BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF SOUTHWESTERN PUBLIC SERVICE COMPANY'S APPLICATION FOR AUTHORIZATION TO IMPLEMENT GRID MODERNIZATION COMPONENTS THAT INCLUDE ADVANCED METERING INFRASTRUCTURE AND RECOVER THE ASSOCIATED COSTS THROUGH A RIDER, ISSUANCE OF RELATED ACCOUNTING ORDERS, AND OTHER ASSOCIATED RELIEF,	)	**Case No. 21-00XXX-UT**
SOUTHWESTERN PUBLIC SERVICE COMPANY,	)	
APPLICANT.	)	

DIRECT TESTIMONY

of

RUTH M. SAKYA

on behalf of

SOUTHWESTERN PUBLIC SERVICE COMPANY

June 4, 2021

Case No. 21-00XXX-UT
Direct Testimony
of
Ruth M. Sakya

TABLE OF CONTENTS

GLOSSARY OF ACRONYMS AND DEFINED TERMS 3
LIST OF ATTACHMENTS 5
I. WITNESS IDENTIFICATION AND QUALIFICATIONS 6
II. PURPOSE AND SUMMARY OF TESTIMONY AND RECOMMENDATIONS 9
III. APPLICABLE STATUTES AND PUBLIC POLICY 13
IV. INTRODUCTION OF SPS'S WITNESSES 21
IV. OVERVIEW OF SPS 24
V. OVERVIEW OF THE GRID MODERNIZATION INITIATIVE 26
VI. OVERVIEW OF THE COSTS OF AMI, FAN, AND FLISR 38
VII. THE IMPLEMENTATION OF AMI, FAN, AND FLISR WILL BENEFIT SPS, ITS CUSTOMERS, AND THE PUBLIC 41
A. THE IMPLEMENTATION OF AMI, FAN, AND FLISR WILL BENEFIT CUSTOMERS AND THE PUBLIC INTEREST BY IMPROVING ELECTRICAL SYSTEM EFFICIENCY, RELIABILITY, AND RESILIENCE 42
B. THE IMPLEMENTATION OF AMI, FAN, AND FLISR WILL ALLOW SPS TO MAINTAIN REASONABLE OPERATIONS, MAINTENANCE, AND CUSTOMER COSTS 43
C. IMPLEMENTING AMI, FAN, AND FLISR WILL ALLOW SPS TO IMPROVE AND MEET DEMANDS THROUGH A FLEXIBLE, DIVERSIFIED AND DISTRIBUTED ENERGY PORTFOLIO . 44
D. THE IMPLEMENTATION OF AMI, FAN, AND FLISR WILL SUPPORT CONNECTION OF NEW MEXICO'S ELECTRICAL GRID WITH REGIONAL ENERGY MARKETS AND INCREASE NEW MEXICO'S CAPABILITY TO SUPPLY REGIONAL NEEDS THROUGH CLEAN AND RENEWABLE ELECTRICITY. 46
E. THE IMPLEMENTATION OF AMI, FAN, AND FLISR WILL INCREASE ACCESS TO AND USE OF CLEAN AND RENEWABLE ENERGY, INCLUDING FOR LOW-INCOME USERS AND USERS IN UNDERSERVED COMMUNITIES 47
F. THE IMPLEMENTATION OF AMI, FAN, AND FLISR WILL ASSIST SPS IN REDUCING AIR POLLUTION, INCLUDING GREENHOUSE GASES 48
G. THE IMPLEMENTATION OF AMI, FAN, AND FLISR WILL ASSIST SPS IN OFFERING ADDITIONAL PRODUCTS AND PROGRAMS, ALLOW FOR CAPITAL INVESTMENT AND SKILLED

JOBS IN RELATED SERVICES, AND PROVIDE CUSTOMER PROTECTION, INFORMATION, OR EDUCATION 49
VIII. RECOVERY OF UNDEPRECIATED LEGACY METER BALANCE 56
IX. SPS'S REQUESTS FOR RELIEF 62
VERIFICATION 64

GLOSSARY OF ACRONYMS AND DEFINED TERMS

Acronym/Defined Term	Meaning
AGIS	Advanced Grid Intelligence and Security
AMI	Advanced Metering Infrastructure
CCN	Certificate of Public Convenience and Necessity
Commission	New Mexico Public Regulation Commission
DER	distributed energy resources
DOE	United States Department of Energy
DSM	demand-side management
FAN	Field Area Network
FLISR	Fault Location Isolation System Restoration
GMR	Grid Modernization Rider
Grid Modernization Statute	Section 62-8-13 of the Public Utility Act
IT	Information Techology
kV	kilovolt
O&M	operations & maintenance

PUA	Public Utility Act
PUCT	Public Utility Commission of Texas
SPS	Southwestern Public Service Company, a New Mexico corporation
WACC	Weighted Average Cost of Capital
Xcel Energy	Xcel Energy Inc.
XES	Xcel Energy Services

LIST OF ATTACHMENTS

Attachment	Description
RMS-1	Table of Grid Modernization Statutory Requirements and Witness Testimony

Case No. 21-00XXX-UT
Direct Testimony
of
Ruth M. Sakya

I. WITNESS IDENTIFICATION AND QUALIFICATIONS

Q. Please state your name and business address.

A. My name is Ruth M. Sakya. My business address is 119 E. Marcy Street, Suite 202, Santa Fe, New Mexico 87501.

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

A. I am filing testimony on behalf of Southwestern Public Service Company, a New Mexico corporation ("SPS"), and wholly-owned subsidiary of Xcel Energy Inc. ("Xcel Energy").

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

A. I am employed by SPS as Manager, Regulatory Administration.

Q. Please briefly outline your responsibilities as Manager, Regulatory Administration.

A. I am responsible for determining the appropriate regulatory policy for SPS. In this role, I direct and prepare comments, testimony, and briefing materials for policy matters impacting SPS and advocate on behalf of SPS and its customers before the New Mexico Public Regulation Commission ("Commission"), the Public Utility Commission of Texas ("PUCT"), and the Southwest Power Pool, Inc.

Q. Please describe your educational background.

A. I graduated from the University of Wyoming in 1998 with a Bachelor of Science degree in Finance and, in 2001, with a Master of Science degree in Finance, with an emphasis in Regulatory Economics. I have completed the coursework and successfully passed the qualifying exams for a Ph.D. in Public Affairs from the University of Colorado, Denver.

Q. Please describe your professional experience.

A. I began my career in 1999 as an intern with the Illinois Commerce Commission and in 2000 joined the PUCT as a Senior Policy Analyst. I have held various other positions, including Rate Analyst at a multijurisdictional electric and gas utility, and Senior Analyst and Supervising Analyst with a consulting firm specializing in services to regulatory agencies and municipal entities. In 2004, I accepted a position with Xcel Energy Services ("XES") as Senior Rate Analyst. In 2007, I accepted a position with XES as Manager, Regulatory Policy. Beginning January 1, 2012, my position as Manager, Regulatory Policy was transferred to SPS, where my job responsibilities continued to be the same as they were since 2007. In April 2018, I became Manager, Regulatory Administration.

Q. Have you testified before any regulatory authorities?

A. Yes. I have filed testimony with the Commission, the PUCT, and the Colorado Public Utilities Commission in numerous cases. I have also testified before each of these regulatory authorities.

II. PURPOSE AND SUMMARY OF TESTIMONY AND RECOMMENDATIONS

Q. What is the purpose of SPS's filing in this proceeding?

A. In accordance with Section 62-8-13 of the Public Utility Act ("PUA"),[1] SPS seeks the Commission's authorization to acquire and implement grid modernization components that include Advanced Metering Infrastructure ("AMI"), Fault Location Isolation System Restoration ("FLISR"), and the Field Area Network ("FAN") that allows AMI and FLISR to operate. As part of that authorization, SPS seeks approval of its proposed ratemaking treatment, which includes recovery of the costs associated with AMI, FAN, and FLISR through SPS's proposed Grid Modernization Rider ("GMR") and recovery of SPS's remaining investment in its legacy meters.

