS HW SPS	26,561	7,985
30	Electric General	Remington	Aging Technology	D.0002190.004	ITC-Purch 2019 Handheld Mobile HW S	24,009	7,218
31	Electric General	Remington	Aging Technology	D.0001822.057	Purch Sub Frame BAU Sites TX SPS	13,972	4,200
32	Electric General	Remington	Cyber Security	D.0002165.010	ITC-Purch OT Monitor DRAGOS HW SPS	11,449	3,442
33	Electric General	Remington	Aging Technology	D.0001822.008	Purch Sub Frame Relay Equip NM	7,453	2,241
34	Electric General	Remington	Aging Technology	D.0002355.004	ITC-Printer Refreshes-Routine HW-SP	5,191	1,560
35	Electric General	Remington	Aging Technology	D.0001822.063	Purch Sub Frame Handesty OK	3,979	1,196
36	Electric General	Remington	Enhance Capabilities	D.0001804.327	Purch Wireless HW SPS	3,451	1,037
37	Electric General	Remington	Enhance Capabilities	D.0001804.397	Purch Wireless HW SPS	2,750	827
38	Electric General	Remington	Aging Technology	D.0001839.063	2015 IT INFS Network Refresh S	1,637	492
39	Electric General	Remington	Aging Technology	D.0001839.853	Purch SCCM HW TX	1,316	396
40	Electric General	Remington	Enhance Capabilities	A.0001577.006	Purch Bus Sys Net Equip Hale Wind S	1,271	382
41	Electric General	Remington	Cyber Security	D.0001804.126	Purch Network Appl Camera Uper SPS	913	274
42	Electric General	Remington	Enhance Capabilities	D.0001804.396	Purch Wireless HW NM	865	260
43	Electric General	Remington	Aging Technology	D.0001821.311	2018 Planned PC SPS	820	247
44	Electric General	Remington	Aging Technology	D.0001839.148	2018 Storage Annual Refresh SP	737	222
45	Electric General	Remington	Aging Technology	D.0002195.004	ITC-Purch 2019 Storage HW SPS	614	185
46	Electric General	Remington	Aging Technology	D.0001783.021	Purch LMR Radio HW TX	575	173
47	Electric General	Remington	Aging Technology	D.0001783.020	Purch LMR Radio HW NM	421	127
48	Electric General	Remington	Aging Technology	D.0002014.008	ITC- Purch WAN Generator OK	178	53
49	Electric General	Remington	Aging Technology	D.0001821.527	Purch 2017 Handheld SPS	22	7
50	Electric General	Remington	Aging Technology	D.0001839.663	Purch Amarillo HQ NetEquip SPS	1	0
51	Electric General	Remington	Aging Technology	D.0001839.840	Purch Property LAN Canyon TX	0	0

Southwestern Public Service Company

Business Systems Capital Additions to Plant in Service: October 1, 2019 through September 30, 2020

