

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. 312; (2) AUTHORITY TO)
ABANDON THE PLANT X UNIT 1,)
PLANT X UNIT 2, AND CUNNINGHAM)
UNIT 1 GENERATING STATIONS AND)
AMEND THE ABANDONMENT DATE)
OF THE TOLK GENERATING)
STATION; AND (3) OTHER)
ASSOCIATED RELIEF,)
)
SOUTHWESTERN PUBLIC SERVICE)
COMPANY,)
)
APPLICANT.)**

CASE NO. 22-00286-UT

DIRECT TESTIMONY

of

RICHARD M. LUTH

on behalf of

SOUTHWESTERN PUBLIC SERVICE COMPANY

TABLE OF CONTENTS

GLOSSARY OF ACRONYMS AND DEFINED TERMS.....	iv
LIST OF ATTACHMENTS	viii
I. WITNESS IDENTIFICATION AND QUALIFICATIONS	1
II. ASSIGNMENT AND SUMMARY OF TESTIMONY AND RECOMMENDATIONS.....	4
III. JURISDICTIONAL ALLOCATION FACTORS	9
IV. DEVELOPMENT OF FUTURE TEST YEAR REVENUE AT PRESENT RATES.....	18
V. CLASS COST OF SERVICE STUDY.....	20
A. FUNCTIONALIZATION.....	21
B. CLASSIFICATION	22
C. ALLOCATION.....	24
1. ALLOCATION OF PRODUCTION AND TRANSMISSION INVESTMENT	28
2. ALLOCATION OF DISTRIBUTION INVESTMENT.....	33
3. ALLOCATION OF GENERAL PLANT AND INTANGIBLE PLANT INVESTMENT	35
4. ALLOCATION OF OTHER RATE BASE INVESTMENT	36
5. ALLOCATION OF REVENUE CREDITS	38
6. ALLOCATION OF PURCHASED POWER COSTS	40
7. ALLOCATION OF O&M EXPENSE	40
8. ALLOCATION OF ADMINISTRATIVE AND GENERAL EXPENSES	42
9. ALLOCATION OF DEPRECIATION AND AMORTIZATION EXPENSE	43
10. ALLOCATION OF TAX EXPENSE.....	43
D. SUMMARY OF CUSTOMER CLASS ALLOCATIONS	44
VI. REVENUE INCREASE DISTRIBUTION	46
VIII. RATE DESIGN	50

A.	OVERVIEW	50
B.	PROPOSED CHANGES TO RATES	53
1.	RESIDENTIAL SERVICE AND RESIDENTIAL HEATING SERVICE	53
2.	SMALL GENERAL SERVICE.....	56
3.	SECONDARY GENERAL SERVICE	57
4.	PRIMARY GENERAL SERVICE	58
5.	IRRIGATION POWER SERVICE	58
6.	LARGE GENERAL SERVICE - TRANSMISSION	60
7.	SCHOOLS AND MUNICIPALS	62
8.	AREA LIGHTING AND MUNICIPAL STREET LIGHTING.....	63
C.	PROPOSED REVENUE RECONCILIATION.....	64
X.	TARIFF CHANGES.....	65
	VERIFICATION.....	70

GLOSSARY OF ACRONYMS AND DEFINED TERMS

<u>Acronym/Defined Term</u>	<u>Meaning</u>
12-CP	12 Coincident Peak
A&G	Administrative and General
ADIT	accumulated deferred income taxes
AED 4-CP	Average and Excess 4-Coincident Peak Demand
Base Period	July 1, 2021 through June 30, 2022
Cannon	Cannon Air Force Base
CCOSS	Class Cost of Service Study
Commission	New Mexico Public Regulation Commission
CP	Coincident Peak
CRS	Customer Resource System
CUSTACCTSS	Customer Accounting, Sales & Service
CUSTDEP	customer classes from which deposits are required
CUSTOTH	Customer Other
DISTLT	Distribution Line Transformers
DISTPLT	Distribution Plant
DISTPRI	Distribution Primary Lines
DISTSEC	Distribution Secondary Lines

<u>Acronym/Defined Term</u>	<u>Meaning</u>
DISTSERV	Distribution Service Laterals
DISTSUB	Distribution Substations
DPROD	Production Demand
DPRODTI	Transmission Interconnect
DTRAN	Transmission Demand
DTRANRAD	Transmission Radial
ENERGY1	energy at the source
EAP	Electric Affordability Program
FERC	Federal Energy Regulation Commission
FPPCAC	Fuel and Purchased Power Cost Adjustment Clause
FTY	Future Test Year ending June 30, 2024
hp	horsepower
IDR	interval demand recording
kVar	kilovolt amperes
kV	kilovolt
kW	kilowatt
kWh	kilowatt-hour
LGS-T	Large General Service-Transmission

<u>Acronym/Defined Term</u>	<u>Meaning</u>
LIGHTING	Lighting
LMS	Large Municipal and School Service
METERING	Metering
METREAD	Meter Reading
NCP	Non-Coincident Peak
O&M	Operation and Maintenance
PRODENE	Production Energy
PRODPLT	Production Plant
PURCHCAP	Purchased Capacity
RFP	Rate Filing Package
ROR	Rate of Return
SALWAGES	salaries and wages
SALWAGXAG	salaries and wages excluding A&G
SL	Municipal Street Lighting
SMS	Small Municipal and School Service
SPS	Southwestern Public Service Company, a New Mexico corporation
TRANINTER	Transmission Interconnect (functional category)
TRANPLT	Transmission plant

<u>Acronym/Defined Term</u>	<u>Meaning</u>
TRANRAD	Transmission Radial Lines
TRANSYS	Transmission System
WAPA	Western Area Power Administration
Xcel Energy	Xcel Energy Inc.

LIST OF ATTACHMENTS

<u>Attachment</u>	<u>Description</u>
RML-1	Revenue Summary (<i>Filename: ARML-1.xlsx</i>)
RML-2	Jurisdictional Allocation (<i>Filename: RML-2.xlsx</i>)
RML-3	Present Revenue (<i>Filename: RML-3.xlsx</i>)
RML-4	Class Cost of Service Study (<i>Filename: RML-4.xlsx</i>)
RML-5	Comparison of Cost Classifications (<i>Filename: RML-5.xlsx</i>)
RML-6	Revenue at Proposed Base Rates (<i>Filename: RML-6.xlsx</i>)
RML-7	Comparison of Present and Proposed Base Rates (<i>Filename: RML-7.xlsx</i>)
RML-8	EAP Tariff (<i>Filename: RML-8.docx</i>)
RML-9	Workpapers (<i>Various Files in Native Format</i>)

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 **I. WITNESS IDENTIFICATION AND QUALIFICATIONS**

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

3 A. My name is Richard M. Luth. My business address is 790 South Buchanan Street,
4 Amarillo, Texas 79101.

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”) and wholly-owned electric utility subsidiary of Xcel
8 Energy Inc. (“Xcel Energy”).

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

10 A. I am employed by SPS as Manager, Pricing and Planning in the Regulatory
11 Administration Department.

12 **Q. Please briefly outline your responsibilities as Manager, Pricing and Planning.**

13 A. I am responsible for the preparation of electric cost allocation studies and the
14 development and design of retail electric rates and tariffs for SPS. Those
15 responsibilities include development of rates, terms, and conditions for proposed
16 service contracts, and the analysis of various other regulatory and business issues
17 for SPS.

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

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

2 A. I graduated from Illinois State University in 1983, with a Bachelor of Science in
3 Accounting.

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

5 A. I have been employed by SPS and its affiliated companies since April 2008. Prior
6 to that, I had been a Rates Analyst and Economic Analyst with the Illinois
7 Commerce Commission since October 1990. At the Illinois Commerce
8 Commission, I reviewed cost-of-service, rates, and other matters involving the
9 regulation of investor-owned public utilities.

10 **Q. Have you attended or taken any special courses or seminars relating to public
11 utilities?**

12 A. Yes. I attended and completed the Edison Electric Institute's Electric Rates
13 Advanced course. In addition, I have attended numerous courses and seminars
14 hosted by the Illinois State University Institute for Regulatory Policy Studies.

15 **Q. Have you testified before any regulatory authorities?**

16 A. Yes. I have filed testimony on behalf of SPS in numerous cases before the New
17 Mexico Public Regulation Commission ("Commission") regarding cost allocation,
18 rate design, and tariff issues, including SPS's last seven base rate cases, which were

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 Case Nos. 20-00238-UT,¹ 19-00170-UT,² 17-00255-UT,³ 15-00296-UT,⁴
2 12-00350-UT,⁵ 10-00395-UT,⁶ and 08-00354-UT.⁷ I have also testified on behalf
3 of SPS in numerous cases before the Public Utility Commission of Texas on the
4 same issues. Finally, before joining SPS, I testified before the Illinois Commerce
5 Commission on numerous occasions on various cost allocation, rate design, and
6 tariff issues.

¹ *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 Plan X Unit 3 Generating Station; and (3) Other Associated Relief*, Case No. 20-00238-UT, Certification of Stipulation (Dec. 21, 2021).

² *In the Matter of Southwestern Public Service Company's Application for: (1) Revision of its Retail Electric Rates Under Advice No. 282; (2) Authorization and Approval to Shorten the Service Life and Abandon its Tolk Generating Station Units; and (3) Other Related Relief*, Case No. 19-00170-UT, Final Order Adopting Certification of Stipulation (May 20, 2020).

³ *In the Matter of Southwestern Public Service Company's Application for Revision of its Retail Electric Rates Pursuant to Advice Notice No. 272*, Case No. 17-00255-UT, Final Order Adopting Recommended Decision With Modifications (Sep. 5, 2018).

⁴ *In the Matter of Southwestern Public Service Company's Application for Revision of its Retail Rates Under Advice Notice No. 258*, Case No. 15-00296-UT, Final Order Adopting Certification of Stipulation (Aug. 10, 2016).

⁵ *In the Matter of Southwestern Public Service Company's Application for Revision of its Retail Rates Under Advice Notice No. 245 and All Associated Approvals*, Case No. 12-00350-UT, Final Order Partially Approving Recommended Decision (Mar. 27, 2014).

⁶ *SPS Application for Revision of its Retail Rates under Advice Notice No. 235*, Case No. 10-00395-UT, Final Order Amending Certification of Stipulation (Dec. 28, 2011).

⁷ *In the Matter of the Application of Southwestern Public Service Company for Revision of its Retail Electric Rates Pursuant to Advice Notice Nos. 217, 218 and 219 and Request for Expedited Interim Relief Authorizing Recovery of Capacity Related Costs Associated With the New Hobbs Generating Station*, Case No. 08-00354-UT, Final Order Conditionally Approving Stipulation (Jul. 14, 2009).

1 **II. ASSIGNMENT AND SUMMARY OF TESTIMONY AND**
2 **RECOMMENDATIONS**

3 **Q. What is your assignment in this proceeding?**

4 **A.** I have several assignments in this proceeding. Specifically, my testimony:

- 5 (1) explains the development of the annual revenues by rate class for the Future
6 Test Year (July 1, 2023 through June 30, 2024)⁸ (“FTY”);
- 7 (2) explains and supports the demand and energy allocation factors for
8 allocating costs among SPS’s New Mexico retail, Texas retail, and
9 wholesale jurisdictions;
- 10 (3) summarizes how the functions involved in providing electric service are
11 reflected in costs and how they serve as the starting point for the Class Cost
12 of Service Study (“CCOSS”), in which costs are assigned to the various
13 New Mexico retail rate classes;
- 14 (4) discusses and supports the allocation of FTY costs among the New Mexico
15 retail customer classes;
- 16 (5) describes SPS’s proposed distribution of the revenue requirement among
17 the customer classes and presents the proof of revenue for the proposed
18 rates;
- 19 (6) explains how SPS has designed the rates necessary to recover the revenue
20 requirement; and
- 21 (7) describes the proposed revisions to SPS’s New Mexico retail rate and rule
22 tariffs.

⁸ SPS’s Application is based on a Future Test Year of July 1, 2023 through June 30, 2024. *See* New Mexico Administrative Code (“NMAC”) §§ 17.1.3.1 - 17.1.3.19. The Base Period is July 1, 2021 through June 30, 2022; and the Linkage Period is July 1, 2022 through June 30, 2023.

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 I also sponsor or co-sponsor the following Rate Filing Package (“RFP”) schedules:

Schedule No.	Description
A-2	Summary of the Revenue Increase or Decrease at the Proposed Rates by Rate Classes
K-2	Allocation of Rate Base – Functional Classification
K-3	Allocation of Rate Base – Demand, Energy, and Customer
K-4	Allocation of Rate Base to Rate Classes
K-6	Allocation of Total Expenses – Functional Classification
K-7	Allocation of Total Expenses – Demand, Energy, and Customer
K-8	Allocation of Total Expenses to Rate Classes
L-1	Allocated Cost Per Billing Unit of Demand, Energy, and Customer
M-1	Allocation Factors Used to Assign Items of Plant and Expenses to the Various Rate Classes
M-2	Classification Factors Used to Assign Items of Plant and Expenses to Demand, Energy, and Customer
M-3	Demand and Energy Loss Factors
N-1	Rate of Return by Rate Classification
O-1	Total Revenue Requirements by Rate Classification
O-2	Proof of Revenue Analysis
O-3	Comparison of Rates for Service Under the Present and Proposed Schedules
O-4	Explanation of Proposed Changes to Existing Rate Schedules
P-1	Peak Demand Information

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

Schedule No.	Description
P-5	Customer Information
P-9	Line-Loss Information

1

2 **Q. Please summarize your testimony and your conclusions and recommendations**
3 **in your testimony.**

4 A. Attachment RML-1, Revenue Summary, provides an overview of the product of
5 my work in this case. Attachment RML-1 presents revenue at present base rates,
6 class cost of service increases, a gradualism adjustment among customer classes,
7 and the overall effect of the proposed increase on average customer bills for each
8 customer class and New Mexico retail as a whole.

9 My testimony covers the three basic steps in determining the cost of service
10 applicable to each retail customer class in New Mexico. First, I describe why it is
11 necessary to develop jurisdictional allocation factors for SPS operations and how
12 those factors are determined. Second, I explain the calculation of SPS's test year
13 revenues at present rates (also referred to as "present revenue"). Finally, I discuss
14 the process and methods SPS uses to allocate costs among SPS's retail customer
15 classes in New Mexico.

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 Next, using load research, billing data, and production and transmission
2 peak demands from the SPS forecast, I developed jurisdictional allocation factors
3 that are inputs for SPS witness Stephanie N. Niemi to calculate SPS's New Mexico
4 retail base rate revenue requirement. Ms. Niemi determined that SPS's New
5 Mexico retail base rate revenue requirement in the Future Test Year, net of
6 miscellaneous operating revenues, is \$550,273,134. As Ms. Niemi explains,
7 because SPS's present New Mexico retail base rate revenue recovers significantly
8 less than that, a \$77,636,954 base rate revenue deficiency is present.

9 After receiving the New Mexico jurisdictional cost of service study from
10 Ms. Niemi, I developed appropriate class demand, energy, and customer allocators,
11 which I used to allocate the New Mexico retail jurisdictional costs among the
12 customer classes based on the CCOSS. A copy of the CCOSS is included in
13 Attachment RML-4.

14 I then used the results of the CCOSS to develop the revenue distribution
15 among the rate classes and to design rates. I developed the proposed base revenue
16 increases among the New Mexico retail customer classes in order to generally move
17 classes toward the calculated cost of providing service to that class, balanced by
18 consideration of increases that are somewhat higher or lower than the system

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 average. As a result of these considerations, proposed increases range from 4.08%
2 to 15.27% on total bills.

3 In conclusion, I recommend that the Commission approve SPS's calculation
4 of jurisdictional allocation factors, present revenues, proposed customer class cost
5 allocation, and proposed rate design.

6 **Q. Were Attachments RML-1 through RML-9 and the RFP schedules you**
7 **sponsor or co-sponsor prepared by you or under your direct supervision and**
8 **control?**

9 A. Yes.

10 **Q. Do you incorporate the RFP schedules shown to be sponsored or co-sponsored**
11 **by you into your testimony?**

12 A. Yes.

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 **III. JURISDICTIONAL ALLOCATION FACTORS**

2 **Q. Please describe SPS’s need for jurisdictional allocation factors.**

3 A. SPS maintains retail operations in New Mexico and Texas, and it has wholesale
4 operations regulated by the Federal Energy Regulation Commission (“FERC”).
5 Because a multi-jurisdictional utility such as SPS incurs joint and common costs to
6 provide electric service to its customers across jurisdictions, it is necessary to
7 allocate such costs among those jurisdictions to develop consistent, just, and
8 reasonable rates. In determining the utility’s revenue requirement associated with
9 a jurisdiction, the jurisdictional allocation factors are multiplied by the utility’s
10 relevant costs to calculate the portion of such costs for which the specific
11 jurisdiction is responsible.