Q. What is the purpose of your direct testimony?

A. I support SPS's filing in this proceeding for authority to acquire and implement AMI, FAN, and FLISR. Specifically, I:

- summarize SPS's requests for relief and introduce the witnesses who provide direct testimony in support of SPS's application;
- provide an overview of SPS and the grid modernization initiative;

[1] I will refer to Section 62-8-13 of the PUA as the "Grid Modernization Statute."

- demonstrate that SPS's proposal supports grid modernization and satisfies the requirements of the Grid Modernization Statute;

- explain that Section 62-9-1 of the PUA does not apply to SPS's requests, but if the Commission determines that the statute does apply, that SPS satisfies its requirements;

- describe the customer outreach that SPS performed in relation to its application;

- explain SPS's proposal that provides alternatives for customers who do not wish to utilize AMI; and

- support SPS's request to recover its remaining investment in its legacy meters.

Q. Please summarize SPS's requests in this case.

A. In accordance with the Grid Modernization Statute, SPS requests that the Commission:

- authorize SPS to acquire and implement grid modernization components that include AMI, FLISR, and FAN that enables operation of AMI and FLISR;

- authorize SPS to recover the capital investment and operations and maintenance ("O&M") costs associated with the implementation of AMI, FAN, and FLISR through SPS's proposed GMR over the useful lives of the assets;

- approve SPS's proposed straight line five percent depreciation rate for AMI, FAN, and FLISR;

- authorize SPS to recover the remaining investment in SPS's legacy meters over a two-year period beginning on January 1, 2022 as a component of

the GMR, because (1) the removal of the legacy meters is a necessary component of the proposed project, which will only be undertaken as part of the project; and (2) that is the time period over which the AMI meters will be installed and the legacy meters will be removed from service; in the alternative, SPS proposes recovery over ten years (also through the GMR) through a regulatory asset that is established on January 1, 2022 and amortized over ten years, and earn a return on the asset at SPS's most recently approved Weighted Average Cost of Capital ("WACC");

- approve SPS's proposed revenue requirement associated with the implementation of AMI, FAN, and FLISR;
- approve SPS's proposed reconciliation process for the GMR;
- approve SPS's proposed fees for customers who choose not to receive an AMI meter;
- approve SPS's proposed GMR Tariff, as shown in Advice Notice No. 294;
- approve SPS's proposed reporting criteria;
- find that SPS's Application complies with the Grid Modernization Statute, is reasonable, prudent, and in the public interest, and that the proposed cost recovery mechanisms set forth in this Application and supporting Direct Testimony and Attachments will provide for the implementation of just and reasonable rates;
- issue a final order in this proceeding by December 31, 2021; and
- grant to SPS all other approvals, authorizations, waivers, or variances that the Commission determines are necessary for SPS to implement and effectuate the relief granted in this case.

Q. Are you sponsoring any attachments as part of your direct testimony?

A. Yes, I am sponsoring Attachment RMS-1, which was prepared by me or under my direct supervision.

Q. Do you have any general comments?

A. Yes. SPS is pleased to present to the Commission its first filing under the Grid Modernization Statute. SPS's proposal will benefit SPS's New Mexico retail customers by supporting grid modernization through infrastructure and technology improvements that will allow SPS to provide additional program offerings to customers, promote the use of renewable energy and distributed generation, and increase the efficiency, reliability, and security of SPS's electric system. Moreover, it is projected to achieve net savings for customers, even based on a conservative cost-benefit analysis.

Q. Please summarize the conclusions reached in your testimony.

A. SPS's application satisfies each of the requirements of the Grid Modernization Statute. It benefits SPS's New Mexico retail customers, and is in the public interest. Accordingly, the Commission should approve SPS's application without modification.

III. APPLICABLE STATUTES AND PUBLIC POLICY

Q. Please provide an overview of the Grid Modernization Statute.

A. The Grid Modernization Statute, which became effective in 2020, establishes a public policy of promoting projects that support grid modernization, including the implementation of AMI, FAN, and FLISR technology, and provides criteria that should be considered in approving grid modernization projects.

Q. What are the requirements of the Grid Modernization Statute?

A. The statute authorizes a public utility to file an application with the Commission to approve grid modernization projects that are needed by the utility (or upon request of the Commission), and states that applications "may include requests for approval of investments or incentives to facilitate grid modernization, rate designs or programs that incorporate the use of technologies, equipment or infrastructure associated with grid modernization and customer education and outreach programs that increase awareness of grid modernization programs and of the benefits of grid modernization." NMSA 1978, § 62-8-13(A).

The statute further provides that in evaluating applications seeking approval of grid modernization projects, the Commission shall consider the

reasonableness of the project and whether the requested investments, incentives, programs, and expenditures are:

(1) reasonably expected to improve the public utility's electrical system efficiency, reliability, resilience and security; maintain reasonable operations, maintenance and ratepayer costs; and meet energy demands through a flexible, diversified and distributed energy portfolio, including energy standards established in Section 62-16-4 NMSA 1978;

(2) designed to support connection of New Mexico's electrical grid into regional energy markets and increase New Mexico's capability to supply regional energy needs through export of clean and renewable electricity;

(3) reasonably expected to increase access to and use of clean and renewable energy, with consideration given for increasing access to low-income users and users in underserved communities;

(4) designed to contribute to the reduction of air pollution, including greenhouse gases;

(5) reasonably expected to support increased product and program offerings by utilities to their customers; allow for private capital investments and skilled jobs in related services; and provide customer protection, information or education;

(6) transparent, incorporating public reporting requirements to inform project design and commission policy; and

(7) otherwise consistent with the state's grid modernization planning process and priorities.

NMSA 1978, § 62-8-13(B).

Q. Does the Grid Modernization Statute define "need" in the context of applications for approval of grid modernization projects?

A. It does not. However, in cases addressing need in the context of Certificates of Public Convenience and Necessity ("CCN"), the Commission has equated the "public convenience and necessity" with the public interest.[2] The "public convenience and necessity standard implies a net public benefit."[3]

In addition, the Legislature's adoption of the Grid Modernization Statute establishes a public policy that encourages grid modernization and provides specific criteria for approval. Accordingly, the Commission should determine that projects that satisfy those criteria are in the public interest.

Q. Does the Grid Modernization Statute apply to the implementation of AMI, FAN, and FLISR?

[2] *See, e.g., In Re Public Service Company,* 119 P.U.R. 4th 48, 50 (1990), *aff'd, Pub. Serv. Co. v. N.M. Pub. Serv. Comm'n*, 1991-NMSC-083, 112 N.M. 379.

[3] *See, e.g., In the Matter of Southwestern Public Service Company's Application Requesting: (1) Issuance of a Certificate of Public Convenience and Necessity Authorizing Construction and Operation of the Eddy County to Kiowa 345-kV Transmission Line and Associated Facilities; (2) Approval of the Location of the 345-kV Transmission Line and Associated Facilities; (3) Determination of Right-of-Way Width for the Transmission Line; and (4) Authorization to Accrue an Allowance for Funds Used During Construction,* Case No. 19-00157-UT, Recommended Decision at 8-9 (Oct. 16, 2019); Final Order Adopting Recommended Decision (Nov. 16, 2019).

A. Yes. Subpart (F) of the statute defines "grid modernization" as "improvements to electric distribution or transmission infrastructure through investments in assets, technologies or services that are designed to modernize the electrical system by enhancing electric distribution or transmission grid reliability, resilience, interconnection of distributed energy resources, distribution system efficiency, grid security against cyber and physical threats, customer service or energy efficiency and conservation . . ."