(A)	(B)	(C)	(D)	(E)	(F)	(G)	
Line No.	Asset Class	Witness	Project Category	WBS Level 2	Project Description (WBS Level 2 Description)	Additions to Plant-in-Service (October 1, 2019 - September 30, 2020)	Additions to Plant-in-Service (October 1, 2019 - September 30, 2020)
52	Electric General	Remington	Aging Technology	D.0001894.324	Purch Wireless HW NM SPS	(0)	(0)
53	Electric General	Remington	Aging Technology	D.0001839.375	Purch 2015 VOIP HW SPS	(68)	(68)
54	Electric General	Remington	Aging Technology	D.0001821.232	2017 Unplanned PC Refresh SPS	(3,804)	(1,144)
55	Electric General	Remington	Aging Technology	D.0002016.004	Purch T&D MPLS - Unplanned (2017) S	(9,414)	(2,830)
56	Electric General	Remington	Aging Technology	D.0002192.004	ITC-Purch 2019 ITINFIS Ref HW SPS	(1,218,228)	(366,228)
57	Total Electric General					\$ 26,584,184	\$ 7,991,833
58	Electric Intangible	Remington	Enhance Capabilities	D.0001839.628	ESB Environment SW SPS-10646	2,192,834	659,218
59	Electric Intangible	Remington	Aging Technology	D.0001895.016	Next Gen MSFT Deploy SW SPS-10693	2,124,182	638,579
60	Electric Intangible	Remington	AGIS	D.0001723.048	ADMS Data - SPS	1,078,669	337,160
61	Electric Intangible	Remington	Enhance Capabilities	D.0001728.007	Sub Asset Mgmt SW SPS	793,095	238,423
62	Electric Intangible	Remington	Enhance Capabilities	D.0001894.393	ESOM Ph2 SW SPS-10687	788,078	236,915
63	Electric Intangible	Remington	Aging Technology	D.0002081.011	VMCM SW SPS-10714	581,689	174,869
64	Electric Intangible	Remington	Aging Technology	D.0002265.004	ITC - 2020 Oracle Licenses SW - TX	487,413	146,528
65	Electric Intangible	Remington	Aging Technology	D.0002244.001	ITC-PCI SPP Settlement SW SPS	458,619	137,872
66	Electric Intangible	Remington	Enhance Capabilities	D.0001787.021	ITC-BB-WIS 19 SW Releases - TX 10792	443,482	133,321
67	Electric Intangible	Remington	Aging Technology	D.0002279.004	ITC - Ujg Pro. Visio. & Adobe Pro S	438,048	131,688
68	Electric Intangible	Remington	Aging Technology	D.0002184.004	IB Lic ESB SW SPS-10742	424,640	127,657
69	Electric Intangible	Remington	Enhance Capabilities	D.0002364.006	ITC-BB Resiliency SW 200074 SPS	400,386	120,366
70	Electric Intangible	Remington	Enhance Capabilities	D.0001787.014	SAP S&O SW Rel 19 SPS-10733	383,270	115,220
71	Electric Intangible	Remington	Enhance Capabilities	D.0002185.006	Net Auto Platform SW SPS-10741	343,591	103,292
72	Electric Intangible	Remington	Enhance Capabilities	D.0002045.015	Operation Monitor SW SPS-10728	315,369	94,807
73	Electric Intangible	Remington	Aging Technology	D.0001805.020	ITC-Pandemic-Next Gen MSFT SW SPS	270,539	81,330
74	Electric Intangible	Remington	Cyber Security	D.0002165.007	OT Monitor DR AGOS SW SPS-10772	263,884	79,330
75	Electric Intangible	Remington	Aging Technology	D.0002282.004	ITC-Mainframe Modernization-SW SPS	262,392	78,881