12 **Q. Are you the only SPS witness who addresses the jurisdictional allocation of**
13 **SPS’s costs?**

14 A. No. Ms. Niemi supports the jurisdictional cost of service. I provide Ms. Niemi
15 with the New Mexico retail, Texas retail, and firm wholesale allocation factors for
16 production and transmission capacity-related costs. Those are based upon monthly
17 kilowatt (“kW”) demands at the SPS system peak. In addition, I provide Ms. Niemi
18 with the New Mexico retail, Texas retail, and firm wholesale shares of metered and

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 line-loss-adjusted shares of energy forecasted to be consumed during the FTY,
2 measured in kilowatt-hour (“kWh”). She uses those fundamental allocation factors,
3 as well as others she derives, to determine the New Mexico retail jurisdictional
4 revenue requirement.

5 **Q. How does SPS allocate costs among its customer jurisdictions?**

6 A. SPS develops four main allocation factors for the allocation of costs to its three
7 customer jurisdictions—New Mexico retail, Texas retail, and firm wholesale
8 requirements customers:

- 9 (1) a metered kWh energy allocation factor, which is of interest for comparison
10 to the metered kWh in Attachment RML-3, Present Revenue, and also for
11 comparison to the line-loss-adjusted kWh energy allocation factor described
12 next;
- 13 (2) a line-loss-adjusted kWh energy allocation factor for the allocation of
14 production non-fuel energy costs including rate base, operation and
15 maintenance (“O&M”), depreciation, taxes, and other costs;
- 16 (3) a line-loss-adjusted production-related 12-CP⁹ demand allocation factor (12
17 CP Production Demand Allocation) for the allocation of production rate
18 base, O&M, depreciation, taxes, and other costs; and
- 19 (4) a line-loss-adjusted transmission-related 12-CP demand allocation factor
20 (12 CP Transmission Demand Allocation) for the allocation of transmission
21 rate base, O&M, depreciation, taxes, and other costs.

⁹ CP refers to Coincident Peak. The number 12 refers to 12 monthly peaks.

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 Please refer to Attachment RML-2 for the four main jurisdictional allocation
2 factors.

3 **Q. What line-loss factors did you apply to the demand and energy data to**
4 **establish the jurisdictional allocation factors?**

5 A. I used the line-loss factors resulting from the line-loss study presented in this case
6 by SPS witness Duane J. Ripperger. Those line-loss factors are set forth in
7 Schedule P-9. The revised line-loss factors also update the line-loss factors
8 provided in Rate Sheet No. 72 for the monthly Fuel and Purchased Power
9 Adjustment Clause (“FPPCAC”) calculations.

10 **Q. Please explain the 12-CP approach that SPS uses in allocating demand, or**
11 **capacity-related, costs to New Mexico retail customers.**

12 A. Under the 12-CP approach, each jurisdiction’s demand is measured in kW,
13 coincident with the system peak for each of the 12 months of the FTY. New Mexico
14 and Texas retail jurisdictional monthly peaks are determined by totaling the forecast
15 of customer class demands coincident with the SPS system peak in each jurisdiction
16 for each month. Wholesale monthly peaks are similarly determined, by totaling the
17 forecasted monthly production and transmission demands provided to those
18 customers coincident with the SPS system peak on a firm basis. The monthly

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 system peaks for each jurisdiction are then averaged, which is referred to as 12-CP.
2 SPS determines New Mexico's retail allocation by dividing the jurisdiction's 12-CP
3 by the 12-CP of the SPS system.

4 **Q. How are the costs associated with the Sagamore and Hale wind projects**
5 **allocated?**

6 A. The Sagamore and Hale costs are allocated among the jurisdictions according to
7 line-loss-adjusted energy, which is discussed later in my testimony. Energy
8 production at Sagamore and Hale is subject to the varying forces of wind at any
9 given time, and as such, Sagamore and Hale are primarily considered energy
10 resources rather than capacity resources. In Case No. 17-00044-UT, authorizing
11 the construction of Sagamore and Hale, the Commission approved the parties'
12 agreement that, in the first base rate filing in which those resources are included in
13 rate base, the costs would be allocated among the jurisdictions according to
14 energy.¹⁰

¹⁰ *Southwestern Public Service Company's Application Requesting: (1) Issuance of a Certificate of Public Convenience and Necessity Authorizing Construction and Operation of Wind Generation and Associated Facilities, and Related Ratemaking Principles Including an Allowance for Funds Used During Construction for the Wind Generation and Associated Facilities; and (2) Approval of a Purchased Power Agreement to Obtain Wind-Generated Energy, Case No. 17-00044-UT, Certification of Stipulation at p. 65 & 87, Recommended Order ¶ L, as approved by the Commission's Order Adopting Certification of Stipulation with Modification (Mar. 21, 2018).*

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 **Q. How are the jurisdictional monthly peaks determined?**

2 A. SPS forecasts the monthly wholesale and retail peaks coincident with the SPS
3 system peak. Since SPS provides retail and wholesale service in both New Mexico
4 and Texas through a shared production and transmission system, the overall
5 forecasted production and transmission costs are allocated across the retail
6 jurisdictions in both states and are combined with the wholesale forecast to
7 determine the respective jurisdictional percentages of production capacity,
8 transmission capacity, and non-fuel energy production costs. For retail customers,
9 the allocation is determined by a combination of: (1) load factors¹¹ from July 1,
10 2021 through June 30, 2022 the (“Base Period”) determined from interval demand
11 recording (“IDR”) meter readings at peak for retail transmission-voltage customers
12 applied to forecasted retail transmission kWh, and (2) load-research-based monthly
13 retail customer class load factors applied to forecasted monthly kWh for each
14 customer class. SPS witness John M. Goodenough discusses load research and the
15 SPS forecast in more detail in his testimony.

¹¹ A load factor is the ratio of the average load in kW supplied during a designated period divided by the peak or maximum load in kW occurring in that period.

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 **Q. Why does SPS allocate demand costs using a 12-CP approach?**

2 A. SPS uses demand allocation factors for costs that are a function of a utility requiring
3 the capacity to be ready and available at all times to provide service for the
4 generation and transmission of electricity among its customer jurisdictions. The
5 use of the 12-CP methodology ensures that generating and transmission capacity
6 investment and O&M expense are allocated among jurisdictions by the capacity
7 required to provide those services to each jurisdiction—i.e., based on that
8 jurisdiction’s proportional use of capacity at the time of peak system demands
9 throughout the year. In addition, because SPS is a multi-jurisdictional utility, the
10 method of determining cost responsibility across those jurisdictions must be
11 consistent so that the combination of costs applicable to each jurisdiction is not
12 under- or overstated. This is accomplished by employing the 12-CP methodology.

13 **Q. Has SPS previously utilized the 12-CP demand allocation method in each of**
14 **its retail jurisdictions?**

15 A. Yes. The 12-CP demand allocation factor was used as the basis for determining
16 jurisdictional production capacity and transmission capacity costs in Case No.
17 20-00238-UT, which was the most recently completed SPS New Mexico base rate
18 case. SPS also utilized a 12-CP demand allocation factor in each of its completed

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 previous base rate cases since 2007, Case Nos. 19-00170-UT, 17-00255-UT,
2 15-00296-UT, 12-00350-UT, 10-00395-UT, 08-00354-UT, and 07-00319-UT.
3 SPS has also used a 12-CP demand allocation factor in its recent Texas base rate
4 cases, including Docket Nos. 51802, 49831, and 47527.

5 **Q. How are demand or capacity-related costs allocated at FERC for SPS's**
6 **wholesale jurisdiction?**

7 A. Demand or capacity-related costs are also allocated using a 12-CP demand
8 allocation factor at FERC for SPS's wholesale jurisdiction.

9 **Q. How are production energy costs allocated among SPS's jurisdictions?**

10 A. SPS allocates production energy costs among SPS's jurisdictions based upon the
11 ratio of kWh consumption during the Future Test Year in each jurisdiction, adjusted
12 for line losses, to the total SPS system kWh forecast for the 12 months ending June
13 30, 2024. It is appropriate to allocate variable energy costs on that basis because
14 kWh is a measure of energy, with metered kWh converted to the equivalent kWh
15 generated at the sources for that energy by the application of line-loss factors to
16 metered kWh at the various service voltages.

17 **Q. Did SPS use the same approach in its previous base rate cases?**

18 A. Yes. SPS's method for allocating production non-fuel energy costs was applied in
19 SPS base rate filings in Case Nos. 20-00238-UT, 19-00170-UT, 17-00255-UT, and

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 12-00350-UT. In addition, SPS applied the same method in Case Nos.
2 15-00296-UT, 10-00395-UT, 08-00354-UT, and 07-00319-UT.

3 **Q. Are there any notable differences between the jurisdictional allocations from**
4 **the Base Period to the FTY?**

5 A. Yes. Other than the difference that the Base Period jurisdictional allocations are
6 determined from historical data and the FTY jurisdictional allocations are
7 determined from the SPS forecast, there were some other differences of note.

8 (1) SPS wholesale customer Lubbock Power & Light is expected to no longer
9 take production or transmission service from SPS as of June 2023. As a
10 result, 12-CP production and transmission capacity applicable to wholesale
11 customers during the Base Period is lower in the FTY, with the retail shares
12 correspondingly higher.

13 (2) The wholesale share of 12-CP production is further diminished with the
14 change in the character of production capacity provided to New Mexico
15 Cooperatives from a load-following service to a partial requirements
16 service.¹²

¹² See *In the Matter of the Petition by the Staff of the New Mexico Public Regulation Commission for a Review of the Operations of Southwestern Public Service Company's Fuel and Purchased Power Cost Adjustment Clause*, Case No. 04-00426-UT, and *In the Matter of Southwestern Public Service Company's Application for Approval of (1) Continued Use of Its Fuel and Purchased Power Cost Adjustment Clause ("FPPCAC") Using a Monthly Adjustment Factor Pursuant to NMPRC Rule 550, (2) The Existing Variance From Rule 550.14(A), and (3) The Report Regarding Collections Under the Previous Annual FPPCAC Adjustment Clause in Effect During the Period October 2001 Through January 2002, and Collections Under the Existing Monthly FPPCAC for the Period February 2002 Through May 2005*, Case No. 05-00341-UT, Final Order Approving Stipulation at 5 (Aug. 26, 2008); *Application of Southwestern Public Service Company for Findings that Replacement Power Sales Agreements are: Reasonable and Prudent, Consistent with the Docket No. 32766 Stipulation, and Eligible for Assignment of System Average Costs*, Docket No. 38197, Order at 4-5 (Sept. 15, 2010).

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

- 1 (3) In total, the FTY wholesale line-loss-adjusted kWh energy is approximately
2 43% lower than in the Base Period, 12-CP production is approximately two-
3 thirds lower, and 12-CP transmission is a little more than 12% lower than
4 in the Base Period.
- 5 (4) Compared to the Base Period, New Mexico retail kWh grew approximately
6 17%, 12-CP production grew nearly 11%, and 12-CP transmission grew
7 approximately 10.6%, which is considerably more than Texas growth of
8 approximately 7%, 1%, and 1% respectively.
- 9 (5) The changes in jurisdictional shares from wholesale reductions and
10 increased New Mexico retail growth compared to Texas retail growth
11 results in a 3.46% increase in the New Mexico retail share of retail kWh
12 energy-related inter-jurisdictional costs, a 4.74% increase in the share of
13 inter-jurisdictional production capacity, and a 2.86% increase in the share
14 of inter-jurisdictional transmission capacity.
- 15 **Q. Do the proposed jurisdictional demand and energy allocations result in a fair**
16 **separation of costs among SPS's three regulatory jurisdictions?**
- 17 A. Yes. The proposed allocation factors reasonably and consistently allocate costs
18 among SPS's three jurisdictions based upon year-round operations.

1 **IV. DEVELOPMENT OF FUTURE TEST YEAR**
2 **REVENUE AT PRESENT RATES**

3 **Q. What topic do you discuss in this section of your testimony?**

4 A. I explain the calculation of FTY revenue at present rates.

5 **Q. Why is it necessary to calculate FTY revenue at present rates?**

6 A. It is necessary to calculate FTY revenues at present rates to determine whether SPS
7 would recover its cost of service in the FTY period under current rates. If present
8 revenues are lower than the utility's FTY cost of service, rates should be adjusted
9 to ensure that rates are just and reasonable and allow the utility to recover its costs
10 of providing service as well as an opportunity to earn a reasonable rate of return on
11 its investment on a timely basis.

12 **Q. Is revenue at present base rates developed by customer class?**

13 A. Yes. As reflected in Attachment RML-3, Present Revenue, the present revenues
14 are calculated by customer class, and then aggregated to arrive at the New Mexico
15 retail total at present rates.

16 **Q. What information is required for SPS to calculate present revenue?**

17 A. Billing determinants must be summarized for each class. Billing determinants are
18 metered kW for demand charges, metered reactive kV-ampere ("kVar") for large
19 demand-billed customers, metered kWh for energy charges, and the number of bills

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 in each class for the service availability charge. The billing determinants are then
2 multiplied by the present rates set forth in SPS's approved tariffs.

3 **Q. How does SPS obtain the information about billing determinants?**

4 A. Future Test Year metered kWh billing determinants are provided through the SPS
5 forecast presented and explained in the direct testimony of Mr. Goodenough.
6 Billing demand relationships to kWh during the Base Period are applied to the
7 forecast kWh to determine kW billing demand and kVar data for demand-metered
8 customer classes.

9 **Q. Please explain how FTY present revenues are calculated.**

10 A. The applicable charge is applied to the FTY quantity of adjusted customer bills,
11 billing demands, and energy totals for each customer class to determine annual
12 revenues. Revenues by customer class are then summed to determine New Mexico
13 retail revenues at present rates. The resulting FTY base rate revenues by customer
14 class at present rates total \$472,636,279, as shown on Attachment RML-3, line
15 no. 216.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18

V. CLASS COST OF SERVICE STUDY

- Q. What do you address in this section of your testimony?**
- A. I discuss the CCOSS, which accomplishes the following: (1) allocates the total New Mexico retail revenue requirement among the New Mexico retail customer classes based upon how each class causes those costs to be incurred; (2) functionalizes New Mexico retail costs to the electric utility functions necessary for SPS to provide service; and (3) classifies those costs according to the component of electric service that applies to each function.
- Q. Please summarize what the CCOSS presents.**
- A. In addition to the allocation, functionalization, and classification of the proposed New Mexico retail revenue requirement, the CCOSS compares the recovery of costs under present rates from each customer class to the cost to provide service to each customer class, and provides cost-based pricing information per unit (\$/kWh, \$/customer, etc.) that can be used in developing proposed rates.
- Attachment RML-4 is the FTY CCOSS for New Mexico retail customers. The proposed revenue requirement at class cost of service is presented in Attachment RML-4, pages 3 and 4, line no. 76. Revenue at proposed rates is shown on pages 5 and 6 of Attachment RML-4, line no. 106. The function and

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 classification totals are included in the “Functions” worksheet tab of Attachment
2 RML-4.¹³

3 **Q. Is the CCOSS presented by SPS consistent with previous CCOSSs presented**
4 **to and approved by the Commission?**

5 A. Yes.

6 **Q. What are the primary factors that can drive differences in the results of a**
7 **CCOSS between rate proceedings?**

8 A. Changes in how customer classes use the utility’s system throughout the year,
9 changes in the relationship of how each customer class uses the utility’s system
10 compared to other customer classes, and changes in the relationship of FTY costs
11 among the utility’s functions in providing service can all affect the results of a
12 CCOSS between rate proceedings.

13 **A. Functionalization**

14 **Q. Please explain the functionalization results in the CCOSS.**

15 A. The CCOSS functionalizes, or categorizes, embedded costs by the primary
16 operating function that causes the costs. Major operating functions can be broadly
17 summarized as production, transmission, distribution, and customer service.

¹³ Attachment RML-9 (USB).xlsx, Class Cost of Service Study.xlsm, “Functions” worksheet tab.

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 **Q. How many functions did SPS use for the functionalization analysis?**

2 A. New Mexico retail costs are categorized into seventeen functions, as shown in the
3 Functions worksheet tab of the CCOSS file included in Attachment RML-9 and
4 presented below in Section V. B., Classification.

5 **B. Classification**

6 **Q. Please explain how costs are classified in the CCOSS.**

7 A. After costs are functionalized, the costs are then classified into three categories that
8 reflect the cost drivers:

9 (1) customer costs – costs related to establishing and managing service to
10 customers;

11 (2) demand costs – costs that result from the kW demand imposed by
12 customers; and

13 (3) energy costs – costs associated with the energy or kWh consumed by
14 customers over the course of the Test Year.

15 These three cost classifications correspond to the primary types of charges used to
16 recover costs from customers:

17 • service availability charges (sometimes described as customer charges),
18 which are typically fixed monthly amounts;

19 • demand charges (sometimes described as capacity charges), which are
20 based on kW; and

21 • energy charges, which are based on kWh.