In addition, the definition expressly includes advanced metering infrastructure and associated communications networks; intelligent grid devices for real time or near-real time system and asset information; automated control systems for electric transmission and distribution circuits and substations; high-speed, low-latency communications networks for grid device data exchange and remote and automated control of devices; distribution system hardening projects for circuits and substations designed to reduce service outages or service restoration times; cybersecurity measures; systems or technologies that enhance or improve distribution system planning capabilities; technologies to enable demand response; and new customer information platforms designed to provide improved customer access, greater service options and expanded access to energy

usage information. As explained by SPS's witnesses, SPS's proposal to implement AMI, FAN, and FLISR satisfies these requirements.

Q. Does the Grid Modernization Statute authorize utilities to recover the costs associated with grid modernization projects?

A. Yes. The statute authorizes a public utility that undertakes grid modernization projects approved by the Commission to recover its reasonable costs through an approved tariff rider or in base rates, or through a combination of the two. SPS is requesting approval to recover the costs associated with AMI, FAN, and FLISR through the GMR over the useful lives of the assets.

Q. Does the Grid Modernization Statute limit a utility's ability to recover costs from certain customers?

A. Yes. Section 62-8-13(D) provides: "Costs for a grid modernization project that only benefits customers of an electric distribution system shall not be recovered from customers served at a level of one hundred ten thousand volts or higher from an electric transmission system in New Mexico."

Q. Does SPS seek to recover costs through the GMR from customers who take service at a level over 110 kilovolt ("kV")?

A. No, not at this time. SPS only seeks to recover costs through the GMR from customers who take service at a level below 69 kV, because at this time, the implementation of AMI, FAN, and FLISR will benefit those customers. SPS witness Richard M. Luth addresses this in more depth.

Q. Does the Grid Modernization Statute establish a deadline for the Commission to issue a decision?

A. Yes. Section 62-8-13(C) authorizes the Commission to suspend a proposed tariff rider within 30 days and requires the Commission to issue a decision within 180 days thereafter, or the application is deemed approved.

Q. How does Section 62-9-1 pertain to this filing?

A. The Grid Modernization Statute provides that applications for approval of grid modernization projects should be filed under Section 62-9-1 of the PUA, as applicable.[4] Section 62-9-1 does not apply to SPS's requests in this case, as SPS is not seeking authorization to construct or operate a plant or system, and CCNs are generally not required for the construction of distribution assets.[5] Rather,

[4] The Grid Modernization Statute also refers to Section 62-9-3 of the PUA, which applies to location approval for certain generating plants and transmission lines. Because SPS is not seeking approval to construct a generating plant or transmission line, Section 62-9-3 does not apply.

[5] *See, e.g., In the Matter of the Investigation of Public Service Company of New Mexico's Proposed Construction of a Norton-Tesuque 115 kV Transmission Line Extension and Installation of a*

notification regarding distribution projects may be provided through the filing of a Rule 440 report. Regardless, SPS notes that its requests nevertheless would satisfy the requirements of Section 62-9-1 if it were deemed applicable.

Q. What are the requirements of Section 62-9-1 of the PUA?

A. Section 62-9-1(A) of the PUA provides: "No public utility shall begin the construction or operation of any public utility plant or system or of any extension of any plant or system without first obtaining from the commission a certificate that public convenience and necessity require or will require such construction or operation." In deciding whether to issue a CCN, the Commission "shall give due regard to the public convenience and necessity."[6] As mentioned above, in prior cases, the Commission has equated the "public convenience and necessity" with the public interest and a net public benefit.[7]

Substation on Tesuque Pueblo Land, Case No. 2673, Final Order (Aug. 24, 1998).

[6] NMSA 1978, § 62-9-6.

[7] *See In Re Public Service Company,* 199 P.U.R. 4th 48, 50 (1990), *aff'd, Pub. Serv. Co. v. N.M. Pub. Serv. Comm'n*, 1991-NMSC-083, 112 N.M. 379.

Q. Will SPS's proposal to implement AMI, FAN, and FLISR, including removal of its legacy meters, result in a net public benefit?

A. Yes. As discussed below and by Mr. Nickell, Mr. Remington, and Mr. Rohlwing, SPS's proposal will provide a net public benefit and is in the public interest.

Q. Does SPS's application satisfy the requirements of Section 62-8-13 of the PUA?

A. Yes. As explained below and in the direct testimony of SPS's witnesses, SPS's application to acquire and implement AMI, FAN, and FLISR benefits SPS's New Mexico retail customers, SPS, and the public interest and is consistent with New Mexico public policy as set out in the Grid Modernization Statute.

IV. INTRODUCTION OF SPS'S WITNESSES

Q. Please identify the other SPS witnesses in this case and briefly describe the areas covered in their respective testimonies.

A. Table RMS-1 identifies the witnesses presenting testimony in this case and the topics each witness will address.

Table RMS-1

Witness	Testimony Topics
Chad S. Nickell	• describes AMI, FAN, and FLISR and explains how the technology will benefit SPS and its New Mexico retail customers • supports SPS's request to recover Distribution capital and O&M costs associated with AMI, FAN, and FLISR through the GMR • describes SPS's process to allow customers to opt-out of AMI • describes SPS's customer education plan
Michael O. Remington	• describes the Information Technology ("IT") aspects of AMI, FAN, and FLISR and explains how the technology will benefit SPS and its New Mexico retail customers • supports SPS's request to recover Business Systems capital and O&M

	costs associated with AMI, FAN, and FLISR through the GMR
Steven D. Rohlwing	• provides a cost-benefit analysis, which demonstrates that SPS's New Mexico retail customers will benefit from the implementation of AMI, FAN, and FLISR • discusses the Automated Meter Reading alternative
Mark P. Moeller	• supports SPS's request to depreciate AMI, FAN, and FLISR over 20 years • supports a depreciation rate of five percent to be applied to AMI meters • supports SPS's request to recover the remaining investment in SPS's legacy meters over two years beginning on January 1, 2022 or, in the alternative, recover the remaining investment through a regulatory asset established on January 1, 2022 and amortized over ten years and earn a return on the asset at SPS's WACC
Stephanie N. Niemi	• determines and explains the revenue requirement associated with SPS's requests • discusses and supports SPS's proposed reconciliation process
Richard M. Luth	• describes and supports SPS's proposed rate design for the recovery of costs through the GMR

- supports SPS's cost allocation proposal
- provides the bill impact associated with SPS's application

Q. Have you provided an attachment that summarizes the requirements of the Grid Modernization Statute and identifies the witnesses who address each requirement?

A. Yes. Attachment RMS-1 to my direct testimony summarizes the statute's requirements and identifies the witnesses who address each requirement.

IV. OVERVIEW OF SPS

Q. Please generally describe SPS.

A. SPS is a fully integrated generation, transmission, and distribution electric utility that serves approximately 398,000 customers in a 52,000 square-mile area of eastern and southern New Mexico and the Panhandle and the South Plains of Texas. SPS has approximately 124,000 customers in its New Mexico service area. SPS's service area extends approximately 400 miles from north to south and 200 miles from east to west.

Q. Please generally describe SPS's customer base.

A. SPS's retail customer base in both New Mexico and Texas consists of residential and commercial customers with a large component of agriculture, industrial, and oil and natural gas customers. The agricultural areas are mostly irrigated by pumping from natural underground water sources and there is also a large investment in cattle feeding and dairy operations in the service area. In the past several years, the SPS service area has experienced growth in oil and natural gas development.

Q. Please describe SPS's customer mix.

A. Unlike many utilities, SPS serves a very large amount of commercial and industrial retail load. Indeed, approximately 81 percent of New Mexico retail sales are to industrial and commercial customers, and at least 70 percent of SPS's New Mexico retail jurisdictional sales are to oil and natural gas businesses. Table RMS-2 illustrates SPS's customer sales mix during 2020.