76	Electric Intangible	Remington	Aging Technology	D.0002143.004	Technology Lic SW SPS	259,083	77,887
77	Electric Intangible	Remington	Cyber Security	D.0002001.020	Sailpoint Ph4 SW SPS-10760	227,707	68,454
78	Electric Intangible	Remington	Cyber Security	D.0002202.006	Multi Auth SW SPS-10759	226,806	68,183
79	Electric Intangible	Remington	Enhance Capabilities	D.0001796.034	Net Tools CISO SW SPS-10718	223,542	67,202
80	Electric Intangible	Remington	Aging Technology	D.0002068.004	ITC-Powerplan Upgrade SW SPS-10768	210,004	63,132
81	Electric Intangible	Remington	Enhance Capabilities	D.0002135.004	Unix Config SW SPS-10770	207,815	62,474
82	Electric Intangible	Remington	Enhance Capabilities	D.0002020.004	SAP Cont Improve SolMan SW SPS-1070	173,087	52,034
83	Electric Intangible	Remington	Cyber Security	D.0002189.006	ITC-Virtual Emergency SW TX-10745	153,862	46,254
84	Electric Intangible	Remington	Enhance Capabilities	D.0002274.004	2019 Advertising & Brand Content Li	115,499	34,722
85	Electric Intangible	Remington	Aging Technology	D.0002252.006	ITC-Strategist Replacement SW TX -	82,733	24,871
86	Electric Intangible	Remington	Enhance Capabilities	D.0002100.031	Private Cloud Realize SW SPS-10767	82,175	24,704
87	Electric Intangible	Remington	Cyber Security	D.0002008.012	Enterprise Data Ph3 SW SPS-10762	81,556	24,518
88	Electric Intangible	Remington	Aging Technology	D.0002072.004	Replace Meeting Planner SW SPS-1073	68,197	20,502
89	Electric Intangible	Remington	Enhance Capabilities	D.0001796.045	Net Tools-Solar Wind SW SPS 10736	66,602	20,022
90	Electric Intangible	Remington	Aging Technology	D.0002245.006	AutoSys Ref SW SPS-10776	63,148	18,984
91	Electric Intangible	Remington	Enhance Capabilities	D.0002243.005	Settlement Tracker Elim SW SPS-1077	62,797	18,878
92	Electric Intangible	Remington	Aging Technology	D.0002307.004	ITC-Unifier PPM Tool-SW-SPS	59,336	17,838
93	Electric Intangible	Remington	Aging Technology	D.0002166.007	SUM Total Upgrade SW SPS-10734	52,673	15,835
94	Electric Intangible	Remington	Cyber Security	D.0002101.018	eGRC Standard SW SPS-10751	52,303	15,723
95	Electric Intangible	Remington	Cyber Security	D.0002268.005	ITC-Endpoint Srvr Security Suite-SW	50,456	15,168
96	Electric Intangible	Remington	Cyber Security	D.0002101.012	eGRC Continuity SW SPS-10750	46,696	14,038
97	Electric Intangible	Remington	Cyber Security	D.0002123.008	ITC-Security Camera Verint-SW SPS	44,663	13,427
98	Electric Intangible	Remington	Cyber Security	D.0002200.006	ITC-Endpoint Privilege SW SPS-10757	38,449	11,559
99	Electric Intangible	Remington	Aging Technology	D.0001792.169	EMAIL SW SPS-10697	32,315	9,715
100	Electric Intangible	Remington	Enhance Capabilities	D.0001796.050	Net Tools Infovista SW SPS-10755	29,692	8,926
101	Electric Intangible	Remington	Aging Technology	D.0002269.004	ITC-Blue Prism Licenses SW 200074 S	27,708	8,330