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 Table RML-1 maps each of the seventeen functions to the type of charge used to
2 recover the costs associated with that function:

Table RML-1

Function	Cost Classification		
	Customer	Demand	Energy
Production Demand (“DPROD”)		X	
Purchased Capacity (“PURCHCAP”)		X	
Production Energy (“PRODENE”)			X
Transmission Interconnect (“TRANINTER”)		X	
Transmission System (“TRANSYS”)		X	
Distribution Substations (“DISTSUB”)		X	
Distribution Primary Lines (“DISTPRI”)		X	
Distribution Secondary Lines (“DISTSEC”)		X	
Distribution Line Transformers (“DISTLT”)		X	
Distribution Service Laterals (“DISTSERV”)	X		
Metering (“METERING”)	X		
AMI Metering (“METERINGAMI”)	X		
Lighting (“LIGHTING”)	X		
Meter Reading (“METREAD”)	X		
Customer Accounting, Sales & Service (“CUSTACCTSS”)	X		
Customer Other (“CUSTOTH”)	X		

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 **Q. Is the AMI Metering function new with this filing?**

2 A. Yes. SPS currently has a Grid Modernization Plan pending with the Commission
3 in Case No. 22-00178-UT. AMI costs are a part of that filing. The AMI costs have
4 been included in the cost of service in this proceeding, given the pendency of Case
5 No. 22-00178-UT. If recovery of costs presented in SPS's grid modernization
6 application are authorized through the Grid Modernization Rider in Case No.
7 22-00178-UT, SPS will adjust cost of service in this filing accordingly.

8 **Q. Have the overall composition of costs applicable to New Mexico customers**
9 **changed since the test year reviewed in the previous SPS base rate filing, Case**
10 **No. 20-00238-UT?**

11 A. Yes. Attachment RML-5 shows how the composition of costs have changed among
12 demand-related costs, energy-related costs, and customer-related cost. Attachment
13 RML-5 shows the overall New Mexico retail differences, and for each New Mexico
14 retail customer class.

15 **C. Allocation**

16 **Q. Please explain the allocation step of the CCOSS.**

17 A. The primary purpose for the development of the CCOSS is to allocate the proposed
18 revenue requirement according to each FERC Account to the customer classes
19 based upon how each class causes those costs to be incurred.

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 **Q. What are the customer classes in the CCOSS?**

2 A. SPS allocates costs among the following customer classes:

- 3 (1) Residential Service;
4 (2) Residential Heating Service;
5 (3) Small General Service;
6 (4) Secondary General Service;
7 (5) Irrigation Power Service;
8 (6) Primary General Service;
9 (7) Large General Service – Transmission (“LGS-T”);
10 (8) Small Municipal and School Service;
11 (9) Large Municipal and School Service;
12 (10) Municipal Street Lighting Service; and
13 (11) Area Lighting Service.

14 **Q. How did you develop the allocation factors for the classes?**

15 A. The allocation factors for the demand and energy functions are based upon
16 customer class kW and kWh information from the FTY forecast, adjusted for line
17 losses. Allocation factors for customer-related functions are based upon customer
18 class counts, weighted as applicable by replacement costs of meters and service
19 lines, and resources necessary to complete billing of each customer class.

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 **Q. How is demand coincident with the time of the monthly system peak**
2 **calculated?**

3 A. For those customer classes that do not have an IDR meter installed at each service
4 location, the class's demands at the times of the monthly system peaks, which is
5 also referred to as coincident peaks, are calculated by applying the monthly
6 customer class load factors at the monthly Base Period peaks to the monthly FTY
7 forecast kWh for that class. The customer class load factors at system peak are
8 determined through the use of load research obtained from IDR meters from a
9 representative sample of customers in those customer classes. For those customer
10 classes in which all customers have IDR meters, such as LGS-T, the demand during
11 the Base Period months is converted to FTY data by taking the same demand at the
12 time of the monthly system peaks compared to Base Period kWh and applying that
13 load factor to FTY kWh forecast. The difference for LGS-T compared to other
14 customer classes is that the load factors are determined from IDR at all customer
15 locations rather than a representative sample. Mr. Goodenough discusses load
16 research in more detail in his direct testimony.

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 **Q. Please turn now to the monthly class peak. How did you calculate the demand**
2 **at the monthly class peak?**

3 A. I calculated each class's peak demand by multiplying the monthly class peak load
4 factors derived from load research by the forecasted monthly energy sales by
5 customer class. The Non-Coincident Peak ("NCP") represents the highest level of
6 demand from each customer class during the year, independent of system peak
7 demand, and is used to allocate distribution voltage-level costs, including
8 substations, primary voltage facilities, and secondary voltage facilities. The NCP
9 is not determined for LGS-T because transmission voltage customers do not take
10 service from distribution voltage facilities.

11 **Q. Did you make any adjustments to the class demands at the time of the monthly**
12 **peaks?**

13 A. Yes. Because the calculated peak hour loads are estimates, the sum of those
14 demands, adjusted for line losses from the meter back to generation level, will
15 almost never equal SPS's total system load. To account for this difference, the
16 calculated peaks are adjusted on a percentage basis so that the sum of all customer
17 class demands at peak equals the forecasted system load at the hour of SPS's
18 monthly system peak demand. Each class's demand contribution relative to the

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 sum of customer class demands as calculated through load research factors is
2 applied to the total difference between the calculated peaks and the SPS system
3 peaks. Both the monthly system peak demand by class and monthly class NCP
4 demands are adjusted through this proportional allocation process.

5 *1. Allocation of Production and Transmission Investment*

6 **Q. How are production investment costs allocated among the customer classes?**

7 A. Steam and Other Production capacity investment is allocated among customer
8 classes using the DPROD allocation factor, which is developed using the
9 line-loss-adjusted Average and Excess 4-Coincident Peak Demand (“AED 4-CP”)
10 at the monthly production peak for the four peak months of June through
11 September. This is consistent with the cost allocation method approved in Case
12 Nos. 12-00350-UT and 17-00255-UT, and is consistent with SPS’s base rate filings
13 in Case Nos. 15-00296-UT, 19-00170-UT, and 20-00238-UT.

14 **Q. Why are the Sagamore and Hale wind project costs allocated according to**
15 **kWh instead of AED-4CP?**

16 A. As discussed by SPS witness Ben R. Elsey, Sagamore and Hale provide limited
17 capacity accreditation to SPS’s system. Sagamore and Hale costs are therefore
18 allocated according to kWh, the same as in the Case No. 20-00238-UT filing, which

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 was resolved in a settlement approved by the Commission. Additionally, the
2 Commission approved the parties' agreement in Case No. 17-00044-UT that
3 Sagamore and Hale should be allocated among the jurisdictions according to energy
4 in the first base rate filing in which those resources are included in rate base.
5 Accordingly, Sagamore and Hale costs are allocated according to line-loss-adjusted
6 kWh, which is generally used for the allocation of energy-related costs.

7 The reasonableness of an energy allocation of wind resources built for the
8 most part to reduce fuel costs, is further indicated by the fact that, with the
9 installation of the Sagamore and Hale wind projects, monthly fuel and purchased
10 power energy costs recovered through the FPPCAC are reduced by intermittent, no
11 fuel-cost Sagamore and Hale production. FPPCAC charges are further reduced
12 through production tax credits resulting from Sagamore and Hale production. Since
13 the costs recoverable under the FPPCAC are allocated by energy, customer classes
14 with higher levels of energy usage benefit to a larger extent from lower FPPCAC
15 costs with the operation of Sagamore and Hale than customer classes with lower
16 levels of energy usage. An energy allocation of Sagamore and Hale costs included
17 in base rates therefore is consistent with a principal reason the wind projects were
18 built.

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 **Q. Why do you refer to Sagamore and Hale production as intermittent?**

2 A. Wind production is not available on demand as is production from other sources of
3 generation provided by SPS. While wind is certainly a recognizable resource in
4 eastern New Mexico and west Texas, the wind cannot be dispatched. Since wind
5 is not always an available resource, referring to generation from the Sagamore and
6 Hale wind projects as intermittent is appropriate. The intermittent nature of wind
7 generation technologies are reflected in the Southwest Power Pool's capacity
8 accreditation calculations, which are based on an effective load carrying capability
9 methodology.

10 **Q. How are transmission investment costs allocated to the customer classes?**

11 A. The majority of transmission investment is allocated to customer classes using the
12 Transmission Demand ("DTRAN") allocator, which is developed using the
13 line-loss-adjusted AED 4-CP demands at the monthly transmission peak for the
14 four peak months of June through September. This is consistent with the cost
15 allocation method approved in Case Nos. 12-00350-UT and 17-00255-UT, and is
16 consistent with SPS's base rate filings in Case Nos. 15-00296-UT, 19-00170-UT,
17 and 20-00238-UT.

18 Finally, the costs of generation interconnection facilities in FERC Account
19 No. 353 Station Equipment are allocated using the Transmission Interconnect

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 (“DPRODTI”) allocator, which applies to transmission facilities that interconnect
2 generation plant. The DPRODTI costs are allocated on an AED 4-CP basis at the
3 production system peak.

4 **Q. Did SPS complete a customer class-level transmission radial line study for this**
5 **filing?**

6 A. No. Transmission radial lines located in New Mexico are part of the SPS
7 transmission system that is used to provide retail service in New Mexico. FERC
8 requires SPS to complete a jurisdictional radial line study to identify the wholesale
9 customer or jurisdiction that has use of a radial transmission line, but the FERC
10 requirement does not include an identification of specific end-use wholesale or
11 retail customers located on each radial line. As such, transmission radial lines
12 serving the New Mexico retail jurisdiction are not split from non-radial
13 transmission lines and are allocated to the retail customer classes according to the
14 DTRAN allocation factor as part of overall New Mexico retail transmission costs.

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 **Q. Please explain how the AED 4-CP allocation factors for production and**
2 **transmission investment are calculated.**

3 A. There are two separate AED 4-CP calculations—one that applies to production
4 investment costs (DPROD), and another that applies to transmission investment
5 costs (DTRAN), both of which are included in my workpapers provided as
6 Attachment RML-9. There are separate AED 4-CP allocations for production and
7 transmission system costs because the transmission system peak is significantly
8 larger than the production system peak as a result of higher levels of wholesale load
9 applying to the use of the SPS transmission system compared to the use of the SPS
10 production system. SPS wholesale customers take transmission service from SPS,
11 but provide a significant percentage or all of their production requirements from
12 their own facilities, purchased power arrangements, or at incremental cost instead
13 of system cost from SPS.

14 **Q. What method did you use to calculate SPS's system load factors for the**
15 **weighting of 4-CP excess demand compared to average demand?**

16 A. SPS's system load factor is based upon the percentage of the average annual load
17 compared to the average of the system peak demands during the four peak months
18 of June through September, or 4-CP. There are two separate system load factors
19 that are inputs to the allocation of capacity-related costs: a production system load

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 factor for production capacity-related costs, and a transmission system load factor
2 for transmission capacity-related costs. The main difference between the
3 production and transmission system load factors is that the transmission factor
4 recognizes the larger SPS transmission system loads compared to SPS production
5 system loads, and is lower.

6 **Q. Do the class allocation methodologies for production and transmission**
7 **investment costs proposed by SPS result in a fair and reasonable allocation of**
8 **costs?**

9 A. Yes. The various approaches to the allocation of production and transmission
10 recommended by SPS take into consideration the differences in the consistency of
11 demand and use among the customer classes, with added weight on the peak months
12 of the Future Test Year for capacity, demand-related investments.

13 *2. Allocation of Distribution Investment*

14 **Q. How are distribution investment costs allocated to the classes?**

15 A. Most distribution investment is allocated based on an NCP basis. It is appropriate
16 to allocate distribution-related costs based upon NCP because distribution systems
17 are sized to meet localized demand to provide service to customer classes that are
18 similar in size and demands, for example, a residential subdivision, rather than
19 system-based demands applicable to production and transmission-related costs.

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 **Q. What does an NCP allocation factor measure?**

2 A. The customer class NCP represents the highest level of demand placed on the SPS
3 system at any time in any month by that class, regardless of whether the maximum
4 occurs at the time of the system peak or not. The NCP allocation percentage for a
5 particular class is based upon the NCP for each customer class divided by the sum
6 of all customer class NCPs.

7 **Q. Are all customer classes included in the NCP allocation of distribution costs?**

8 A. No. Customers served at transmission voltage are not included in the allocation of
9 primary and secondary distribution system costs because those customers do not
10 use the primary and secondary distribution system. Similarly, customers served at
11 primary voltage are not included in the allocation of secondary distribution system
12 costs because those customers do not use the secondary distribution system.

13 **Q. Are any of the costs in distribution-related FERC accounts allocated on a basis
14 other than NCP?**

15 A. Yes. Costs in FERC Account Nos. 369, 370, 371, and 373 are allocated using
16 customer-related information. However, costs in those distribution-related
17 accounts apply to customer or lighting-related functions rather than distribution
18 functions and are primarily recovered through the service availability charges,
19 rather than through kWh energy-based or kW demand-based charges.

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 3. Allocation of General Plant and Intangible Plant Investment

2 **Q. How are the costs for General Plant and Intangible Plant investment allocated**
3 **to the classes?**

4 A. General Plant and Intangible Plant costs do not readily fall into a demand, energy,
5 or customer classification because those costs reflect indirect common costs
6 necessary to operate a utility system and to bill for the service. General Plant and
7 Intangible Plant generally supports the day-to-day functions of employees, and are
8 therefore mostly allocated by the relative weighting of wages and salaries by O&M
9 expense accounts, excluding Administrative and General (“A&G”) accounts using
10 the salaries and wages excluding A&G (“SALWAGXAG”) allocation factor.

11 **Q. What does the “Other” suffix indicate in the General Plant and Intangible**
12 **Plant accounts?**

13 A. “Other” indicates costs in those accounts not associated with the Customer
14 Resource System (“CRS”) or the Xcel Energy Customer Call Center. Costs in those
15 accounts associated with CRS or the Call Center have a “CRS” or “Call Center”
16 suffix.

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 **Q. Is any General Plant and Intangible Plant investment allocated on a basis**
2 **other than SALWAGXAG?**

3 A. Yes. Portions of investment in the following accounts are based on the number of
4 customers in each class, which is reflected in the CUST allocation factor:

- 5 • FERC Account No. 303 Intangible CRS Computer Software (the Xcel
6 Energy billing system); and
- 7 • FERC Account No. 390 Structures & Improvements – Call Center.

8 *4. Allocation of Other Rate Base Investment*

9 **Q. How are depreciation reserves allocated to customer classes?**

10 A. Depreciation reserves by FERC account are allocated to customer classes based
11 upon the allocation of related plant-in-service investment.

12 **Q. How are fuel inventories allocated to customer classes?**

13 A. SPS allocates fuel inventory using the Energy – Fuel (“ENERGY1”) allocator,
14 which is based on kWh at the source.

15 **Q. How has SPS allocated materials and supplies included in rate base?**

16 A. SPS allocated materials and supplies based on the allocation of related plant
17 accounts. Thus, materials and supplies used for production plant are allocated using
18 the Production Plant (“PRODPLT”) allocator; those used for transmission plant are

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 allocated using the Transmission Plant (“TRANPLT”) allocator; and those used for
2 distribution plant are allocated using the Distribution Plant (“DISTPLT”) allocator.

3 **Q. How is cash working capital allocated?**

4 A. Cash working capital (“CWC”) is an element of rate base resulting from the level
5 of SPS advanced funding of O&M expenses and investment costs prior to recovery
6 from customers through base rates. CWC is allocated to classes based upon the
7 functional composition of O&M or investment costs. For example, cash working
8 capital corresponding to production-related O&M is allocated to customer classes
9 based upon AED-4CP Production, referenced as DPROD in the CCOSS;
10 transmission-related O&M cash working capital is allocated based upon AED-4CP
11 Transmission, referenced as DTRAN in the CCOSS; and energy-related O&M
12 CWC is allocated based upon a line-loss-adjusted kWh, referenced as ENERGY1
13 in the CCOSS. These examples do not encompass all CWC requirements, however,
14 the examples illustrate the concepts employed to allocate a cross-section of the
15 various functional CWC requirements.

16 **Q. How are prepayments allocated?**

17 A. Prepayments are also an element of rate base allocated to classes on the basis of
18 associated O&M expenses. For example, pre-paid insurance is allocated according
19 to total plant in service allocated to each customer class.

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 **Q. Please describe the allocation of accumulated deferred income taxes (“ADIT”).**

2 A. ADIT amounts are allocated on the basis of the investments or costs that give rise
3 to tax deferrals resulting from differences in book and tax accounting. Overall,
4 most ADIT items represent differences in book and tax depreciation on plant-in-
5 service, and are therefore allocated on the same basis as the underlying plant-in-
6 service. Other notable ADIT occur as a result of differences in accounting for
7 payroll and payroll-related costs, and as a result, are allocated according to the level
8 of salaries and wages attributable to each customer class.