Table RMS-2: 2020 Customer Sales Mix

Customer Class	Kilowatt Hour	Percent of Total
Commercial (SGS, SG, IRR)	976,680,940	14.1%
Industrial (PG, LGST)	4,633,918,308	66.8%
Lighting	28,229,352	0.4%
Muni & School	132,940,529	1.9%
Residential	1,168,393,727	16.8%
Total	**6,940,162,857**	**100.0%**

V. OVERVIEW OF THE GRID MODERNIZATION INITIATIVE

Q. What topics will you discuss in this section of your testimony?

A. I will provide an overview of the purpose and goals of Xcel Energy's Advanced Grid Intelligence and Security ("AGIS") initiative, of which its application in this matter is a component, and identify the grid modernization components that SPS is including in this application. I will also provide a summary of the associated costs, which are discussed in greater detail by Mr. Nickell and Mr. Remington.

Q. What is the AGIS initiative?

A. AGIS is a multi-year project to create benefits for customers by transforming SPS's distribution system into an intelligent and highly automated system. It is broader than the current application, and includes investments that are being made outside this application and are useful independently of this application. In this long-term strategic initiative, SPS will modernize and transform its electrical distribution grid to enhance reliability, efficiency, and security, ensure the safe operation of the grid with the bi-directional flow of energy, and enable and support improved customer products and services into the future.

The technical capabilities of the current grid are limited compared to more advanced grid technologies, and the overall system is somewhat opaque –

meaning that SPS has little insight into performance and operation beyond the substation level. AGIS seeks to take advantage of developed and enhanced technologies to increase grid reliability, transparency, efficiency, and access by enhancing grid visibility and creating the infrastructure to support and actualize advanced grid technologies.

Importantly, AGIS will give SPS tools to enhance customers' experience by providing customers with more in-depth information regarding outages, energy use, system controls, and rate availability. Further, AGIS will help support SPS's clean energy transition through enhanced enablement of distributed energy resources ("DER"), optimized demand-side management ("DSM"), and creating more flexibility for customers.

Q. What components comprise the AGIS initiative?

A. The AGIS platform consists of multiple programs utilizing software, hardware, and networks. Mr. Nickell and Mr. Remington describe these components in detail in their direct testimony. The grid modernization components of AGIS that SPS has included in the current application are AMI, FAN, and FLISR. These three elements will extend SPS's visibility and control of the distribution system from the substation level to customers' premises and will provide the necessary

platform to further enhance the distribution grid through the deployment of field-based applications.

Q. Please generally describe AMI, FAN, and FLISR.

A. I provide a brief description of AMI, FAN, and FLISR below. Mr. Nickell and Mr. Remington discuss these grid modernization components in more detail.

- *AMI:* AMI meters are able to measure and transmit voltage, current, and power quality data and can act as a "meter as a sensor," allowing for near real-time monitoring of the distribution system. These meters provide information about customer usage and will enhance SPS's ability to send price signals to customers, allow for new rate structures that will enable customers to manage their energy usage with near real-time energy usage data available through a customer web portal, identify outages without customer reporting, respond efficiently to metering and usage issues, and allow remote service disconnects and reconnects. AMI meters will replace existing meters to improve service and reliability.

- *FLISR:* FLISR allows for the use of software and automated switching devices to decrease the duration and number of customers affected by any individual outage.

- *FAN:* FAN is the communications network that will enable communications between the infrastructure that already exists at the SPS substations, the new AMI software systems, the new AMI meters, and the new intelligent field devices associated with advanced applications such as FLISR.

Q. Is SPS including AMI, FAN, and FLISR as a series of separate projects for which it seeks approval?

A. No. SPS is seeking approval of its application as a whole, inclusive of AMI, FAN, FLISR, and the GMR, and without modification or removal of elements.

Q. Does the Grid Modernization statute allow a utility to define its own application in this way?

A. Yes. The Grid Modernization statute allows a utility to file an application for projects and include its "requests for approval of investments or to facilitate grid modernization, rate designs or programs . . . ." Moreover, the statute (1) neither provides for conditional approvals, nor for the Commission to revise the application or require it to be revised; and (2) provides criteria for review that do not demonstrate that the utility prove it has proposed some abstract, "ideal" program or set of programs, but rather poses questions whether the proposal is "reasonably expected" to accomplish certain improvements, etc., or "designed" to "support" or "contribute" to certain goals.

Q. Is SPS's proposal "needed" as the term is used in the Grid Modernization statute?

A. Yes, pursuant to the definition of need I previously mentioned, that the programs, as proposed, are in the public interest and will provide a net public benefit. SPS has made incremental modernization efforts for the distribution system over many

years, striving to maintain a grid that is as reliable and efficient as it could be with the technology it currently employs. However, as I explain later, now is the right time to begin a more significant advancement of the grid through grid modernization – of which AMI meters are the largest component. Other drivers impacting the timing of the grid modernization transition include:

- SPS's strategic priorities to lead the clean energy transition, enhance the customer experience, and keep bills affordable;
- SPS's desire to meet the growing needs and expectations of customers;
- current distribution system needs; and
- public policy and legislative direction regarding customer offerings, performance, and technological capabilities of the grid.

To be clear, however, SPS is capable of continuing to operate its distribution system consistent with the status quo in the absence of these programs, and will do so if SPS's application in this matter is not approved by the Commission. A Commission denial of SPS's application would necessarily constitute a determination that SPS's proposals are not in the public interest and not needed.

Q. Please explain how SPS's strategic priorities are driving the grid modernization investments.

A. SPS is working every day to lead the transition to a clean energy future, enhance its customers' experience, and be mindful of bill impacts. The grid modernization initiative advances each of these priorities. As I describe throughout my testimony, SPS's customers can be partners in a more environmentally sound future, especially if they are empowered with better information and data to manage their energy usage and make conservation-friendly choices. AMI and the other associated grid modernization components are very useful tools in furthering these efforts. DER are also a key to this clean energy future, and two-way communications on the distribution grid, down to the meter level, are necessary to accommodate increased levels of DER on the system. Thus, while grid modernization provides direct benefits to SPS's customers (beginning with implementation and over the long term), it also provides environmental benefits to the general public.

Further, customers are generally demanding more optionality and increasing levels of service from service providers. Grid modernization will create better interfaces with customers, provide them with better information and more choices, and improve their overall experience. Improved energy management, control, conservation, and bill management are all available with a

more interactive, advanced distribution system. And, continually enhancing customers' reliability experience is at the core of quality electric service.

Finally, the implementation of AMI will offer customers opportunities to better control and manage their monthly bills by providing more timely and granular energy usage data and enabling advanced rate design.

Q. How will SPS's grid modernization investments address customer expectations?

A. Customers have generally come to expect more from their energy providers than in the past, including levels of service, as well as greater control over their energy sources and their energy use. Customers also expect greater functionality and interaction in how those services are delivered. Technologies that customers can use to control their energy usage are evolving quickly, including smart thermostats, electric vehicle chargers, smart home devices, and smart phones and energy-related digital applications.

Q. How will the grid modernization components enable SPS to meet evolving customer expectations?

A. While SPS customers have access to energy efficiency and demand management programs, renewable energy choices, and billing options, there is a limit to what

SPS can offer without taking advantage of the new technology that has emerged around grid advancement. Smart electric meters can now more easily and flexibly gather more detailed information about customer energy usage, which utilities can use to help customers better understand and manage their usage. Other advanced equipment on the grid can detect, communicate, and respond in real time to circumstances that would normally result in power outages. Grid operators can also obtain improved data to better and more proactively plan and operate the grid. These advancements form the foundation for a flexible grid environment that helps support two-way power flows from customer-connected devices or generating resources (such as rooftop solar) and provides utilities with a greater ability to adapt to future developments.

Q. What system needs make now the right time for SPS to implement AMI, FAN, and FLISR?

A. There are a variety of needs. SPS's current distribution system is based on a one-way flow of information, which means that beyond the distribution substation, SPS has little insight into the workings of the distribution system as it relates to outages, voltage levels experienced by the customer, and DER operations. Additional components that integrate with advanced meters are

necessary to better manage and shorten outages, and to maximize the voltage management on SPS's system. AMI will allow SPS to expand the use of its meter system beyond basic billing functions for the benefit of customers.