Southwestern Public Service Company

Business Systems Capital Additions to Plant in Service: October 1, 2019 through September 30, 2020

(A)	(B)	(C)	(D)	(E)	(F)	(G)	
Line No.	Asset Class	Witness	Project Category	WBS Level 2	Project Description (WBS Level 2 Description)	Additions to Plant-in-Service (October 1, 2019 - September 30, 2020)	Additions to Plant-in-Service (October 1, 2019 - September 30, 2020)
						Total Company	NM Retail
102	Electric Intangible	Remington	Cyber Security	D.0001770.026	Secure File MFT SW SPS-10754	26,712	8,030
103	Electric Intangible	Remington	Enhance Capabilities	D.0002368.004	ITC-Propensity to Pay SW 200171 SPS	23,752	7,141
104	Electric Intangible	Remington	Aging Technology	D.0002295.004	ITC-FME Upgrade- SW SPS	20,659	6,211
105	Electric Intangible	Remington	Aging Technology	D.0002290.004	ITC-Field Collect Sys Upg- SW SPS	19,868	5,973
106	Electric Intangible	Remington	Aging Technology	D.0002068.010	ITC-Powerplan Upg Phase 1b- SW- SPS	18,175	5,464
107	Electric Intangible	Remington	Enhance Capabilities	D.0002205.006	Cost Mobile App SW SPS-10765	13,983	4,204
108	Electric Intangible	Remington	Aging Technology	D.0002287.004	ITC - EasyPower Lic Purchase SW SPS	13,661	4,107
109	Electric Intangible	Remington	Cyber Security	D.0002098.004	CyberArk PAM SW SPS-10694	6,549	1,969
110	Electric Intangible	Remington	Aging Technology	D.0002043.004	Enterprise Learning Upgrade SW SPS1	4,196	1,261
111	Electric Intangible	Remington	Aging Technology	D.0001839.186	Mobile Computing Infra SW SPS	2,980	896
112	Electric Intangible	Remington	Aging Technology	D.0001770.014	Secure File&Transfer Ph. 2.SW SPS-10	2,496	750
113	Electric Intangible	Remington	Enhance Capabilities	D.0001726.058	Work and Asset Phase 1 SW SPS	2,169	652
114	Electric Intangible	Remington	Aging Technology	D.0001748.007	Corp Email SW SPS	1,923	578
115	Electric Intangible	Remington	Aging Technology	D.0002084.034	RIS CREW SW SPS-10732	1,187	357
116	Electric Intangible	Remington	Enhance Capabilities	D.0001796.025	Network Tools Mgmt SW SPS-10700	1,008	303
117	Electric Intangible	Remington	Cyber Security	D.0001770.007	Electronic Data SW SPS	807	243
118	Electric Intangible	Remington	Aging Technology	D.0001770.020	Sec File Ph3 SW SPS-10716	453	136
119	Electric Intangible	Remington	Aging Technology	D.0001796.014	Network Tools LNI Smallworld SW TX -	416	125
120	Electric Intangible	Remington	Enhance Capabilities	D.0002100.007	Private Cloud Infra SW SPS-10710	354	106
121	Electric Intangible	Remington	Enhance Capabilities	D.0001826.247	2015 RPAM Phase 3 Amort SW SPS	265	80
122	Electric Intangible	Remington	Enhance Capabilities	D.0002090.004	IT Service Request SW SPS-10699	243	73
123	Electric Intangible	Remington	Cyber Security	D.0002099.007	Firewall Rule Mgmt SW SPS-10707	218	65
124	Electric Intangible	Remington	Cyber Security	D.0001818.108	Emergency Mass SW SPS-10709	175	53
125	Electric Intangible	Remington	Enhance Capabilities	D.0001744.035	Corporate Giving SW SPS	162	49
126	Electric Intangible	Remington	Aging Technology	D.0002033.011	CommodityXL SW SPS - 10681	146	44
127	Electric Intangible	Remington	Aging Technology	D.0002002.007	NMS 1.12 Upgrade SW SPS-10669	105	32
128	Electric Intangible	Remington	Aging Technology	D.0002090.013	Microfocus SW SPS-10721	85	26
129	Electric Intangible	Remington	Cyber Security	D.0001771.007	Certificate Key Mgmt SW SPS	34	10
130	Electric Intangible	Remington	Aging Technology	D.0001744.014	Powerplan Upgrade SW (Ph 2) SP	30	9
131	Electric Intangible	Remington	Cyber Security	D.0002101.006	eGRC Ph3 SW SPS-10719	30	9
132	Electric Intangible	Remington	Aging Technology	D.0001839.792	WebSphere-BSPRJ00932 SW SPS	6	2
133	Electric Intangible	Remington	Enhance Capabilities	D.0002084.027	Blue Prism SW SPS-10731	5	2
134	Electric Intangible	Remington	Enhance Capabilities	D.0001804.369	Integrated Talent Ph4-SWSPS-10637	(37)	(11)
135	Electric Intangible	Remington	Cyber Security	D.0001818.018	Security Incident SW SPS	(513)	(154)
136	Electric Intangible	Remington	Enhance Capabilities	D.0001787.009	Customer Mgmt SPS	(334,131)	(100,448)
137	Electric Intangible Total					\$ 14,617,256	\$ 4,407,179
138	Grand Total					\$ 41,201,440	\$ 12,399,012

Southwestern Public Service Company

Business Systems Capital Additions to Plant in Service: October 1, 2020 through February 28, 2021

	(A)	(B)	(C)	(D)	(E)	(F)
Line No.	Asset Class	Witness	Project Category	Project Description	Additions to Plant-in-Service (October 1, 2020 - February 28, 2021) Total Company	Additions to Plant-in-Service (October 1, 2020 - February 28, 2021) NM Retail
1	Electric General	Remington	Savings Target	Savings Target	(1,840,306) \$	(553,239)
2	Electric Intangible	Remington	Savings Target	Savings Target	(507,897) \$	(152,686)
3	Grand Total				\$ (2,348,203)	\$ (705,925)