9 **Q. How are the remaining elements of rate base allocated?**

10 A. Customer deposits are allocated based on the number of customers in customer
11 classes from which deposits are required (“CUSTDEP”); and Statement of
12 Financial Standard 106 and 112 liabilities are allocated based on salaries and wages
13 (“SALWAGES”). Each of these allocations is based upon the costs underlying the
14 rate base item.

15 *5. Allocation of Revenue Credits*

16 **Q. How are revenue credits allocated to the customer classes?**

17 A. Most, but not all, of the revenue credits use internally-derived allocation factors.
18 Table RML-2 sets forth the revenue credits by FERC account and allocation factor:

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1

Table RML-2

FERC Account No.	Description	Allocation Basis
450	Late Payment Revenue – New Mexico	OX_904 (account write-offs)
451.03	Misc. Service Revenue – Customer Connection – New Mexico	CUST (customer class counts)
451.04	Misc. Service Revenue – Returned Check Fee Revenue	DISTPLT
451.06	Misc. Service Revenue – Service Revenues	DISTPLT
454	Rent from Electric Property – New Mexico	DISTPLT
456.1Z2PROD	Funded Upgrades Credit Distribution	DPROD
456.1Z2PTP	Z2 PTP Revenues	DTRAN
456.05	RTO PTP Firm Revenues	DTRAN
456.06	Tariff Base Non-Firm PTP	DTRAN
456.12	Sch 1 Scheduling, System Control, and Dispatch Revenue	DTRAN
456.14	Sch 2 Reactive Supply and Voltage Control Revenue	DPROD
456.42	Other Miscellaneous Revenue	DTRAN
456.42OT	Other Misc Revenue	DTRAN
456.73	Schedule 11 Network Base Plan Revenues	DTRAN

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 6. Allocation of Purchased Power Costs

2 **Q. How has SPS allocated non-fuel purchased power costs included in base rates?**

3 A. SPS allocated FERC Account No. 555 Purchased Power – Energy using an energy
4 allocation factor (ENERGY1), which is based upon kWh energy line-loss-adjusted
5 to the source, also described as generation level. SPS allocated FERC Account No.
6 555 Purchased Power – Demand using a production demand allocation factor
7 (DPURCH), which is based upon AED 4-CP for production system peaks.

8 7. Allocation of O&M Expense

9 **Q. How did SPS allocate production O&M expense?**

10 A. FERC Account No. 501 – Fuel and FERC Account No. 547 – Other Power
11 Generation Fuel are energy-related expenses and are allocated on the basis of kWh
12 energy at the generation level. All other power production expenses, except
13 supervision and engineering accounts, are allocated through DPROD, which, as
14 explained above, is calculated on the basis of the AED 4-CP allocation factor.
15 Supervision and engineering accounts are allocated based upon the allocation of the
16 wages and salaries recorded in the related series of accounts.

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 **Q. Are there any differences in the allocation factor applied to production O&M**
2 **expenses compared to Case No. 20-00238-UT?**

3 A. No.

4 **Q. How did SPS allocate transmission O&M expense?**

5 A. The majority of expenses booked in most O&M expense accounts are related to the
6 allocation of the associated plant-in-service account. An energy allocation factor
7 is used for 6.77% of regional market expense charged to FERC Account No. 575
8 to mirror the day-to-day, hour-by-hour nature of regional market monitoring by
9 SPS employees. The bulk of FERC Account No. 575, or 93.23%, is allocated
10 according to DTRAN, which is an AED-4CP allocation, because those aspects of
11 the account represent charges from the Southwest Power Pool, Inc. based upon
12 transmission peaks.

13 **Q. Are there any differences in the allocation factor applied to transmission**
14 **O&M expenses compared to Case No. 20-00238-UT?**

15 A. Yes. O&M expense associated with radial transmission lines is now allocated
16 according to AED-4CP. As discussed earlier, radial transmission lines located in
17 New Mexico and serving New Mexico retail customers are part of the SPS

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 transmission system. The AED-4CP allocation is consistent with the allocation of
2 other transmission capacity-related O&M.

3 **Q. How did SPS allocate distribution O&M expense?**

4 A. Consistent with the allocation of production and transmission O&M, distribution
5 O&M expense accounts are allocated on the basis of the related plant account.

6 **Q. Are there any differences in the allocation factor applied to distribution O&M
7 expenses compared to Case No. 20-00238-UT?**

8 A. No.

9 **Q. How did you allocate customer-related costs among the classes?**

10 A. The customer-related accounts are allocated primarily on the basis of number of
11 bills or number of customers. However, FERC Account No. 904, Uncollectible
12 Accounts expense, is allocated on the basis of accounts that were written off during
13 the 12-months ended September 30, 2022 as uncollectible.

14 *8. Allocation of Administrative and General Expenses*

15 **Q. How did SPS allocate A&G expenses?**

16 A. A large portion of A&G activities support the functions and activities carried out
17 by SPS employees. Therefore, many A&G expense accounts are allocated on the

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 basis of allocated salaries and wages and salaries other than A&G. Exceptions to
2 that general conclusion are:

- 3 • FERC Account No. 924, Property Insurance, allocated on the basis of total
4 plant-in-service;
- 5 • FERC Account No. 928, Regulatory Commission Expense, allocated by
6 total cost of service;
- 7 • FERC Account No. 935, Maintenance of General Plant allocated on the
8 basis of general plant; and
- 9 • Contributions and Dues are allocated on the basis of salaries and wages.

10
11 *9. Allocation of Depreciation and Amortization Expense*

12 **Q. How did SPS allocate depreciation and amortization expense?**

13 A. Similar to depreciation reserves, depreciation expense is allocated on the basis of
14 the associated FERC plant account.

15 *10. Allocation of Tax Expense*

16 **Q. How is the income tax expense applicable to each customer class determined?**

17 A. Income taxes applicable to each customer class are determined by a calculation of
18 income taxes resulting from the return on rate base allocated to each customer class,
19 and, similar to ADIT, the sum of the allocations of deferred income tax elements
20 associated with plant-in-service or O&M based upon the functional component of

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 each deferred income tax item, and a credit for the amortization of investment tax
2 credits based upon the overall allocation of total plant-in-service.

3 **Q. How did SPS allocate the costs of taxes other than income taxes?**

4 A. Taxes other than income taxes are allocated based upon the underlying basis for the
5 tax. For example, property taxes are allocated based upon total plant-in-service
6 applicable to each customer class, and payroll taxes are allocated based upon
7 salaries and wages applicable to each customer class.

8 **D. Summary of Customer Class Allocations**

9 **Q. Have you totaled the allocation of the various functions to the rate classes?**

10 A. Yes. Please refer to the electronic version of Attachment RML-4, CCOSS,
11 “Unbundled” worksheet tab, rows 1052 through 1081, for a summary of the
12 Customer Related, Production, Transmission, Distribution, and Production Energy
13 revenue requirements for each rate class.

14 **Q. In general, why would customer class allocation factors change from one case
15 to the next?**

16 A. There are a variety of reasons customer class allocation factors can change from
17 one case to another. The overarching reason is a difference in test years.
18 Circumstances and inputs change from year to year, such as dates and times of

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 system peaks, differences or improvements in the general efficiency of customer
2 equipment, changes in business conditions, and changes in how electricity is used.
3 Revised allocation factors reflect the overall change in how the SPS electrical
4 system is expected to be used across jurisdictions and among customer classes
5 during the FTY.

6 **Q. What does the final CCOSS reflect?**

7 A. The CCOSS shows the revenue requirement recoverable from each customer class
8 at cost of service, and is the starting point and a reference for the development of
9 rates, as discussed below.

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 **VI. REVENUE INCREASE DISTRIBUTION**

2 **Q. What topic do you discuss in this section of your testimony?**

3 A. I describe SPS's proposed methodology for distributing the proposed revenue
4 increases among the customer classes.

5 **Q. What principles have you relied upon in deciding how to distribute the**
6 **proposed revenue increases among the customer classes?**

7 A. The main consideration when balancing the distribution of the base rate revenue
8 increase is the overall effect from the CCOSS-based increase in customer class
9 revenue recovered through base rates combined with other charges, including fuel
10 and purchased power costs, renewable portfolio standard costs, and energy
11 efficiency rider charges. Reaching a reasonable balance among those
12 considerations is a matter of judgment, and can involve considerable discussion
13 among customer groups with diverging interests, in reducing an increase while
14 allowing SPS the opportunity the recover the cost of providing safe and reliable
15 service during a period of transition for industry. My consideration has the
16 following results:

17 (1) the proposed rate of return ("ROR") for individual classes will generally
18 move closer to the system average ROR;

19 (2) Secondary General Service and Primary General Service customer classes
20 provide funding for the proposed gradualism adjustment to other customer

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 classes, yet their proposed increases are lower than the overall average
2 10.18% proposed New Mexico retail increase in total revenue; and

3 (3) the proposed base rate increases for customer classes will range from 50%
4 to 150% of the base rate increase on total New Mexico retail revenue
5 including fuel and purchased power charges, renewable portfolio standard
6 charges, and energy efficiency charges.

7 **Q. Please explain why SPS's proposed revenue distribution does not move each**
8 **class to the same ROR?**

9 A. The CCOSS represents the expected composition of costs, customers and their
10 associated energy usage and demands for the FTY. However, while the CCOSS
11 contains a high level of data and is the result of the analysis of that data, other
12 factors can be considered when determining what level of forecasted costs should
13 be recovered from each customer class. The embedded cost allocation study
14 provides information that should be reviewed and interpreted through the steps of
15 revenue distribution and rate design, but there is no requirement that it dictate all
16 aspects of revenue distribution and rates.

17 The proposed revenue distribution employs an approach that is often
18 referred to as gradualism. The use of a gradualism approach appropriately balances
19 increases resulting from CCOSS compared to current base rates with the goal of
20 avoiding an increase that could unduly affect the billing impact to customers. The
21 use of a gradualism approach also avoids the potential for over-correction due to

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 variations in class results between test years. In other words, the proposed approach
2 offers the Commission a moderate alternative to strictly applying the results from
3 the test-year class cost allocation study.

4 **Q. Why are there variations in increases by class among customer cases?**

5 A. The RORs produced by classes will vary to some extent between customer cases
6 due to a variety of factors. Those factors include:

- 7 • differences in the composition of costs between test years;
- 8 • variances in the hour and day of summer monthly system peaks;
- 9 • variations in the composition of customers within classes;
- 10 • economic factors;
- 11 • non-normalized weather differences;
- 12 • energy efficiency and technology advancements implemented by
13 customers;
- 14 • unusual events or circumstances that are not normalized and that affect
15 the test year;
- 16 • new investment that is intended to not only serve existing loads but also
17 to serve planned load growth; and
- 18 • revenue distribution decisions from prior rate cases.

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 **Q. Why does SPS recommend gradualism adjustments to the CCOSS results for**
2 **the FTY in this filing?**

3 A. A major driver for this base rate filing is the continued reduction of firm wholesale
4 production service and, in this case, a significant reduction of firm wholesale
5 transmission service. These jurisdictional allocation changes are material drivers of
6 SPS's New Mexico retail FTY revenue requirement. As SPS's New Mexico retail
7 base rate revenue requirement, or retail cost responsibility, shifts materially with
8 these allocation changes, it is reasonable to apply a gradualism adjustment to
9 incorporate these larger changes in SPS's cost profile.

10 It is a common approach in rate cases to establish minimum and maximum
11 levels of base rate revenue increases that will be applied to customer classes. This
12 approach is intended to ensure that all classes bear some portion of the increased
13 cost responsibility, but also limits the increases so that no customer class will
14 receive a disproportionately large increase. Gradualism adjustments have
15 frequently been applied at this Commission and at other utility regulatory
16 commissions to limit impacts to customer classes while moving those customer
17 classes closer to cost of service. A gradualism adjustment continues to be
18 reasonable in this proceeding given the material changes in jurisdictional customer
19 concentration that SPS is experiencing.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17

VIII. RATE DESIGN

A. Overview

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

A. I explain how I designed the rates for each customer class.

Q. What do you mean when you refer to “rate design”?

A. I am referring to the way in which the revenue requirement amount recoverable from a particular class is allocated among demand charges, energy charges, and service availability charges. In total, the charges should be sufficient to recover the full amount of the revenue requirement allocated to that class.

Q. Are rates designed for all customer classes in the same way?

A. No. The rate design for a particular class is partly dependent on the resources available to measure how the customer uses electricity. Residential customers, for example, do not currently have demand meters so demand charges do not apply. Instead, all residential costs are recovered through customer charges and energy charges. Another example is that it is not necessary to meter street lights, so rates for street lights are based on a per-light charge based upon the type of the light and its usage characteristics.

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 **Q. How are customer-related charges recovered?**

2 A. Customer-related costs are billed through a monthly service availability charge that
3 does not vary with monthly differences and that applies to each customer in a
4 customer class. The service availability charge generally recovers costs associated
5 with making service available to a customer, such as meters, meter reading, service
6 connections to the customer from the distribution system, and billing. The charge
7 also covers the fixed costs and O&M expenses associated with the facilities
8 installed specifically to serve an individual customer such as meters and service
9 lines.

10 **Q. How are demand-related costs recovered from customers?**

11 A. Demand-related costs are necessary so that production, transmission, and
12 distribution capacity are available to provide and deliver the maximum level of
13 power required from each customer class. Capacity facilities must be in place
14 before a customer requires an expected higher level of service, and as a result
15 cannot be considered variable costs. Production, transmission, and distribution
16 demand-related costs are recovered from customer classes through a kW demand
17 charge, if applicable, or through a kWh charge for customer classes that do not have
18 demand metering and kW demand charges. Billing for demand-related costs varies

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 among customers with differences in monthly kW demand, or differences in
2 monthly kWh if a kW demand charge is not billed to a customer class.

3 **Q. How are energy-related costs billed?**

4 A. Energy-related costs are billed through a kWh charge.

5 **Q. Are the kW or the kWh rates seasonally differentiated?**

6 A. Yes. A seasonal differential is applied to kW demand charges during the peak
7 summer months of June through September for those customer classes with meters
8 that measure each customer's demand. If the rate does not have a kW demand
9 charge, the kWh rate is seasonally differentiated for the capacity cost share of the
10 rate. Absent a kW demand charge, kWh rates also have a non-fuel energy cost
11 component that does not vary by season.

12 **Q. Why are capacity costs recovered through the kW demand charge or kWh
13 energy charge seasonally differentiated?**

14 A. A seasonal differential signals that it is more costly to provide the facilities
15 necessary for service during peak summer months. A higher level of production,
16 transmission, and distribution capacity is necessary to provide service at higher
17 summer levels, resulting in higher costs than circumstances in which loads on the
18 system were level in all months. The average of the four summer monthly peaks
19 are forecasted to be approximately 15% higher than the average of the eight

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 non-summer months and is the basis for the factor applied to winter capacity cost
2 charges.

3 **Q. Have you prepared a comparison of current base rates for each customer class**
4 **to proposed base rates?**

5 A. Yes. Please refer to Attachment RML-7. In this attachment, the current base rate
6 applicable to every customer class is compared to the corresponding proposed rate.
7 RFP Schedule O-3 provides similar information.

8 **B. Proposed Changes to Rates**

9 *1. Residential Service and Residential Heating Service*

10 **Q. Please explain the proposed changes in Residential rates.**

11 A. Under SPS's proposed rates, the bill for an average Residential Service customer
12 using 900 kWh per month will increase \$13.77 per month, or 11.3% of their total
13 bill. The bill for an average Residential Heating Service customer using 1,300 kWh
14 per month will increase \$29.88 per month, or 14.02% of their total bill. The
15 distinction between the Residential Service and Residential Heating Service rates
16 is that Residential Heating Service customers have space heating predominantly
17 provided from electric equipment that is in regular use.

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 The overall load factor of space heating customers is higher than the load
2 factor of non-space heating customers because space heating customers use
3 electricity as the primary source for heating their homes during the off-peak winter
4 months, whereas Residential Service customers do not. A higher load factor means
5 that Residential Heating Service customers regularly use a higher level of electricity
6 relative to their maximum or peak level of demand over the course of the year.

7 Accordingly, the per-kWh energy charges for Residential Heating Service
8 customers are lower than the per-kWh charge for Residential Service during
9 non-summer months to recognize that costs are spread over a greater number of
10 kWh energy billing units. The residential summer per-kWh energy rate is the same
11 for both Residential Service customers and Residential Heating Service customers
12 because electric heating does not affect the summer peak.