Q. To what extent is SPS's proposal to implement AMI aligned with the industry?

A. As stated in the United States Department of Energy ("DOE"), Office of Electricity's November 2018 Smart Grid System Report to Congress, "[f]rom 2007 to 2016, the number of advanced meters has grown ten-fold. About 70.8 million meters out of a total of 151.3 million meters were smart meters as of 2016, representing about 47 percent of U.S. electricity customers."[8] According to the U.S. Energy Information Administration, the number of AMI installations had grown to 94.8 million by 2019. [9] Thus, utilities are increasingly implementing AMI.

SPS has always performed well with respect to system reliability, management, and customer service, but in light of the prevalence of advanced

[8] https://www.energy.gov/sites/prod/files/2019/02/f59/Smart%20Grid%20System%20Report%20November%202018_1.pdf, as of October 1, 2019 (internal citations omitted) (DOE Smart Grid System Report).

[9] https://www.eia.gov/tools/faqs/faq.php?id=108&t=3 (updated November 12, 2020).

meters and smart grid technologies, SPS must make similar investments to ensure continuing alignment with industry direction and customer expectations.

Q. Are broader infrastructure needs also factored into SPS's grid modernization strategy?

A. Yes. The DOE Smart Grid System Report has recognized the broader need for attention to distribution infrastructure nationwide:

> Our [country's] electric infrastructure is aging and it is being pushed to do more than it was originally designed to do. Modernizing the grid to make it "smarter" and more resilient through the use of cutting-edge technologies, equipment, and controls that communicate and work together to deliver electricity more reliably and efficiently can greatly reduce the frequency and duration of power outages, reduce storm impacts, and restore service faster when outages occur. Consumers can better manage their own energy consumption and costs because they have easier access to their own data. Utilities also benefit from a modernized grid, including improved security, reduced peak loads, increased integration of renewables, and lower operational costs.
>
> "Smart grid" technologies are made possible by two-way communication technologies, control systems, and computer processing. These advanced technologies include advanced sensors… that allow operators to assess grid stability, advanced digital meters that give consumers better information and automatically report outages, relays that sense and recover from faults in the substation automatically, automated feeder switches that re-route power around problems, and batteries that store excess

energy and make it available later to the grid to meet customer demand.[10]

SPS's proposal to implement AMI, FAN, and FLISR comports with these objectives. And, as noted earlier, customers are also demanding more optionality, environmentally-sound investments, more control over their energy usage, and better outage management and communications.

Q. Has SPS solicited stakeholder input in forming its grid strategy?

A. Yes. As explained below, SPS solicited stakeholder feedback regarding SPS's proposals in this case.

Q. Are there other reasons why the components of the AGIS initiative are important at this time?

A. Yes. By enacting the Grid Modernization Statute in 2020, the New Mexico Legislature established a public policy that encourages utilities to implement grid modernization projects for the benefit of customers and the public. This policy aligns with the national trends and policies discussed above. SPS has considered these policies and goals when developing its overall strategy and specific project plans for grid modernization.

[10] https://www.energy.gov/oe/activities/technology-development/grid-modernization-and-smart-grid, as of Oct. 1, 2019.

Further, as the prevalence of DER continues to rise, the ability to manage these resources requires visibility into the grid and a more resilient and responsive grid. As the DOE Smart Grid Report stated, grid advancement is necessary to support "the increasing presence of renewable generation and the proliferation of customer- and merchant-owned DERs [that] are introducing significantly greater levels of variability and uncertainty in both the supply of electricity and the demand for it. Generation and load profiles, which have been predictable in the past, can now vary instantaneously and are subject to the behavior of consumers where DERs are present."[11] Enhanced grid management through meters with two-way communications that act as sensors, and greater voltage optimization will all support SPS's ability to host increasing levels of DERs.

Given these circumstances and the additional customer and system benefits enabled by advanced grid technology, now is the appropriate time for SPS to pursue a targeted grid modernization initiative that will address system needs, customer needs, and SPS's overall strategic priorities to lead the clean energy transition and enhance the customer experience.

[11] DOE Smart Grid Report at p. 5.

VI. OVERVIEW OF THE COSTS OF AMI, FAN, AND FLISR

Q. What are the overall anticipated costs of AMI, FAN, AND FLISR?

A. SPS plans to place in service capital additions totaling $31.69 million and incur O&M costs totaling $5.76 million to implement AMI, FAN, and FLISR between 2022 and 2025.

Q. What is the amount of capital additions that SPS will incur to implement AMI, FAN, and FLISR?

A. SPS's forecasted capital additions are shown in Table RMS-3 below.

Table RMS-3
Grid Modernization Capital Additions
(New Mexico Retail)
(Dollars in Millions)

Component	2022	2023	2024	2025
AMI	5.26	16.68	1.44	0.05
FLISR	0.00	2.06	2.42	0.50
FAN	0.47	1.75	0.94	0.12
Total	**5.73**	**20.49**	**4.80**	**0.67**

Q. What are the key drivers for the grid modernization capital additions?

A. As explained by Mr. Nickell and Mr. Remington, the key drivers of the capital additions are equipment purchases and installation and testing of equipment.

Q. What types of O&M costs will SPS incur to implement AMI, FAN, AND FLISR?

A. The forecasted O&M expenses are shown in Table RMS-4 below.

Table RMS-4
Grid Modernization O&M Expenses
(New Mexico Retail)
(Dollars in Millions)

Component	2022	2023	2024	2025
AMI	0.29	1.30	1.38	1.13
FLISR	0.00	0.09	0.28	0.24
FAN	0.12	0.19	0.41	0.33
Total	**0.41**	**1.58**	**2.07**	**1.70**

Q. What are the key drivers for the grid modernization O&M expenses?

A. As explained by Mr. Nickell and Mr. Remington, there are two main drivers with respect to the O&M expenses: (1) program management and implementation costs; and (2) software and hardware maintenance costs.

Q. What does SPS's application provide with respect to these costs?

A. The costs of capital investments and O&M expense for AMI, FAN, and FLISR, including remaining recovery on legacy meters, are to be recovered through the GMR. Ms. Niemi discusses the implementation of the GMR and SPS's proposed reconciliation mechanism.

Q. Does SPS present detailed support for these costs and for the quantitative and qualitative benefits associated with them?

A. Yes. Mr. Nickell and Mr. Remington provide detailed information regarding each category of costs that SPS seeks to recover, as well as the associated benefits. Mr. Rohlwing provides a detailed cost-benefit analysis and also discusses the quantitative and qualitative support for the components that SPS seeks to include in the GMR. With an overall grid modernization benefit-cost ratio of 1.15, Mr. Rohlwing concludes that SPS's benefit to cost ratio demonstrates more benefit than cost for the customer over the life of the project.

Q. Is SPS's request to recover the costs of its proposal through the GMR just and reasonable?

A. Yes. As demonstrated by SPS's witnesses, these grid modernization components will provide significant benefits to SPS's New Mexico retail customers and are in the public interest. Accordingly, the associated costs are just and reasonable and should be recovered.

VII. THE IMPLEMENTATION OF AMI, FAN, AND FLISR WILL BENEFIT SPS, ITS CUSTOMERS, AND THE PUBLIC

Q. What topics will you address in this section of your testimony?

A. I will explain that the implementation of AMI, FAN, and FLISR benefits customers, and is in the public interest, because it will: facilitate grid modernization; improve the efficiency, reliability, resilience, and security of SPS's system; give customers near-real time data regarding energy usage that allows them to monitor and reduce consumption as they deem appropriate; allow SPS to maintain reasonable operations, maintenance, and customer costs; improve SPS's ability to develop and implement DSM programs; improve SPS's ability to accommodate increased levels of distributed energy resources; reduce emissions; increase New Mexico's capability to supply regional needs through clean and renewable electricity; increase access to and use of renewable energy; support a flexible, diversified, and distributed energy portfolio; improve customer education; and allow for capital investment and skilled jobs in related services.

I will also discuss SPS's proposal to provide reports regarding the implementation of AMI, FAN, and FLISR.

Q. Do SPS's other witnesses address these topics?

A. Yes. Mr. Nickell discusses the benefits of AMI, FAN, and FLISR from a distribution perspective, and Mr. Remington discusses the benefits of these components from an IT perspective. Mr. Rohlwing provides a cost-benefit analysis, which shows that SPS's proposal will benefit customers and the public interest.

A. The implementation of AMI, FAN, and FLISR will benefit customers and the public interest by improving electrical system efficiency, reliability, and resilience

Q. Please summarize how AMI, FAN, and FLISR will improve electrical system efficiency, reliability, and operations.

A. As explained in more detail by Mr. Nickell, AMI, FAN, and FLISR will give SPS increased visibility into the distribution grid, allowing SPS to operate the grid and detect faults and outages in real-time or near real time. This will allow SPS to (1) reduce the occurrences and durations of electric outages; (2) optimize the use of the existing distribution grid and enable the installation of field-based devices and applications with which to better operate the system; and (3) manage the distribution grid as it migrates from one-way power flows to a dynamic, two-way grid.

Q. Will the implementation of AMI, FAN, and FLISR benefit SPS's New Mexico retail customers and the public interest?

A. Yes. As discussed by Mr. Nickell, AMI, FAN, and FLISR will improve reliability, resilience, and efficiency by allowing SPS to monitor its distribution system to detect faults and outages in real-time or near real time. This will improve SPS's ability to manage the distribution grid by quickly detecting and responding to faults and will benefit SPS, its New Mexico retail customers, and the public interest.

B. The implementation of AMI, FAN, and FLISR will allow SPS to maintain reasonable operations, maintenance, and customer costs

Q. Will the implementation of AMI, FAN, and FLISR allow customers to better manage their energy costs?

A. Yes. As explained by Mr. Nickell, advanced meters will provide customers with detailed, near real-time data regarding their energy usage, which will allow them to monitor and reduce usage as necessary. Customers may also benefit from alerts when their monthly usage or bill amount goes over a preset amount. As discussed by Mr. Nickell, SPS will also allow customers to utilize the Xcel Energy Green Button Connect web portal, which permits customers to share their

energy useage data with third-party service providers. These services require advanced metering and more timely usage data than is available with SPS's current meter infrastructure.

Q. Will AMI, FAN, and FLISR reduce other costs?

A. Yes. As Mr. Nickell explains, the advanced grid reduces costs by enabling remote connection and disconnection capabilities, reducing energy theft through better detection and prevention capability, reducing uncollectible/bad debt expense, and reducing consumption on inactive meters. The implementation of AMI will also reduce costs through avoided meter purchases and manual reading services.

Q. Do you expect that the implementation of AMI, FAN, and FLISR will allow SPS to maintain reasonable operations, maintenance, and customer costs?

A. Yes, for the reasons discussed above and by Mr. Nickell.

C. Implementing AMI, FAN, and FLISR will allow SPS to improve and meet demands through a flexible, diversified and distributed energy portfolio

Q. Will implementing AMI, FAN, and FLISR allow SPS to improve and meet demands through a flexible, diversified, and distributed energy portfolio?

A. Yes. Implementing these grid modernization components will enable the use of DERs.

Q. How will AMI enable distributed generation integration?

A. As explained by Mr. Nickell, AMI will provide the detailed data on the flow of energy to and from customers, as well as voltage, current, and power quality data from the AMI meter. With this information, SPS will be able to facilitate the integration of greater amounts of distributed generation onto the system.

Additionally, with this data, SPS will be able to identify any voltage problems caused by solar DERs or a potential transformer overload due to DERs. This will allow SPS to enable distributed resources while at the same time maintaining reliability and power quality for each of our customers.

Further, AMI will enable the creation of more accurate load profiles which are used to create better system models for planning and operational purposes.

Finally, AMI meters have bi-directional capabilities that can be utilized by net metered customers, without the need for installation of a different meter, which is currently the case.

D. The implementation of AMI, FAN, and FLISR will support connection of New Mexico's electrical grid with regional energy markets and increase New Mexico's capability to supply regional needs through clean and renewable electricity.

Q. Please address Section 62-8-13(B)(2) of the Grid Modernization Statute.

A. This section of the statute provides that the Commission should consider whether a grid modernization project is designed to support connection of New Mexico's electrical grid into regional energy markets and increase New Mexico's capability to supply regional energy needs through export of clean and renewable electricity. By implementing the advanced grid technologies that provide for two-way communications, there will be significant improvement in SPS's ability to collect system data, manage distributed energy resources, and track outages and power quality issues. This insight into the distribution grid will enhance SPS's ability to deliver on clean energy goals and support increased DER, specifically with the increase of wholesale generation connected to the distribution system.

Q. Has FERC adopted an order that requires utilities to remove barriers to DER?

A. Yes. In September of 2020, FERC adopted Order 2222 to enable DER to compete in regional organized wholesale electric markets through aggregations.

The order is intended to allow new technologies to come online and participate on a level playing field, further enhancing competition, encouraging innovation, and driving down costs for consumers.[12]

Q. Please explain how the implementation of AMI, FAN, and FLISR will support connection of New Mexico's electrical grid with regional energy markets and increase New Mexico's capability to supply regional needs through clean and renewable electricity.

A. As explained above, the implementation of AMI, FAN, and FLISR will facilitate SPS's ability to support DER and promote renewable resources by improving SPS's ability to collect system data, manage distributed energy resources, and track outages and power quality issues. This is especially important given the fact that FERC Order 2222 is expected to increase DER on SPS's system.

E. The implementation of AMI, FAN, and FLISR will increase access to and use of clean and renewable energy, including for low-income users and users in underserved communities

Q. Will AMI, FAN, and FLISR increase access to and use of clean and renewable energy, including for low-income users and users in underserved communities?

[12] *See* www.ferc.gov/media/ferc-order-no-2222-fact-sheet

A. Yes. Since AMI, FAN, and FLISR will be implemented systemwide, all of SPS's customers, including low-income users and users in underserved communities, will have equal access to this new technology. These grid modernization components will allow all customers to monitor and potentially reduce their energy usage as they deem necessary and will help SPS effectively manage increased levels of renewable resources on its system.

F. The implementation of AMI, FAN, and FLISR will assist SPS in reducing air pollution, including greenhouse gases

Q. Will AMI, FAN, and FLISR assist SPS in reducing air pollution, including greenhouse gases?

A. Yes. The implementation of AMI, FAN, and FLISR will allow SPS's customers to closely monitor their energy consumption and receive timely price signals so that they can reduce usage as appropriate. These components will also enable new DSM programs and, as discussed above, facilitate DER.

Q. How will AMI, FAN, and FLISR enable or enhance new DSM programs?

A. The more detailed and timely data that these investments provide can help enable or enhance programs in a number of ways. SPS can utilize the information provided by these systems to update program designs and marketing tactics. SPS

will have better insight into how and when customers use their energy, which will allow SPS to better market and segment customers and provide more impactful communications and programs.

G. The implementation of AMI, FAN, and FLISR will assist SPS in offering additional products and programs, allow for capital investment and skilled jobs in related services, and provide customer protection, information, or education

Q. Will AMI, FAN, and FLISR assist SPS in offering additional programs and products?

A. Yes. As explained above, the implementation of AMI, FAN, and FLISR will provide SPS and its customers with granular, real time and near-real time data regarding energy usage. This information will allow SPS to develop and offer additional products and programs, including programs related to energy efficiency. It will also allow SPS's customers to better manage their energy consumption.

Q. Will AMI, FAN, and FLISR improve SPS's ability to provide customer protection, information, and education?

A. Yes, for the reasons discussed above. In addition, Mr. Nickell provides detailed information regarding SPS's proposed customer communication plan.