13 **Q. Are Residential rates designed to recover the full amount of residential**
14 **non-fuel cost of service?**

15 A. The proposed 13.93% Residential Service base rate increase is at cost of service;
16 however, the proposed 21.13% Residential Heating Service increase is more than
17 three-quarters of the 26.65% base rate increase indicated by the allocated cost of
18 service.

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 **Q. Is SPS proposing a change in the service availability charge for Residential**
2 **Service and Residential Heating Service?**

3 A. Yes. SPS is proposing to increase the service availability charge for these rates by
4 24.49%, or \$2.40 per month.

5 **Q. Will the proposed \$2.40 per month increase for both Residential Service and**
6 **Residential Heating Service recover the full customer component cost of**
7 **service?**

8 A. No. In previous SPS base rate filings, other parties have indicated a concern for
9 the effect of an increase in the service availability charge on low volume customers.
10 To address that concern, SPS proposes a less than cost of service-based increase.
11 That level of increase will cause approximately \$8.7 million of the recovery of
12 customer-related costs to move to energy charges, which is more than 39% of total
13 customer-related costs. At cost of service, the service availability charge would be
14 \$20.02 per month, which would more than double the present charge of \$9.80 per
15 month.

16 **Q. Does cost of service for both Residential and Residential Heating Service**
17 **include the cost of advanced metering?**

18 A. Yes. SPS currently has a Grid Modernization Plan pending with the Commission
19 in Case No. 22-00178-UT. Advance metering costs applicable to Residential and

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 Residential Heating Service customers represent \$1.59 million out of total New
2 Mexico advanced metering costs of \$2.14 million. If recovery of advanced
3 metering costs through the Grid Modernization Rider is authorized in Case No.
4 22-00178-UT, SPS will adjust the respective Residential and Residential Heating
5 Service class cost of service accordingly.

6 *2. Small General Service*

7 **Q. Please describe the Small General Service rate.**

8 A. The Small General Service rate is a rate for small commercial or other
9 non-residential customers for electric service supplied at a secondary voltage, at
10 one Point of Delivery and measured through one meter. The load for customers
11 served under this rate cannot exceed 25 kW of demand in any month. Examples of
12 customers served under this rate include small loads such as small offices, small
13 businesses, shops, barns and water wells. The structure of this rate is similar to the
14 Residential Service rate and only includes a service availability charge and a
15 seasonal energy charge.

16 **Q. Please explain the proposed changes to the Small General Service rate.**

17 A. The base rate structure of Small General Service will not change, in that applicable
18 charges include a service availability charge and an energy charge that increases

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 during the months of June through September compared to other months. Overall,
2 base rate revenue from Small General Service will increase a cost of service-based
3 \$1.65 million, or 11.01% on current base rates and 7.95% on total revenue.

4 3. Secondary General Service

5 **Q. Please explain the proposed changes to the Secondary General Service rates.**

6 A. The base rate structure of Secondary General Service will not change, in that
7 applicable charges include a service availability charge, a year-round energy
8 charge, and a demand charge that increases during the months of June through
9 September compared to other months.

10 Under the proposed rates, Secondary General Service class provides a
11 higher ROR than the proposed system average. The proposed ROR for the class is
12 10.66%, which is 36% higher than the 7.85% proposed ROR for New Mexico retail
13 customers. As discussed previously, SPS proposes that Secondary General Service
14 provide support for the gradualism adjustment applicable to other customers, which
15 results in a higher ROR than the system average. Even with support provided for
16 the gradualism adjustment, Secondary General Service will have a 4.08% increase
17 in an average bill, considerably less than the overall New Mexico retail average of
18 10.18%.

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 4. Primary General Service

2 **Q. Please explain the proposed changes to Primary General Service rates.**

3 A. The base rate structure of Primary General Service will not change, in that
4 applicable charges include a service availability charge, a year-round energy
5 charge, and a demand charge that increases during the months of June through
6 September compared to other months.

7 Under the proposed rates, Primary General Service class provides a higher
8 ROR than the proposed system average. The proposed ROR for the class is 8.33%,
9 which is 6% higher than the proposed ROR for New Mexico retail customers of
10 7.85%. As discussed previously, SPS proposes that Primary General Service
11 provide support for the gradualism adjustment applicable to other customers, which
12 results in a higher ROR than the system average. Even with support provided for
13 the gradualism adjustment, Primary General Service will have a 4.96% increase in
14 an average bill, somewhat less than half of the overall 10.18% New Mexico retail
15 average.

16 5. Irrigation Power Service

17 **Q. Please explain the proposed changes to Irrigation rates.**

18 A. The base rate structure of Irrigation will not change, in that applicable charges
19 include a service availability charge, a year-round energy charge, and a demand

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 charge that increases during the months of June through September compared to
2 other months. Overall, the proposed Irrigation base rate increase is a 15.27%
3 increase on total revenue, which is 1.5 times the overall New Mexico retail average
4 of 10.18%.

5 Unlike demand-metered customer classes, however, a large percentage of
6 capacity-related costs are recovered through the energy charge. SPS proposes to
7 recover more of the capacity costs for Irrigation through the demand charge as
8 compared with current rates. Although the proposed energy charge for Irrigation
9 will continue to recover the majority of capacity costs, the proposed rate design will
10 reduce the overall percentage included in the energy charge from the current level.
11 Energy charge recovery of demand-related costs from Irrigation customers is a
12 continuation of base rate relationships from previous base rate filings.

13 **Q. Why is SPS proposing a larger increase in the Irrigation demand charge in**
14 **comparison with current rates?**

15 A. Recovering more of the overall increase for the class through demand charges,
16 particularly during the peak summer months, will more accurately reflect costs and
17 reduce intra-class subsidies. In addition, recovery of a higher level of capacity costs
18 through demand charges will reduce the impacts on Irrigation customers during

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 seasons in which greater irrigation is necessary. During higher irrigation periods,
2 it will typically be necessary for Irrigation customers to pump more often. More
3 frequent and lengthier periods of irrigation during the growing season results in a
4 significantly higher level of energy consumption, as measured by kWh, but their
5 kW demands should remain relatively constant because the capacity to power the
6 equipment is the same.

7 Furthermore, even with the proposed increase in demand charges, the
8 proposed demand charges are only 13% of the year-round average of \$28.02¹⁴ per
9 kW demand charges that would result if the charge recovered the full amount of
10 Irrigation demand costs, and rates were established at fully allocated cost of service.

11 *6. Large General Service - Transmission*

12 **Q. Please explain the proposed changes to LGS-T rates.**

13 A. The base rate structure of LGS-T will not change, in that applicable charges include
14 a service availability charge, a year-round energy charge, and a demand charge that
15 increases during the months of June through September compared to other months.
16 In addition, a different energy charge and demand charge will apply depending

¹⁴ 13% = \$1,413,925 recovered through proposed kW demand charges ÷ \$10,932,581 CCOSS capacity cost.

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 upon whether the LGS-T customer takes service at 69 kilovolt (“kV”) or 115 kV
2 and above. The proposed LGS-T rate is designed as a single rate with the demand
3 and energy charges for service 69 kV and 115 kV and above differentiated by the
4 applicable demand and energy loss factors.

5 Overall, base rate revenue from LGS-T customers will increase \$40.1
6 million, or 35.03% on current base rate revenue and 17.73% on total revenue. The
7 proposed increase is reduced \$6.5 million as a result of above cost of service
8 increases from other customer classes. As a result, the 7.20% ROR on SPS
9 investment to provide service to LGS-T will be 8% lower than the overall New
10 Mexico retail average.

11 **Q. Why is the LGS-T increase considerably higher than the overall New Mexico**
12 **retail increase?**

13 A. At current rates, the combined ROR on SPS investment to provide service to 69 kV
14 and 115 kV and higher LGS-T customers is only 3.16% compared to the 5.38%
15 overall ROR at current rates. A lower ROR can be expected when considering that
16 LGS-T accounts for 70% of the forecasted 2,625 New Mexico GWh load growth
17 since the test year ended June 30th, 2020 in Case No. 20-00238-UT, which was
18 SPS’s most recent base rate filing. In addition, while LGS-T accounts for 46.58%

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 of New Mexico retail kWh load with adjustment for line losses, current demand
2 and energy charges from LGS-T recover only 31.30% of New Mexico retail
3 production capacity, transmission capacity, and energy-related costs compared to
4 the 42.39% of those costs that would be charged to LGS-T at cost of service.¹⁵

5 *7. Schools and Municipals*

6 **Q. Please explain the changes to Small Municipal and School Service (“SMS”)**
7 **rates.**

8 A. The base rate structure of SMS will not change, in that applicable charges include
9 a service availability charge and an energy charge that increases during the months
10 of June through September compared to other months. Overall, base rate revenue
11 from SMS will increase a cost of service-based \$170,520, or 18.85% on current
12 base rates and 13.46% on total revenue.

13 **Q. Please explain the changes to Large Municipal and School Service (“LMS”)**
14 **rates.**

15 A. The base rate structure of LMS will not change, in that applicable charges include
16 a service availability charge, a year-round energy charge, and a demand charge that
17 increases during the months of June through September compared to other months.

¹⁵ The LGS-T share of production capacity, transmission capacity, and energy-related costs is lower than its share of New Mexico retail kWh as result of a higher load factor than other customer classes.

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 Overall, base rate revenue from LMS will increase by a cost of service-based \$1.1
2 million, or 14.0% on current base rates and 9.5% on total revenue.

3 *8. Area Lighting and Municipal Street Lighting*

4 **Q. Please explain the proposed changes to Area Lighting rates.**

5 A. The base rate structure of Area Lighting will not change, in that the applicable
6 charge is a set monthly charge that varies according to light type and installation.
7 Overall, base rate revenue from Area Lighting will increase a class cost of
8 service-based of approximately \$316,901, or 12.01% on total revenue, which is
9 approximately the 1.83% more than the overall proposed average New Mexico
10 retail overall increase. The proposed ROR is 7.86%, which is approximately the
11 same as the overall proposed 7.85% New Mexico retail ROR.

12 **Q. Please explain the proposed changes to Municipal Street Lighting (“SL”)
13 rates.**

14 A. The base rate structure of SL will not change, in that applicable charges include a
15 set monthly charge that varies according to light type and installation. Overall, base
16 rate revenue from SL will increase by approximately \$382,697, or 15.27% on total
17 revenue, which as a result of rate support provided by other rate classes, is
18 approximately \$1 million less than the cost of service resulting from the CCOSS.
19 Approximately \$1 million of the class cost of service increase is a result of

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 increased plant in service resulting from LED replacements of mercury vapor
2 installations. Current monthly SL rates for LEDs are increased by approximately
3 17.81% and non-LED lights are increased approximately 10.0% to result in the
4 overall 15.27% overall increase on total revenue.

5 **C. Proposed Revenue Reconciliation**

6 **Q. Have you prepared a reconciliation of revenues under proposed rates with the**
7 **proposed cost of service recovered through base rates?**

8 A. Yes. Attachment RML-6, Revenue at Proposed Base Rates, is a reconciliation of
9 the FTY revenue from proposed rates with the FTY cost of service. By applying
10 the proposed base rates to the FTY billing determinants, this attachment
11 demonstrates that the proposed base rates, as designed, result in appropriate FTY
12 cost recovery. The resulting revenue is then compared to the total revenue
13 requirement for each rate class, including the proposed gradualism adjustment.
14 With only small differences due to the rounding of individual rate elements,
15 Attachment RML-6 demonstrates the accuracy of the level of the proposed base
16 rates.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18

X. TARIFF CHANGES

Q. What are rate tariffs?

A. Rate tariffs specify the terms and conditions under which SPS will provide service, including the rates at which it will provide service.

Q. Is SPS proposing any rate tariff changes other than for rates in this case?

A. Yes. In addition to the changes in the energy line-loss factors listed in Rate No. 72, Fuel and Purchased Power Adjustment Clause, referenced earlier in the discussion of RFP Schedule P-9, SPS proposes modifications to:

- Rate Nos. 1 and 39 – Residential Service and Residential Heating Service;
- Rate No. 27 – SLCA Integrated Projects Energy Rider for Cannon Air Force Base, New Mexico;
- Rate No. 28 – Area Lighting Service; and
- Rate No. 34 – Large General Service – Transmission.

SPS is also proposing Rate No. 89, Electric Affordability Program (“EAP”), a new energy assistance program that would be available to New Mexico retail residential customers who are qualified for and receive assistance from the New Mexico Low-Income Home Energy Assistance Program during the federal fiscal year. SPS witness Brooke A. Trammell describes the EAP in her testimony.

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 **Q. Please explain the modification to Rate Nos. 1 and 39, Residential Service and**
2 **Residential Heating Service.**

3 A. SPS is recommending a change in the measure for residential-related service from
4 a horsepower (“hp”) motor basis to a kW demand basis. Residential will remain
5 applicable to uses of electricity for domestic purposes, but the maximum for service
6 at a residential premise should be re-stated to 15 kW demand rather than 10 hp
7 motors. 10 hp converts to approximately 7.5 kW demand, but there are now
8 additional applications for domestic use of electricity than when the 10 hp measure
9 for residential service was first put into effect. In addition, kW is generally
10 applicable as a measure for the level of electric capacity required for electrical
11 applications. An update to 15 kW is due with the changes in applications for
12 electrical use and to make the measure consistent with how electric power is
13 metered.

14 **Q. Please explain the modification to Rate No. 27, SLCA Integrated Projects**
15 **Energy Rider for Cannon Air Force Base, New Mexico.**

16 A. SPS is proposing to update this tariff to account for the fact that Cannon Air Force
17 Base (“Cannon”) can receive a production capacity credit for power delivered to it
18 by the Western Area Power Administration (“WAPA”). Although it is my
19 understanding that Cannon is not currently able to arrange for real-time delivery of

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 power from WAPA, SPS seeks to amend the tariff in the event Cannon is able to
2 do so in the future.

3 **Q. Please explain the modification to Rate No. 28, Area Lighting Service.**

4 A. SPS is proposing to update this tariff to include an LED option for Area Lighting
5 installations with lamps in need of replacement. Mercury vapor is no longer
6 available, and high pressure sodium and metal halide have been surpassed by LED
7 as a customer preference and are lower cost.

8 **Q. Please explain the modification to Rate No. 34, Large General Service –**
9 **Transmission.**

10 A. SPS is proposing to update the basis for the net present value of the lease
11 termination charge to reflect SPS's proposed 7.85% overall cost of capital in this
12 case. The current basis for the net present value of the lease termination charge is
13 7.07%, which is based upon SPS's cost of capital in the final order in Case No.
14 20-00238-UT.

15 **Q. How are the monthly charges determined for Rate No. 89, the EAP?**

16 A. Yes. The monthly charges are shown on the last page of Attachment RML-8, which
17 is the proposed EAP tariff. Funding for the EAP will be obtained from all customer
18 classes with an addition to the monthly service availability charge and the monthly

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 charge for Area and Municipal Street Lighting Service. The charges are determined
2 by:

- 3 • the amount of the proposed \$750,000 annual total allocated to each customer
4 class based upon a 25% weighting of class cost of service and 75% weighting
5 of the customer count in each customer class, and
- 6 • dividing the allocated amount by the number of monthly FTY customer bills
7 to each customer class.

8 **Q. Why did SPS use a 25% weighting of class cost of service and 75% weighting**
9 **of customer bills?**

10 A. SPS believes that is an appropriate weighting that achieves a reasonable charge for
11 funding of the EAP that can be absorbed by each customer class without a
12 significant adverse impact to the overall bill.

13 **Q. Is funding for the EAP included in the overall base rate cost of service**
14 **discussed previously?**

15 A. No. The EAP is an additional cost that is not part of the cost to provide service. It
16 is a program that SPS will administer to assist customers who have difficulty paying
17 for electric service, and will be funded through a rider that is in addition to the cost
18 to provide electric service, with costs and revenue tracked separately to identify
19 imbalances for periodic updates.

Case No. 22-00286-UT
Direct Testimony
of
Richard M. Luth

1 **Q. What are rule tariffs?**

2 A. Rule tariffs govern and provide guidelines for SPS and customer responsibilities
3 and rights for the overall generation operation of the SPS system in New Mexico.

4 **Q. Is SPS proposing any rule tariff changes in this case?**

5 A. Yes. The current version of Rule 15 states that SPS will not install or maintain
6 equipment on the customer's side of the point of delivery other than meters and
7 meter enclosures. SPS would like to have the opportunity to provide additional
8 services, under agreements with customers and with authorization from the
9 Commission, that may require SPS to install and maintain equipment (e.g., electric-
10 vehicle supply infrastructure) on the customer's side of the point of delivery. The
11 change will allow SPS to install and maintain equipment on the customer's side of
12 the point of delivery not only for customer convenience and to provide an additional
13 level of service, but also to maintain and improve the operation of the SPS system
14 if a customer's load characteristics affect SPS's ability to provide reliable and safe
15 service to other SPS customers.