Q. Will the implementation of AMI, FAN, and FLISR allow for capital investment?

A. Yes. As discussed above, SPS plans to implement significant capital investment in relation to the implementation of AMI, FAN, and FLISR.

Q. Will the implementation of AMI, FAN, and FLISR allow for skilled jobs in related services?

A. Yes. The implementation of AMI, FAN, and FLISR will require the use of skilled labor, both within SPS and externally.

Q. Does SPS expect that some positions will be eliminated as a result of the implementation of AMI?

A. Yes, some positions will be eliminated since manual reading of SPS's meters will no longer be required. However SPS believes the economic benefits to customers outweigh the reduction in meter reading positions. SPS look for opportunities for these displaced employees with retraining and reintegration into other positions within the company.

H. Proposed Reporting Regarding the Implementation of AMI, FAN, and FLISR

Q. Does the Grid Modernization Statute require transparency and public reporting requirements?

A. Yes. Section 62-8-13(B)(6) requires the Commission to consider whether a proposed grid modernization project is transparent and incorporates public reporting requirements to inform design and commission policy.

Q. Please describe SPS's proposal to provide reports regarding the implementation of AMI, FAN, and FLISR.

A. SPS proposes to provide annual reports to the Commission, the Commission's Utility Division Staff, and parties who intervene in this case in August of each year.

Q. What does SPS propose to include in the annual reports?

A. SPS proposes to include in its annual reports: (1) the number of advanced meters installed; (2) significant delays or deviation from the deployment plan and the reasons for the delay or deviation; (3) the number of any advanced meters that may have been replaced as a result of problems; (4) a description of significant problems SPS has experienced with the implementation of AMI, with an explanation of how the problems are being addressed; (5) the number of customers who have opted-out of AMI; (6) the status of deployment of features;

and (7) an identification of new programs that SPS has offered to customers as a result of the implementation of AMI, FAN, and FLISR.

Q. Will SPS's annual reports provide information that is useful to the Commission, Staff, and parties?

A. Yes. The information that SPS proposes to provide in its annual reports will provide transparency and allow the Commission, Staff, and parties to evaluate the benefits of SPS's grid modernization components and inform Commission decisions on the design of grid modernization projects and Commission policy.

Q. Overall, will SPS's proposal to implement AMI, FAN, and FLISR provide a net public benefit?

A. Yes, for the reasons discussed above and in the testimony of Mr. Nickell, Mr. Remington, and Mr. Rohlwing.

IX. STAKEHOLDER OUTREACH

Q. What is the purpose of this section of your testimony?

A. In this section of my testimony, I will discuss SPS's effort to reach out to stakeholders to obtain input on SPS's proposal prior to filing.

Q. How did SPS seek stakeholder input prior to filing its applications?

A. On April 30, 2021, SPS held an information session to provide information on its proposal and seek input from stakeholders. At the end of the session, parties were invited to follow-up with SPS on any additional questions or comments; however, no additional feedback was received after the meeting.

Q. Who did SPS invite to the session?

A. SPS invited Commission Staff, representatives of all of the intervenors in SPS's current base rate case (Case No. 20-00238-UT), and others.

Q. What information did SPS provide?

A. SPS provided a summary of its proposal and requests in this case, including a description of AMI, FAN, and FLISR, and the associated costs.

Q. Did the participants provide input on SPS's filing?

A. The participants asked questions about SPS's filing but did not provide any specific suggestions or input.

X. CUSTOMER OPT-OUT

Q. What topic will you discuss in this section of your testimony?

A. I will discuss SPS's plan to allow customers to opt-out of an advanced meter if they wish to do so.

Q. Do other witnesses address SPS's opt-out proposal?

A. Yes. Mr. Nickell provides a detailed discussion of SPS's proposal, and Mr. Luth sponsors the tariff.

Q. Please summarize SPS's proposal to allow customers to opt-out of an advanced meter.

A. Customers will have the opportunity to opt-out of an AMI meter by calling or emailing SPS's Customer Service department. Customers can opt-out of an AMI meter as soon as the opt-out policy is approved by the Commission and even after the AMI meter has been installed. Customers will be informed of the option to opt-out on three separate occasions prior to meter installation at 90-, 60-, and 30-day intervals.

Q. Is there a cost associated with opting out of an advanced meter?

A. Yes. As discussed by Mr. Nickell and Mr. Luth, SPS proposes to charge customers who opt-out of an AMI meter a one-time fee of approximately $200 if

the customer opts-out of an AMI meter prior to installation or approximately $250 if a customer opts-out of an AMI meter after installation, and a monthly fee of approximately $12. These fees are designed to recover the costs associated with opting out of an advanced meter, are reasonable, and will ensure that the costs are not subsidized by customers who receive AMI meters.

Q. Is SPS's opt-out proposal reasonable?

A. Yes. SPS's proposal balances the interests of SPS and its customers by addressing the concerns of customers who do not wish to receive an advanced meter while ensuring that other customers do not bear the associated costs. In addition, other utility commissions, including the PUCT and the Public Utility Commission of Colorado, have approved opt-out procedures and fees for customers who do not wish to receive an advanced meter.[13]

[13] *See PUCT Substantive Rule 25.133; In the Matter of Advice Letter No. 1820 Electric of Public Service Company of Colorado to Implement an Optional Schedule Interval Data Meter Option for Residential and Small Commercial Customers to Become Effective on April 6, 2020,* Proceeding No. 20AL-0094E, Decision No. R20-0490 (July 9, 2020).

VIII. RECOVERY OF UNDEPRECIATED LEGACY METER BALANCE

Q. What topic will you discuss in this section of your testimony?

A. I will discuss SPS's request to recover its remaining investment in its legacy meters.

Q. Please explain how SPS proposes to recover its remaining investment in the legacy meters.

A. As explained by Mr. Moeller, SPS's application includes recovery of the remaining investment in its legacy meters through the GMR. SPS proposes recovery over a two-year period beginning on January 1, 2022 because that is the time period over which the AMI meters will be installed and the legacy meters will be removed from service. In the alternative, SPS proposes to recover its remaining investment through a regulatory asset that is established on January 1, 2022 and amortized over ten years, and earn a return on the asset at SPS's most recently approved WACC, with recovery by this method also through the GMR.

Q. Why does SPS propose to recover its remaining investment in the legacy meters over two years or, in the alternative, through a regulatory asset amortized over ten years?

A. As explained by Mr. Nickell, SPS plans to complete installation of the AMI meters in 2023. Recovering the remaining investment over two years will align SPS's cost recovery with the remaining useful life of the legacy meters.

If the Commission determines that a longer period of time is appropriate, SPS proposes to recover its remaining investment through a regulatory asset that is amortized over ten years and earn a return on the asset at SPS's WACC.

Q. Why shouldn't SPS's remaining investment in the legacy meters be recovered over their currently-approved remaining useful life?

A. Recovering the asset over two years, or even ten years, is consistent with principles of intergenerational equity and is warranted given the numerous benefits provided by AMI.

Q. How does SPS propose to treat the undepreciated balance of the legacy meters that is currently included in SPS's base rates?

A. SPS proposes to credit customers with the amount of depreciation paid in base rates through the annual GMR true-up process discussed by Ms. Niemi.

Q. Does SPS's request balance the interests of customers and SPS?

A. Yes. As explained by SPS's witnesses, the implementation of AMI, FAN, and FLISR will provide significant benefits to SPS's New Mexico retail customers,

including cost savings, better management of energy use and costs, and opportunities for increased DSM programs and DER. SPS's plan to implement AMI, FAN, and FLISR complies with the requirements of the Grid Modernization Statute and is consistent with New Mexico public policy as adopted in the statute. Accordingly, SPS should be permitted to recover its remaining undepreciated investment in the legacy meters.

Q. Is SPS's request to recover the remaining investment in its legacy meters in the public interest?

A. Yes. Considering the numerous benefits that the implementation of AMI, FAN, and FLISR will provide to SPS's customers and the public, it is in the public interest for SPS to recover its remaining investment in the legacy meters.

Q. Is removal of the legacy meters a reasonable part of SPS's programs and application in this matter?

A. Yes. In fact, it is a necessary part.

Q. If SPS is not permitted to recover its remaining investment in the legacy meters (including both return of and return on), will it still implement the balance of the programs?

A. No. As discussed earlier in my testimony, SPS's application is for its programs as a unified whole, including removal and recovery of remaining investment in the legacy meters. Rejection or modification of this aspect of SPS's application constitutes rejection of SPS's application and SPS would not move forward.

Q. Are there policy reasons that favor ensuring full recovery of and recovery on investments in legacy meters that would be removed from customers' premises in favor of replacing them with advanced meters?

A. Yes. The legacy meters are capable of continuing to serve customers without any change. As recognized by the Legislature, however, the electric industry is at a point where there are new technological opportunities to achieve further benefits for customers. Accordingly, SPS is proposing to move forward with certain technologies, including advanced meters, because SPS's analysis shows they will benefit customers and the grid, and even produce net economic benefits for customers inclusive of factoring in the costs of recovery of and on the legacy meters. Disallowing recovery would, in contrast, create a clear, significant economic disincentive for utilities to pursue these or other advanced grid technologies that stand to significantly benefit customers. Further, it is not reasonable to put utilities at risk for predicting the pace of technology and

deploying only those assets that will never be overtaken by better technologies during their depreciable lives. Indeed, it is not as if SPS could have foregone decades worth of metering customers' usage, waiting for the technology that has now arrived. Utilities should be encouraged to adopt the best technologies presently available, while continuing to evaluate alternative options that might provide further net benefits to customers. Making SPS whole for its necessary investments in the existing metering equipment best achieves that goal and the clearly articulated goals of the Grid Modernization statute.

Q. Would you characterize the legacy meters' disposition in that context as them being used and useful on behalf of customers?

A. Yes. The legacy meters are fully capable of remaining on customers' premises and continuing to be used and useful in that sense. The question for the utility and the Commission, particularly given the Legislature's public policy provided through the Grid Modernization statute, is whether it is worthwhile to provide customers with the superior tools available through advanced meters and use the removal of the legacy meters to achieve those benefits. If the determination is made to provide customers with advanced metering, and thereby achieve those benefits and the net economic benefits associated with that (which are net

inclusive of the cost of the legacy meters), then that is a determination that the best use and usefulness of the legacy meters is, in fact, their removal and replacement.

IX. SPS'S REQUESTS FOR RELIEF

Q. Please summarize SPS's requests for relief.

A. In accordance with the Grid Modernization Statute, SPS requests that the Commission:

- authorize SPS to acquire and implement grid modernization components that include AMI, FAN, and FLISR;
- authorize SPS to recover the capital investment and O&M costs associated with the implementation of AMI, FAN, and FLISR through SPS's proposed GMR over the useful lives of the assets;
- approve SPS's proposed straight line five percent depreciation rate for AMI, FAN, and FLISR;
- authorize SPS to recover the remaining investment in SPS's legacy meters over a two-year period beginning on January 1, 2022, or, in the alternative, through a regulatory asset that is established on January 1, 2022 and amortized over ten years, and earn a return on the asset at SPS's most recently approved WACC;
- approve SPS's proposed revenue requirement associated with the implementation of AMI, FAN, and FLISR;
- approve SPS's proposed reconciliation process for the GMR;
- approves SPS's proposed fees for customers who choose not to receive an AMI meter;
- approve SPS's proposed GMR Tariff;
- approve SPS's proposed evaluation and reporting criteria;

- find that SPS's Application complies with the Grid Modernization Statute, is reasonable, prudent, and in the public interest, and that the proposed cost recovery mechanisms set forth in this Application and supporting Direct Testimony and Attachments will provide for the implementation of just and reasonable rates;

- issue a final order in this proceeding by December 31, 2021; and

- grant to SPS all other approvals, authorizations, waivers, or variances that the Commission determines are necessary for SPS to implement and effectuate the relief granted in this case.

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

A. Yes.

VERIFICATION

On this day, June 4, 2021, I, Ruth M. Sakya, swear and affirm under penalty of perjury under the law of the State of New Mexico, that my testimony contained in Direct Testimony of Ruth M. Sakya is true and correct.

/s/Ruth M. Sakya
RUTH M. SAKYA

N. M. S. A. 1978, Section 62-8-13 Applications for Grid Modernization Projects	
Statutory Provision	**Witness**
(62-8-13(A)) Applications may include requests for approval of:	
• investments or incentives to facilitate grid modernization;	• Ruth M. Sakya
• rate designs or programs that incorporate the use of technologies, equipment or infrastructure associated with grid modernization; and	• Richard M. Luth
• customer education and outreach programs that increase awareness of grid modernization programs and of the benefits of grid modernization.	• Ruth M. Sakya • Chad S. Nickell
(62-8-13(A)) Applications shall:	
• include the utility's estimate of costs for grid modernization projects;	• Ruth M. Sakya • Chad S. Nickell • Michael O. Remington • Mark P. Moeller • Stephanie N. Niemi
• be filed pursuant to Section 62-9-1, as applicable *(New construction; ratemaking principles)*; and	• Ruth M. Sakya • Chad S. Nickell • Michael O. Remington • Mark P. Moeller • Stephanie N. Niemi • Richard M. Luth
• be filed pursuant to Section 62-9-3 NMSA 1978, as applicable *(Location control)*.	Not Applicable
(62-8-13(B)) The Commission shall review the reasonableness of a proposed grid modernization project.	• Ruth M. Sakya • Chad S. Nickell • Michael O. Remington • Steven D. Rohlwing
(62-8-13(B)) In determining whether a proposed grid modernization project is reasonable, the Commission shall consider whether the investments, incentives, programs and expenditures are:	
(1) reasonably expected to improve the public utility's electrical system efficiency, reliability, resilience and security;	• Chad S. Nickell • Michael O. Remington
maintain reasonable operations, maintenance and ratepayer costs;	• Chad S. Nickell • Michael O. Remington
meet energy demands through a flexible, diversified, and distributed energy portfolio, including energy standards established in Section 62-16-4 NMSA 1978;	• Ruth M. Sakya • Chad S. Nickell
(2) designed to support connection of New Mexico's electrical grid into regional energy markets and increase New Mexico's capability to supply regional energy needs through export of clean and renewable electricity;	• Ruth M. Sakya • Chad S. Nickell
(3) reasonably expected to increase access to and use of clean and renewable energy, with consideration given for increasing access to low-income users and users in underserved communities	• Ruth M. Sakya • Chad S. Nickell
(4) designed to contribute to the reduction of air pollution, including greenhouse gases;	• Ruth M. Sakya • Chad S. Nickell
(5) reasonably expected to support increased product and program offerings by utilities to their customers; allow for private capital investments and skilled jobs in related services; and provide customer protection, information or education;	• Ruth M. Sakya • Chad S. Nickell • Michael O. Remington

N. M. S. A. 1978, Section 62-8-13 Applications for Grid Modernization Projects	
Statutory Provision	**Witness**
(6) transparent, incorporating public reporting requirements to inform project design and commission policy;	• Ruth M. Sakya
(7) otherwise consistent with the state's grid modernization planning process and priorities.	• Ruth M. Sakya
(62-8-13(C)) Except as provided in Section 62-8-13(D), a public utility that undertakes approved grid modernization projects may recover its reasonable costs through an approved tariff rider or in base rates, or by a combination of the two.	• Ruth M. Sakya • Richard M. Luth • Stephanie N. Niemi
(62-8-13(D)) Grid modernization costs only benefiting customers of an electric distribution system shall not be recovered from customers served at a level of one hundred ten thousand volts or higher from an electric transmission system in New Mexico.	• Richard M. Luth • Ruth M. Sakya