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

17 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. 312; (2) AUTHORITY TO)
ABANDON THE PLANT X UNIT 1,)
PLANT X UNIT 2, AND CUNNINGHAM)
UNIT 1 GENERATING STATIONS AND)
AMEND THE ABANDONMENT DATE)
OF THE TOLK GENERATING)
STATION; AND (3) OTHER)
ASSOCIATED RELIEF,)
)
SOUTHWESTERN PUBLIC SERVICE)
COMPANY,)
)
APPLICANT.)**

CASE NO. 22-00286-UT

VERIFICATION

On this day, November 18, I, Richard M. Luth, swear and affirm under penalty of perjury under the law of the State of New Mexico, that my testimony contained in Direct Testimony of Richard M. Luth is true and correct.

/s/ Richard M. Luth _____
RICHARD M. LUTH

Southwestern Public Service Company
- New Mexico Retail
Summary of Proposed Base Rate Increases by Customer Class
For the Future Test Year ending June 30, 2024

	Current Revenue from Base Rates	Proposed Revenue from Base Rates	Difference	
Residential Service	\$ 70,133,888	\$ 79,905,263	\$ 9,771,375	13.93%
Residential Heating Service	\$ 39,515,829	\$ 47,863,719	\$ 8,347,890	21.13%
Total Residential	<u>\$ 109,649,717</u>	<u>\$ 127,768,982</u>	<u>\$ 18,119,265</u>	<u>16.52%</u>
Small General Service	\$ 15,028,506	\$ 16,683,449	\$ 1,654,943	11.01%
Irrigation Power Service	\$ 7,422,045	\$ 9,007,493	\$ 1,585,448	21.36%
Secondary General Service	\$ 61,419,128	\$ 65,026,072	\$ 3,606,943	5.87%
Primary General Service	\$ 132,700,911	\$ 143,262,476	\$ 10,561,565	7.96%
Large General Service Transmissio	\$ 132,913,973	\$ 173,008,348	\$ 40,094,375	30.17%
Total Commercial and Industrial	<u>\$ 327,034,012</u>	<u>\$ 381,296,896</u>	<u>\$ 54,262,884</u>	<u>16.59%</u>
Small Municipal and School Servic	\$ 902,379	\$ 1,072,437	\$ 170,059	18.85%
Large Municipal and School Servic	\$ 8,177,077	\$ 9,322,515	\$ 1,145,438	14.01%
Municipal Street Lighting Service	\$ 2,253,676	\$ 2,636,180	\$ 382,504	16.97%
Area Lighting Service	\$ 2,168,867	\$ 2,485,181	\$ 316,314	14.58%
Total New Mexico Retail	<u>\$ 472,636,279</u>	<u>\$ 550,273,134</u>	<u>\$ 77,636,855</u>	<u>16.43%</u>

Southwestern Public Service Company
- New Mexico Retail
Proposed Base Rate Increases by Customer Class - Detailed
For the Future Test Year ending June 30, 2024

	Total Present Base Revenues	Fuel and Purchased Power, RPS, and Energy Efficiency Charges	Total Current Revenues	Cost of Service Increase/ (decrease)	Base Rate Increase	Increase or decrease on Total Revenue	Adjusted Increase	Base Rate Increase	Increase or decrease on Total Revenue
	(a)	(b)	(c)	(d)	(d) ÷ (a)	(d) ÷ (c)	(e)	(e) ÷ (a)	(e) ÷ (c)
Residential Service	70,133,888	22,338,718	92,472,606	9,771,375	13.93%	10.57%	9,771,375	13.93%	10.57%
Residential Heating Service	39,515,829	15,154,604	54,670,433	10,529,303	26.65%	19.26%	8,347,890	21.13%	15.27%
Total Residential	109,649,717	37,493,322	147,143,039	20,300,678	18.51%	13.80%	18,119,265	16.52%	12.31%
Small General Service	15,028,506	5,779,070	20,807,576	1,654,943	11.01%	7.95%	1,654,943	11.01%	7.95%
Irrigation Power Service	7,422,045	2,961,072	10,383,117	5,199,105	70.05%	50.07%	1,585,448	21.36%	15.27%
Secondary General Service	61,419,128	26,936,313	88,355,441	(5,653,648)	-9.21%	-6.40%	3,606,943	5.87%	4.08%
Primary General Service	132,700,911	82,283,669	214,984,579	6,600,398	4.97%	3.07%	10,561,565	7.96%	4.91%
Large General Service Transmissio	132,913,973	129,664,571	262,578,544	46,557,394	35.03%	17.73%	40,094,375	30.17%	15.27%
Total Commercial and Industrial	327,034,012	238,884,552	565,918,564	47,504,144	14.53%	8.39%	54,262,884	16.59%	9.59%
Small Municipal and School Servic	902,379	360,936	1,263,315	170,059	18.85%	13.46%	170,059	18.85%	13.46%
Large Municipal and School Servic	8,177,077	3,835,851	12,012,928	1,145,438	14.01%	9.54%	1,145,438	14.01%	9.54%
Municipal Street Lighting Service	2,253,676	251,349	2,505,025	1,346,175	59.73%	53.74%	382,504	16.97%	15.27%
Area Lighting Service	2,168,867	464,600	2,633,467	316,314	14.58%	12.01%	316,314	14.58%	12.01%
Total New Mexico Retail	472,636,279	290,030,753	762,667,032	77,636,855	16.43%	10.18%	77,636,855	16.43%	10.18%

Southwestern Public Service Company
- New Mexico Retail
Proposed Base Rate Increases by Customer Class - Adjustments
For the Future Test Year ending June 30, 2024

	Minimum Increase compared to Overall New Mexico increase on Total Revenue	Maximum Increase compared to Overall New Mexico increase on Total Revenue	Increase at 50% Minimum to 150% Maximum of Overall New Mexico Increase		Adjusted Allocation to Recovery of SPS Costs		Adjusted Increase
	50%	150%					
	(a)	(b)	(c)	(c) - (class cost of service) if greater than 0	(d)	(e) = (d) x \$2,744,157	(c) + (e)
Residential Service	4,706,695	14,120,085	\$ 9,771,375	\$ -	0.00%	\$ -	\$ 9,771,375
Residential Heating Service	2,782,630	8,347,890	\$ 8,347,890	\$ -	0.00%	\$ -	\$ 8,347,890
Total Residential	7,489,325	22,467,975	\$ 18,119,265	\$ -	0.00%	\$ -	\$ 18,119,265
Small General Service	1,059,069	3,177,208	\$ 1,654,943	\$ -	0.00%	\$ -	\$ 1,654,943
Irrigation Power Service	528,483	1,585,448	\$ 1,585,448	\$ -	0.00%	\$ -	\$ 1,585,448
Secondary General Service	4,497,139	13,491,416	\$ 4,497,139	\$ 10,150,787	70.04%	\$ (890,195)	\$ 3,606,943
Primary General Service	10,942,342	32,827,025	\$ 10,942,342	\$ 4,341,944	29.96%	\$ (380,776)	\$ 10,561,565
Large General Service Transmission	13,364,792	40,094,375	\$ 40,094,375	\$ -	0.00%	\$ -	\$ 40,094,375
Total Commercial and Industrial	28,804,272	86,412,816	\$ 55,533,856	\$ 14,492,731	100.00%	\$ (1,270,972)	\$ 54,262,884
Small Municipal and School Service	64,301	192,902	\$ 170,059	\$ -	0.00%	\$ -	\$ 170,059
Large Municipal and School Service	611,437	1,834,312	\$ 1,145,438	\$ -	0.00%	\$ -	\$ 1,145,438
Municipal Street Lighting Service	127,501	382,504	\$ 382,504	\$ -	0.00%	\$ -	\$ 382,504
Area Lighting Service	134,039	402,117	\$ 316,314	\$ -	0.00%	\$ -	\$ 316,314
Total New Mexico Retail	38,818,427	116,455,282	\$ 78,907,826	\$ 14,492,731	100.00%	\$ (1,270,972)	\$ 77,636,855

Southwestern Public Service Company
- New Mexico Retail
Functional Increases
For the Future Test Year ending June 30, 2024

	Production Capacity				Transmission Capacity		Increase/(decrease)	
	Future Test Year	20-00238-UT Rebuttal	Increase/(decrease)		Future Test Year	20-00238-UT Rebuttal		
							(4,909,325)	-26.94%
							(2,557,620)	-24.59%
Residential Service	19,720,694	18,966,524	754,170	3.98%	13,312,152	18,221,477	(7,466,945)	-26.09%
Residential Heating Service	11,349,095	10,944,379	404,717	3.70%	7,844,870	10,402,490		
Total Residential	31,069,790	29,910,903	1,158,887	3.87%	21,157,023	28,623,967	(120,581)	-4.10%
							4,127,922	240.75%
Small General Service	4,128,905	3,125,193	1,003,712	32.12%	2,821,451	2,942,032		
Irrigation Power Service	2,453,500	1,842,980	610,520	33.13%	5,842,534	1,714,612	161,094	1.39%
							8,027,250	36.55%
Secondary General Service	16,706,742	12,335,411	4,371,331	35.44%	11,717,145	11,556,051		
Primary General Service	40,650,783	23,231,849	17,418,934	74.98%	29,992,216	21,964,967	(468,487)	-22.68%
Large General Service Transmission							25,569,430	113.08%
69 kV	2,193,303	1,714,971	478,332	27.89%	1,596,976	2,065,463	25,100,943	101.72%
115 kV and >	65,113,032	25,313,837	39,799,195	157.22%	48,180,817	22,611,387	33,289,287	57.20%
LGS-T combined	67,306,335	27,028,808	40,277,527	149.02%	49,777,793	24,676,850		
Total Commercial and Industrial	124,663,860	62,596,067	62,067,792	99.16%	91,487,155	58,197,868	967	0.64%
							(191,552)	-9.26%
Small Municipal and School Service	217,034	164,337	52,697	32.07%	152,899	151,932	(20,656)	-21.79%
Large Municipal and School Service	2,747,316	2,145,692	601,623	28.04%	1,877,947	2,069,499	24,174	17.64%
Municipal Street Lighting Service	99,942	104,049	(4,107)	-3.95%	74,141	94,796	29,642,616	31.56%

Southwestern Public Service Company

- New Mexico Retail

Functional Increases

For the Future Test Year ending June 30, 2024

	Distribution Capacity				Energy (includes Hale and Sagamore)			
	Future Test Year	20-00238-UT Rebuttal	Increase/(decrease)		Future Test Year	20-00238-UT Rebuttal	Increase/(decrease)	
	21,870,760	19,184,915	2,685,845	14.00%	9,801,916	11,820,501	(2,018,586)	-17.08%
	17,042,947	13,118,741	3,924,206	29.91%	6,718,881	8,551,684	(1,832,803)	-21.43%
Residential Service	38,913,707	32,303,656	6,610,051	20.46%	16,520,796	20,372,185	(3,851,389)	-18.91%
Residential Heating Service								
Total Residential	4,036,073	2,878,695	1,157,378	40.20%	2,540,805	2,562,470	(21,664)	-0.85%
	2,636,548	2,158,451	478,097	22.15%	1,296,772	1,277,930	18,843	1.47%
Small General Service								
Irrigation Power Service	12,985,591	9,589,238	3,396,353	35.42%	11,900,913	12,228,086	(327,173)	-2.68%
	28,137,052	17,420,748	10,716,304	61.51%	37,186,417	34,021,988	3,164,429	9.30%
Secondary General Service								
Primary General Service	0	0	(0)		1,890,930	2,475,107	(584,177)	-23.60%
Large General Service Transmission	0	0	(0)		60,325,663	43,399,284	16,926,379	39.00%
69 kV	0	0	(0)	-54.72%	62,216,593	45,874,391	16,342,202	35.62%
115 kV and >	41,122,644	27,009,986	14,112,657	52.25%	111,303,923	92,124,465	19,179,458	20.82%
LGS-T combined								
Total Commercial and Industrial	234,424	170,909	63,515	37.16%	159,166	184,338	(25,172)	-13.66%
	2,623,311	1,795,862	827,449	46.08%	1,702,555	1,922,718	(220,163)	-11.45%
Small Municipal and School Service	224,600	241,111	(16,511)	-6.85%	93,631	178,388	(84,756)	-47.51%
Large Municipal and School Service	474,901	321,227	153,674	47.84%	203,552	257,833	(54,280)	-21.05%
Municipal Street Lighting Service	90,266,208	66,879,898	23,386,311	34.97%	133,821,202	118,880,326	14,940,876	12.57%

Southwestern Public Service Company
- New Mexico Retail
Summary of Proposed Base Rate Increases by Customer Class
For the Future Test Year ending June 30, 2024
Alternative Adjustments

	Increase compared to Overall New Mexico increase on Total Revenue	Maximum Increase compared to Overall New Mexico increase on Total Revenue	Increase at 50% Minimum to 150% Maximum of Overall New Mexico Increase	Allocation of Additional Amount for Recovery of SPS Costs	Adjusted Increase		
	75%	125%					
	(a)	(b)	(c)	(c) - (b) if greater than 0	(d) (e) = (d) x \$2,744,157	(c) + (e)	
Residential Service	7,060,043	11,766,738	\$ 9,771,375	\$ 1,995,363	10.60%	\$ (61,431)	\$ 9,709,944
Residential Heating Service	4,173,945	6,956,575	\$ 6,956,575	\$ -	0.00%	\$ -	\$ 6,956,575
Total Residential	11,233,988	18,723,313	\$ 16,727,950	\$ 1,995,363	10.60%	\$ (61,431)	\$ 16,666,519
Small General Service	1,588,604	2,647,674	\$ 1,654,943	\$ 992,731	5.27%	\$ (30,563)	\$ 1,624,380
Irrigation Power Service	792,724	1,321,207	\$ 1,321,207	\$ -	0.00%	\$ -	\$ 1,321,207
Secondary General Service	6,745,708	11,242,846	\$ 6,745,708	\$ 4,497,139	23.88%	\$ (138,453)	\$ 6,607,255
Primary General Service	16,413,513	27,355,854	\$ 16,413,513	\$ 10,942,342	58.11%	\$ (336,880)	\$ 16,076,632
Large General Service Transmission	20,047,188	33,411,979	\$ 33,411,979	\$ -	0.00%	\$ -	\$ 33,411,979
Total Commercial and Industrial	43,206,408	72,010,680	\$ 56,571,200	\$ 15,439,480	82.00%	\$ (475,333)	\$ 56,095,867
Small Municipal and School Service	96,451	160,751	\$ 160,751	\$ -	0.00%	\$ -	\$ 160,751
Large Municipal and School Service	917,156	1,528,593	\$ 1,145,438	\$ 383,155	2.03%	\$ (11,796)	\$ 1,133,642
Municipal Street Lighting Service	191,252	318,754	\$ 318,754	\$ -	0.00%	\$ -	\$ 318,754
Area Lighting Service	201,058	335,097	\$ 316,314	\$ 18,783	0.10%	\$ (578)	\$ 315,736
Total New Mexico Retail	58,227,641	97,046,068	\$ 78,216,556	\$ 18,829,512	100.00%	\$ (579,701)	\$ 77,636,855

**SOUTHWESTERN PUBLIC SERVICE COMPANY
JURISDICTIONAL ALLOCATION OF ENERGY AND
DEMAND
FOR THE FUTURE TEST YEAR ENDED: June 30, 2024**

ENERGY @ METER ALLOCATION

<u>Line No.</u>	<u>Jurisdiction</u>	<u>Energy (kWH)</u>	<u>Allocation</u>
1	Texas	14,246,227,820	56.5215%
2	New Mexico	9,878,752,417	39.1937%
3	Total Wholesale	<u>1,080,000,000</u>	<u>4.2849%</u>
4	System	25,204,980,237	100.0000%

ENERGY KWH @ SOURCE ALLOCATION (INPUT KWH)

<u>Jurisdiction</u>	<u>Energy (kWH)</u>	<u>Allocation</u>
5 Texas	15,285,518,049	56.7978%
6 New Mexico	10,546,636,738	39.1891%
7 Total Wholesale	<u>1,080,000,000</u>	<u>4.0131%</u>
8 System	26,912,154,788	100.0000%

12 CP PRODUCTION DEMAND @ SOURCE ALLOCATION

<u>Jurisdiction</u>	<u>Demand (kW)</u>	<u>Allocation</u>
9 Texas	2,069,276	58.0788%
10 New Mexico	1,370,687	38.4713%
11 Total Wholesale	<u>122,917</u>	<u>3.4499%</u>
12 System	3,562,880	100.0000%

12 CP TRANSMISSION DEMAND ALLOCATION

<u>Jurisdiction</u>	<u>Demand (kW)</u>	<u>Allocation</u>
13 Texas	2,069,276	44.1449%
14 New Mexico	1,370,687	29.2416%
15 Total Wholesale	<u>1,247,499</u>	<u>26.6135%</u>
16 System	4,687,462	100.0000%

**Attachment RML-3 is
provided in electronic format**

**Attachment RML-4 is provided
in electronic format**

Southwestern Public Service Company

**Comparison of Cost Classifications
For the Test Years Ended June 30th, 2024 and September 30th, 2020**

Line No.	Customer Class	Customer Cost	Demand Cost	Energy Cost	Total
Residential					
1	Case No. 22-00286-UT Proposed	\$ 15,199,740	\$ 54,903,607	\$ 9,801,916	\$ 79,905,263
2	Case No. 20-00238-ut settlement	\$ 11,265,984	\$ 47,766,641	\$ 12,056,097	\$ 71,088,723
3		\$ 3,933,756	\$ 7,136,966	\$ (2,254,182)	\$ 8,816,540
4	Difference	34.92%	14.94%	-18.70%	12.40%
Residential Heating Service					
5	Case No. 22-00286-UT Proposed	\$ 7,089,339	\$ 36,236,913	\$ 6,718,881	\$ 50,045,132
6	Case No. 20-00238-ut settlement	\$ 5,263,915	\$ 28,368,079	\$ 8,574,112	\$ 42,206,106
7		\$ 1,825,424	\$ 7,868,834	\$ (1,855,231)	\$ 7,839,026
8	Difference	34.68%	27.74%	-21.64%	18.57%
Small General Service					
9	Case No. 22-00286-UT Proposed	\$ 3,156,214	\$ 10,986,429	\$ 2,540,805	\$ 16,683,449
10	Case No. 20-00238-ut settlement	\$ 2,382,658	\$ 8,165,310	\$ 2,534,601	\$ 13,082,570
11		\$ 773,556	\$ 2,821,119	\$ 6,204	\$ 3,600,879
12	Difference	32.47%	34.55%	0.24%	27.52%
Secondary General Service					
13	Case No. 22-00286-UT Proposed	\$ 2,455,088	\$ 41,409,479	\$ 11,900,913	\$ 55,765,480
14	Case No. 20-00238-ut settlement	\$ 1,779,312	\$ 38,422,337	\$ 12,554,451	\$ 52,756,101
15		\$ 675,776	\$ 2,987,141	\$ (653,538)	\$ 3,009,379
16	Difference	37.98%	7.77%	-5.21%	5.70%
Irrigation Service					
17	Case No. 22-00286-UT Proposed	\$ 391,796	\$ 10,932,581	\$ 1,296,772	\$ 12,621,150
18	Case No. 20-00238-ut settlement	\$ 304,580	\$ 4,493,541	\$ 1,292,407	\$ 6,090,527
19		\$ 87,217	\$ 6,439,041	\$ 4,366	\$ 6,530,623
20	Difference	28.64%	143.30%	0.34%	107.23%
Primary General Service					
21	Case No. 22-00286-UT Proposed	\$ 3,334,839	\$ 98,780,052	\$ 37,186,417	\$ 139,301,309
22	Case No. 20-00238-ut settlement	\$ 2,223,158	\$ 70,723,637	\$ 31,640,915	\$ 104,587,710
23		\$ 1,111,681	\$ 28,056,415	\$ 5,545,502	\$ 34,713,599
24	Difference	50.00%	39.67%	17.53%	33.19%
LGS-T - 69kV					
25	Case No. 22-00286-UT Proposed	\$ 27,610	\$ 3,790,279	\$ 1,890,930	\$ 5,708,819
26	Case No. 20-00238-ut settlement	\$ 20,529	\$ 3,214,830	\$ 2,060,083	\$ 5,295,442
27		\$ 7,081	\$ 575,448	\$ (169,154)	\$ 413,376
28	Difference	34.49%	17.90%	-8.21%	7.81%
LGS-T - 115 kV					
29	Case No. 22-00286-UT Proposed	\$ 143,036	\$ 113,293,849	\$ 60,325,663	\$ 173,762,548
30	Case No. 20-00238-ut settlement	\$ 126,595	\$ 40,916,414	\$ 36,122,134	\$ 77,165,144
31		\$ 16,441	\$ 72,377,436	\$ 24,203,528	\$ 96,597,405
32	Difference	12.99%	176.89%	67.00%	125.18%

Southwestern Public Service Company

**Comparison of Cost Classifications
For the Test Years Ended June 30th, 2024 and September 30th, 2020**

Line No.	Customer Class	Customer Cost	Demand Cost	Energy Cost	Total
Small Municipal & School Service					
33	Case No. 22-00286-UT Proposed	\$ 308,915	\$ 604,357	\$ 159,166	\$ 1,072,437
34	Case No. 20-00238-ut settlement	\$ 228,905	\$ 472,128	\$ 179,640	\$ 880,673
35	Difference	\$ 80,011	\$ 132,229	\$ (20,475)	\$ 191,764
36		34.95%	28.01%	-11.40%	21.77%
Large Municipal & School Service					
37	Case No. 22-00286-UT Proposed	\$ 371,387	\$ 7,248,573	\$ 1,702,555	\$ 9,322,515
38	Case No. 20-00238-ut settlement	\$ 280,602	\$ 5,398,623	\$ 1,832,601	\$ 7,511,826
39	Difference	\$ 90,784	\$ 1,849,950	\$ (130,046)	\$ 1,810,689
40		32.35%	34.27%	-7.10%	24.10%
Street Lighting Service					
41	Case No. 22-00286-UT Proposed	\$ 3,107,537	\$ 398,683	\$ 93,631	\$ 3,599,851
42	Case No. 20-00238-ut settlement	\$ 2,097,985	\$ 327,843	\$ 132,929	\$ 2,558,757
43	Difference	\$ 1,009,552	\$ 70,840	\$ (39,298)	\$ 1,041,094
44		48.12%	21.61%	-29.56%	40.69%
Area Lighting Service					
45	Case No. 22-00286-UT Proposed	\$ 1,428,276	\$ 853,353	\$ 203,552	\$ 2,485,181
46	Case No. 20-00238-ut settlement	\$ 1,079,241	\$ 911,359	\$ 251,580	\$ 2,242,180
47	Difference	\$ 349,035	\$ (58,006)	\$ (48,028)	\$ 243,002
48		32.34%	-6.36%	-19.09%	10.84%
Total New Mexico Retail					
49	Case No. 22-00286-UT Proposed	\$ 37,013,778	\$ 379,438,154	\$ 133,821,202	\$ 550,273,134
50	Case No. 20-00238-ut settlement	\$ 27,053,464	\$ 249,180,742	\$ 109,231,552	\$ 385,465,759
51	Difference	\$ 9,960,314	\$ 130,257,412	\$ 24,589,649	\$ 164,807,375
52		36.82%	52.27%	22.51%	42.76%

Southwestern Public Service Company
- New Mexico Retail
Calculation of Revenue from Proposed Rates
For the Future Test Year Ending June 30, 2024

Line No.	Customer Class	Billing Units	Rate	Revenue - \$
<u>Residential Service</u>				
Residential				
1	Service Availability Charge	756,087 Bills	\$ 12.20 / Month	\$ 9,224,261
2	Energy Charge - Summer	263,379,999 kWh	\$ 0.112899 / kWh	\$ 29,735,339
3	Energy Charge - Winter	416,862,322 kWh	\$ 0.098174 / kWh	\$ 40,925,042
4	Total	680,242,321 kWh		\$ 79,884,642
Residential Heating				
8	Service Availability Charge	356,935 Bills	\$ 12.20 / Month	\$ 4,354,607
9	Energy Charge - Summer	152,812,098 kWh	\$ 0.112899 / kWh	\$ 17,252,333
10	Energy Charge - Winter	314,295,902 kWh	\$ 0.083345 / kWh	\$ 26,194,992
11	Total	467,108,000 kWh		\$ 47,801,932
Residential TOU				
8	Service Availability Charge	133 Bills	\$ 12.20 / Month	\$ 1,623
9	Energy Charge - Off-Peak	196,152 kWh	\$ 0.081684 / kWh	\$ 16,022
10	Energy Charge - On-Peak	11,463 kWh	\$ 0.295963 / kWh	\$ 3,393
11	Total	207,615 kWh		\$ 21,038
<u>Total Residential Service</u>				
12	Base Rate Revenue	1,147,557,936 kWh		\$ 127,707,612
<u>Small Commercial Service</u>				
SGS - Small General Service				
13	Service Availability Charge	143,639 Bills	\$ 22.00 / Month	\$ 3,160,058
14	Energy Charge - Summer	64,831,518 kWh	\$ 0.082409 / kWh	\$ 5,342,701
15	Energy Charge - Winter	114,159,022 kWh	\$ 0.071660 / kWh	\$ 8,180,636
16	Total	178,990,540 kWh		\$ 16,683,394
17	SGS - Unmetered	- Bills	\$ 9.40 / Month	\$ -
SGS - Small General Service TOU				
18	Service Availability Charge	- Bills	\$ 22.00 / Month	\$ -
19	Energy Charge - Off-Peak	- kWh	\$ 0.057118 / kWh	\$ -
20	Energy Charge - On-Peak	- kWh	\$ 0.272793 / kWh	\$ -
21	Total	- kWh		\$ -

Southwestern Public Service Company
- New Mexico Retail
Calculation of Revenue from Proposed Rates
For the Future Test Year Ending June 30, 2024

Line No.	Customer Class	Billing Units	Rate	Revenue - \$
<u>Total Small Commercial Service</u>				
22	Base Rate Revenue	178,990,540 kWh		\$ 16,683,394
 <u>Commercial & Industrial Service</u>				
SG - Secondary General Service				
23	Service Availability Charge	52,674 Bills	\$ 46.60 / Month	\$ 2,454,608
24	Demand Charge - Summer	796,900 kW-Mo	\$ 22.83 / kW-Mo	\$ 18,193,227
25	Demand Charge - Winter	1,624,723 kW-Mo	\$ 19.60 / kW-Mo	\$ 31,844,571
26	Energy Charge	821,454,825 kWh	\$ 0.014145 / kWh	\$ 11,619,479
27	Power Factor Charge	124,229 kVar	\$ 0.83 / kVar	\$ 103,110
37	Power Factor Credit	19,615 kVar	\$ (0.83) / kVar	\$ (16,280)
38	Total	<u>821,454,825 kWh</u>		<u>\$ 64,198,714</u>
 SG - Secondary General Service TOU				
39	Service Availability Charge	48 Bills	\$ 46.60 / Month	\$ 2,237
40	Energy Charge - Off-Peak	17,275,376 kWh	\$ 0.014145 / kWh	\$ 244,360
41	Energy Charge - On-Peak	2,164,536 kWh	\$ 0.202445 / kWh	\$ 438,199
42	Demand Charge	1,602 kW-Mo	\$ 15.11 / kW-Mo	\$ 24,206
43	Power Factor Charge	- kVar	\$ 0.83 / kVar	\$ -
44	Power Factor Credit	- kVar	\$ (0.83) / kVar	\$ -
45	Total	<u>19,439,912 kWh</u>		<u>\$ 709,003</u>
 IR - Irrigation Service				
46	Service Availability Charge	12,051 Bills	\$ 30.00 / Month	\$ 361,530
47	Demand Charge - Summer	177,115 kW-Mo	\$ 3.97 / kW-Mo	\$ 703,147
48	Demand Charge - Winter	213,075 kW-Mo	\$ 3.31 / kW-Mo	\$ 705,278
49	Energy Charge	91,536,071 kWh	\$ 0.078594 / kWh	\$ 7,194,186
50	Total	<u>91,536,071 kWh</u>		<u>\$ 8,964,141</u>
 IR - Irrigation Service TOU				
51	Service Availability Charge	36 Bills	\$ 30.00 / Month	\$ 1,080
52	Energy Charge - Off-Peak	46,058 kWh	\$ 0.066805 / kWh	\$ 3,077
53	Energy Charge - On-Peak	92,325 kWh	\$ 0.283871 / kWh	\$ 26,208
54	Demand Charge - summer	141 kW-Mo	\$ 3.14 / kW-Mo	\$ 443
55	Demand Charge - winter	367 kW-Mo	\$ 3.14 / kW-Mo	\$ 1,152
55	Total	<u>138,383 kWh</u>		<u>\$ 31,960</u>

Southwestern Public Service Company
- New Mexico Retail
Calculation of Revenue from Proposed Rates
For the Future Test Year Ending June 30, 2024

Line No.	Customer Class	Billing Units	Rate	Revenue - \$
PG - Primary General Service				
56	Service Availability Charge	60,394 Bills	\$ 55.20 / Month	\$ 3,333,749
57	Demand Charge - Summer	1,938,711 kW-Mo	\$ 22.48 / kW-Mo	\$ 43,582,223
58	Demand Charge - Winter	3,904,387 kW-Mo	\$ 19.55 / kW-Mo	\$ 76,330,766
59	Energy Charge	2,678,562,350 kWh	\$ 0.007258 / kWh	\$ 19,441,006
60	Power Factor Charge	828,551 kVar	\$ 0.80 / kVar	\$ 662,841
61	Power Factor Credit	250,085 kVar	\$ (0.80) / kVar	\$ (200,068)
62	Total	2,678,562,350 kWh		\$ 143,150,516
PG - Primary General Service TOU				
63	Service Availability Charge	- Bills	\$ 55.20 Bills	\$ -
64	Energy Charge - Off-Peak	- kWh	\$ 0.007258 / kWh	\$ -
65	Energy Charge - On-Peak	- kWh	\$ 0.192127 / kWh	\$ -
66	Demand Charge	- kW-Mo	\$ 15.63 / kW-Mo	\$ -
67	Power Factor Charge	- kVar	\$ 0.80 / kVar	\$ -
68	Power Factor Credit	- kVar	\$ (0.80) / kVar	\$ -
69	Total	- kWh		\$ -
LGS-T - Large General Service - Transmission, 69 kV				
70	Service Availability Billing Charge	72 Bills	\$ 1,102.80 / Month	\$ 79,402
71	Demand Charge - Summer	94,985 kW-Mo	\$ 19.39 / kW-Mo	\$ 1,841,759
72	Demand Charge - Winter	186,035 kW-Mo	\$ 16.16 / kW-Mo	\$ 3,006,326
73	Energy Charge	144,711,273 kWh	\$ 0.008329 / kWh	\$ 1,205,300
74	Power Factor Charge	144,753 kVar	\$ 0.71 / kVar	\$ 102,775
75	Power Factor Credit	84 kVar	\$ (0.71) / kVar	\$ (60)
76	Total	144,711,273 kWh		\$ 6,235,502
LGS-T, 115 kV and >				
77	Service Availability Billing Charge	373 Bills	\$ 1,102.80 / Month	\$ 411,344
78	Demand Charge - Summer	2,410,162 kW-Mo	\$ 19.29 / kW-Mo	\$ 46,492,025
79	Demand Charge - Winter	5,028,904 kW-Mo	\$ 16.08 / kW-Mo	\$ 80,864,776
80	Energy Charge	4,643,799,519 kWh	\$ 0.008286 / kWh	\$ 38,478,523
81	Power Factor Charge	865,907 kVar	\$ 0.71 / kVar	\$ 614,794
82	Power Factor Credit	543,796 kVar	\$ (0.71) / kVar	\$ (386,095)
83	Total	4,643,799,519 kWh		\$ 166,475,367
		12,449,865 85.51%		
		19,944		
Commercial & Industrial - General Service				
84	Total at Current Rates	8,399,642,333 kWh		\$ 389,765,203

Public Authority Service

Large Municipal and School Service

85	Service Availability Charge	6,913 Bills	\$ 53.70 / Month	\$ 371,228
86	Demand Charge - Summer	167,897 kW-Mo	\$ 18.29 / kW-Mo	\$ 3,070,836
87	Demand Charge - Winter	262,237 kW-Mo	\$ 15.90 / kW-Mo	\$ 4,169,568
88	Energy Charge	120,390,944 kWh	\$ 0.014140 / kWh	\$ 1,702,328

Southwestern Public Service Company
- New Mexico Retail
Calculation of Revenue from Proposed Rates
For the Future Test Year Ending June 30, 2024

Line No.	Customer Class	Billing Units	Rate	Revenue - \$
89	Power Factor Charge	12,259 kVar	\$ 0.83 /kVar	\$ 10,175
90	Power Factor Credit	1,936 kVar	\$ (0.83) /kVar	\$ (1,607)
91	Total	120,390,944 kWh		\$ 9,322,529
<u>Large Municipal and School Service TOU</u>				
92	Service Availability Charge	- Bills	\$ 53.70 / Month	\$ -
93	Energy Charge - Off-Peak	- kWh	\$ 0.014140 / kWh	\$ -
94	Energy Charge - On-Peak	- kWh	\$ 0.169829 / kWh	\$ -
95	Demand Charge	- kW-Mo	\$ 11.92 / kW-Mo	\$ -
96	Power Factor Charge	- kVar	\$ 0.83 /kVar	\$ -
97	Power Factor Credit	- kVar	\$ 0.83 /kVar	\$ -
98	Total	- kWh		\$ -
<u>Small Municipal and School Service</u>				
99	Service Availability Charge	14,145 Bills	\$ 21.80 / Month	\$ 308,361
100	Energy Charge - Summer	4,059,464 kWh	\$ 0.074285 / kWh	\$ 301,557
101	Energy Charge - Winter	7,160,086 kWh	\$ 0.064596 / kWh	\$ 462,513
102	Total	11,219,550 kWh		\$ 1,072,431
<u>Small Municipal and School Service TOU</u>				
103	Service Availability Charge	- Bills	\$ 21.80 / Month	\$ -
104	Energy Charge - Off-Peak	- kWh	\$ 0.052182 / kWh	\$ -
105	Energy Charge - On-Peak	- kWh	\$ 0.224063 / kWh	\$ -
106	Total	- kWh		\$ -
107	<u>SMS - Unmetered</u>	- Bills	\$ 9.60 / Month	\$ -
<u>Total Public Authority Service</u>				
108	Base Rate Revenue	131,610,494 kWh		\$ 10,394,960

Southwestern Public Service Company
- New Mexico Retail
Calculation of Revenue from Proposed Rates
For the Future Test Year Ending June 30, 2024

Line No.	Customer Class			Billing Units		Rate		Revenue - \$
<u>Street and Area Lighting Service</u>								
<u>Area Lights</u>								
109		7,000	MV	175	27,886	\$	14.19	\$ 395,702
110		15,000	HPS	150	105,565	\$	13.58	\$ 1,433,573
111		27,500	HPS	250	632	\$	15.68	\$ 9,910
112		50,000	HPS	400	8,277	\$	18.79	\$ 155,525
113		140,000	HPS	####	8,930	\$	29.79	\$ 266,025
114		14,000	MTHL	175	97	\$	15.08	\$ 1,463
115		20,500	MTHL	250	171	\$	16.87	\$ 2,885
116		36,000	MTHL	400	2,860	\$	18.83	\$ 53,854
117		110,000	MTHL	####	5,251	\$	31.72	\$ 166,562
118		6,000	LED		-	\$	16.08	\$ -
119		14,000	LED		-	\$	21.10	\$ -
120		25,000	LED		-	\$	30.63	\$ -
121		Subtotal			159,669 lights 14,466,964 kWh			\$ 2,485,497
<u>Street Lights</u>								
122		7,000	MV	175	3,462	\$	16.78	\$ 58,092
123		20,000	MV	400	2,986	\$	21.90	\$ 65,393
124		35,000	MV	700	24	\$	30.32	\$ 728
125		50,000	MV	####	72	\$	35.02	\$ 2,521
126		15,000	HPS	150	5,407	\$	16.09	\$ 86,999
127		27,500	HPS	250	4,129	\$	18.59	\$ 76,758
128		50,000	HPS	400	1,531	\$	22.24	\$ 34,049
129		6,000	LED		91,202	\$	16.08	\$ 1,466,528
130		14,000	LED		24,954	\$	21.10	\$ 526,529
131		25,000	LED		29,999	\$	30.63	\$ 918,869
132		Subtotal			163,766 lights 6,484,150 kWh			\$ 3,236,468
133	Customer Owned Street Lights				- kWh	\$	0.075926	\$ -

Southwestern Public Service Company
- New Mexico Retail
Calculation of Revenue from Proposed Rates
For the Future Test Year Ending June 30, 2024

Line No.	Customer Class	Billing Units	Rate	Revenue - \$
134	Total Lighting Service	323,435 Lights		
	Base Rate Revenue	20,951,114 kWh		\$ 5,721,965
135	Total Company			
	Total NM Retail Revenue Requirement	9,878,752,417 kWh		\$ 550,273,134

Southwestern Public Service Company
- New Mexico Retail
Comparison of Current and Proposed Base Rate Charges

Line No.	Customer Class Charges	Current Rate	Proposed Rate	Change in Rate	
Residential					
1	Service Availability Charge	\$ 9.80	\$ 12.20 / Month	\$ 2.40	24.49%
2	Energy Charge - Summer	\$ 0.101549	\$ 0.112899 / kWh	\$ 0.011350	11.18%
3	Energy Charge - Winter	\$ 0.086263	\$ 0.098174 / kWh	\$ 0.011911	13.81%
Residential Heating					
4	Service Availability Charge	\$ 9.80	\$ 12.20 / Month	\$ 2.40	24.49%
5	Energy Charge - Summer	\$ 0.101549	\$ 0.112899 / kWh	\$ 0.011350	11.18%
6	Energy Charge - Winter	\$ 0.065225	\$ 0.083345 / kWh	\$ 0.018120	27.78%
Residential TOU					
7	Service Availability Charge	\$ 10.80	\$ 12.20 / Month	\$ 1.40	12.96%
8	Energy Charge - Off-Peak	\$ 0.071857	\$ 0.081684 / kWh	\$ 0.009827	13.68%
9	Energy Charge - On-Peak	\$ 0.255968	\$ 0.295963 / kWh	\$ 0.039995	15.63%
SGS - Small General Service					
10	Service Availability Charge	\$ 16.90	\$ 22.00 / Month	\$ 5.10	30.18%
11	Energy Charge - Summer	\$ 0.078774	\$ 0.082409 / kWh	\$ 0.003635	4.61%
12	Energy Charge - Winter	\$ 0.065645	\$ 0.071660 / kWh	\$ 0.006015	9.16%
13	SGS - Unmetered	\$ 8.50	\$ 9.40 / Month	\$ 0.90	10.59%
SGS - Small General Service TOU					
14	Service Availability Charge	\$ 17.90	\$ 22.00 / Month	\$ 4.10	22.91%
15	Energy Charge - Off-Peak	\$ 0.052324	\$ 0.057118 / kWh	\$ 0.004794	9.16%
16	Energy Charge - On-Peak	\$ 0.260760	\$ 0.272793 / kWh	\$ 0.012033	4.61%
SG - Secondary General Service					
17	Service Availability Charge	\$ 35.90	\$ 46.60 / Month	\$ 10.70	29.81%
18	Demand Charge - Summer	\$ 21.56	\$ 22.83 / kW-Mo	\$ 1.27	5.89%
19	Demand Charge - Winter	\$ 18.50	\$ 19.60 / kW-Mo	\$ 1.10	5.95%
20	Energy Charge	\$ 0.014046	\$ 0.014145 / kWh	\$ 0.000099	0.70%
21	Power Factor Charge	\$ 0.77	\$ 0.83 / kVar	\$ 0.06	7.79%
37	Power Factor Credit	\$ (0.77)	\$ (0.83) / kVar	\$ (0.06)	7.79%
SG - Secondary General Service TOU					
38	Service Availability Charge	\$ 37.90	\$ 46.60 / Month	\$ 8.70	22.96%
39	Energy Charge - Off-Peak	\$ 0.014046	\$ 0.014145 / kWh	\$ 0.000099	0.70%
40	Energy Charge - On-Peak	\$ 0.186996	\$ 0.202445 / kWh	\$ 0.015449	8.26%
41	Demand Charge	\$ 13.52	\$ 15.11 / kW-Mo	\$ 1.59	11.76%
42	Power Factor Charge	\$ 0.77	\$ 0.83 / kVar	\$ 0.06	7.79%
43	Power Factor Credit	\$ (0.77)	\$ (0.83) / kVar	\$ (0.06)	7.79%
IR - Irrigation Service					
44	Service Availability Charge	\$ 25.00	\$ 30.00 / Month	\$ 5.00	20.00%

Southwestern Public Service Company
- New Mexico Retail
Comparison of Current and Proposed Base Rate Charges

Line No.	Customer Class Charges	Current Rate	Proposed Rate	Change in Rate	
45	Demand Charge - Summer	\$ 3.01	\$ 3.97 / kW-Mo	\$ 0.96	31.89%
46	Demand Charge - Winter	\$ 2.51	\$ 3.31 / kW-Mo	\$ 0.80	31.87%
47	Energy Charge	\$ 0.065794	\$ 0.078594 / kWh	\$ 0.012800	19.45%
IR - Irrigation Service TOU					
48	Service Availability Charge	\$ 26.00	\$ 30.00 / Month	\$ 4.00	15.38%
49	Energy Charge - Off-Peak	\$ 0.047593	\$ 0.066805 / kWh	\$ 0.019212	40.37%
50	Energy Charge - On-Peak	\$ 0.281300	\$ 0.283871 / kWh	\$ 0.002571	0.91%
51	Demand Charge - summer	\$ 2.39	\$ 3.14 / kW-Mo	\$ 0.75	31.38%
52	Demand Charge - winter	\$ 2.39	\$ 3.14 / kW-Mo	\$ 0.75	31.38%
PG - Primary General Service					
53	Service Availability Charge	\$ 40.80	\$ 55.20 / Month	\$ 14.40	35.29%
54	Demand Charge - Summer	\$ 21.99	\$ 22.48 / kW-Mo	\$ 0.49	2.23%
55	Demand Charge - Winter	\$ 18.32	\$ 19.55 / kW-Mo	\$ 1.23	6.71%
56	Energy Charge	\$ 0.005842	\$ 0.007258 / kWh	\$ 0.001416	24.24%
57	Power Factor Charge	\$ 0.74	\$ 0.80 /kVar	\$ 0.06	8.11%
58	Power Factor Credit	\$ (0.74)	\$ (0.80) /kVar	\$ (0.06)	8.11%
PG - Primary General Service TOU					
59	Service Availability Charge	\$ 42.80	\$ 55.20 Bills	\$ 12.40	28.97%
60	Energy Charge - Off-Peak	\$ 0.005842	\$ 0.007258 / kWh	\$ 0.001416	24.24%
61	Energy Charge - On-Peak	\$ 0.160626	\$ 0.192127 / kWh	\$ 0.031501	19.61%
62	Demand Charge	\$ 14.88	\$ 15.63 / kW-Mo	\$ 0.75	5.04%
63	Power Factor Charge	\$ 0.74	\$ 0.80 / kVar	\$ 0.06	8.11%
64	Power Factor Credit	\$ (0.74)	\$ (0.80) / kVar	\$ (0.06)	8.11%
LGS-T - Large General Service - Transmission, 69 kV					
65	Service Availability Billing Charge	\$ 1,102.80	\$ 1,102.80 / Month	\$ -	0.00%
66	Demand Charge - Summer	\$ 15.40	\$ 19.39 / kW-Mo	\$ 3.99	25.91%
67	Demand Charge - Winter	\$ 12.83	\$ 16.16 / kW-Mo	\$ 3.33	25.95%
68	Energy Charge	\$ 0.005752	\$ 0.008329 / kWh	\$ 0.002577	44.80%
69	Power Factor Charge	\$ 0.71	\$ 0.71 /kVar	\$ -	0.00%
70	Power Factor Credit	\$ (0.71)	\$ (0.71) /kVar	\$ -	0.00%
LGS-T, 115 kV and >					
71	Service Availability Billing Charge	\$ 1,102.80	\$ 1,102.80 / Month	\$ -	0.00%
72	Demand Charge - Summer	\$ 15.26	\$ 19.29 / kW-Mo	\$ 4.03	26.41%
73	Demand Charge - Winter	\$ 12.74	\$ 16.08 / kW-Mo	\$ 3.34	26.22%
74	Energy Charge	\$ 0.005720	\$ 0.008286 / kWh	\$ 0.002566	44.86%
75	Power Factor Charge	\$ 0.71	\$ 0.71 /kVar	\$ -	0.00%
76	Power Factor Credit	\$ (0.71)	\$ (0.71) /kVar	\$ -	0.00%
Large Municipal and School Service					
77	Service Availability Charge	\$ 42.90	\$ 53.70 / Month	\$ 10.80	25.17%

Southwestern Public Service Company
- New Mexico Retail
Comparison of Current and Proposed Base Rate Charges

Line No.	Customer Class Charges	Current Rate	Proposed Rate	Change in Rate	
78	Demand Charge - Summer	\$ 16.09	\$ 18.29 / kW-Mo	\$ 2.20	13.67%
79	Demand Charge - Winter	\$ 13.40	\$ 15.90 / kW-Mo	\$ 2.50	18.66%
80	Energy Charge	\$ 0.013761	\$ 0.014140 / kWh	\$ 0.000379	2.75%
81	Power Factor Charge	\$ 0.81	\$ 0.83 /kVar	\$ 0.02	2.47%
82	Power Factor Credit	\$ (0.81)	\$ (0.83) /kVar	\$ (0.02)	2.47%
<u>Large Municipal and School Service TOU</u>					
83	Service Availability Charge	\$ 44.90	\$ 53.70 / Month	\$ 8.80	19.60%
84	Energy Charge - Off-Peak	\$ 0.013761	\$ 0.014140 / kWh	\$ 0.000379	2.75%
85	Energy Charge - On-Peak	\$ 0.169260	\$ 0.169829 / kWh	\$ 0.000569	0.34%
86	Demand Charge	\$ 10.23	\$ 11.92 / kW-Mo	\$ 1.69	16.52%
87	Power Factor Charge	\$ 0.81	\$ 0.83 /kVar	\$ 0.02	2.47%
88	Power Factor Credit	\$ (0.81)	\$ 0.83 /kVar	\$ 1.64	-202.47%
<u>Small Municipal and School Service</u>					
89	Service Availability Charge	\$ 16.60	\$ 21.80 / Month	\$ 5.20	31.33%
90	Energy Charge - Summer	\$ 0.066582	\$ 0.074285 / kWh	\$ 0.007703	11.57%
91	Energy Charge - Winter	\$ 0.055486	\$ 0.064596 / kWh	\$ 0.009110	16.42%
<u>Small Municipal and School Service TOU</u>					
92	Service Availability Charge	\$ 17.60	\$ 21.80 / Month	\$ 4.20	23.86%
93	Energy Charge - Off-Peak	\$ 0.044823	\$ 0.052182 / kWh	\$ 0.007359	16.42%
94	Energy Charge - On-Peak	\$ 0.212508	\$ 0.224063 / kWh	\$ 0.011555	5.44%
95	<u>SMS - Unmetered</u>	\$ 8.10	\$ 9.60 / Month	\$ 1.50	18.52%
<u>Area Lights (lumens)</u>					
96	7,000 MV	\$ 12.38	\$ 14.19 / Month	\$ 1.81	14.62%
97	15,000 HPS	\$ 11.85	\$ 13.58 / Month	\$ 1.73	14.60%
98	27,500 HPS	\$ 13.69	\$ 15.68 / Month	\$ 1.99	14.54%
99	50,000 HPS	\$ 16.40	\$ 18.79 / Month	\$ 2.39	14.57%
100	140,000 HPS	\$ 26.00	\$ 29.79 / Month	\$ 3.79	14.58%
101	14,000 MTI	\$ 13.16	\$ 15.08 / Month	\$ 1.92	14.59%
102	20,500 MTI	\$ 14.72	\$ 16.87 / Month	\$ 2.15	14.61%
103	36,000 MTI	\$ 16.43	\$ 18.83 / Month	\$ 2.40	14.61%
104	110,000 MTI	\$ 27.68	\$ 31.72 / Month	\$ 4.04	14.60%
105	6,000 LEE	\$ 11.12	\$ 16.08 / Month	\$ 4.96	44.60%
106	14,000 LEE	\$ 14.59	\$ 21.10 / Month	\$ 6.51	44.62%
107	25,000 LEE	\$ 21.18	\$ 30.63 / Month	\$ 9.45	44.62%
<u>Street Lights (lumens)</u>					
108	7,000 MV	\$ 15.29	\$ 16.78 / Month	\$ 1.49	9.74%
109	20,000 MV	\$ 19.95	\$ 21.90 / Month	\$ 1.95	9.77%
110	35,000 MV	\$ 27.63	\$ 30.32 / Month	\$ 2.69	9.74%
111	50,000 MV	\$ 31.91	\$ 35.02 / Month	\$ 3.11	9.75%
112	15,000 HPS	\$ 14.66	\$ 16.09 / Month	\$ 1.43	9.75%

Southwestern Public Service Company
- New Mexico Retail
Comparison of Current and Proposed Base Rate Charges

Line No.	Customer Class Charges	Current Rate	Proposed Rate	Change in Rate
113	27,500 HPS	\$ 16.94	\$ 18.59 / Month	\$ 1.65 9.74%
114	50,000 HPS	\$ 20.26	\$ 22.24 / Month	\$ 1.98 9.77%
115	6,000 LEL	\$ 13.70	\$ 16.08 / Month	\$ 2.38 17.37%
116	14,000 LEL	\$ 17.97	\$ 21.10 / Month	\$ 3.13 17.42%
117	25,000 LEL	\$ 26.09	\$ 30.63 / Month	\$ 4.54 17.40%

SOUTHWESTERN PUBLIC SERVICE COMPANY

ORIGINAL RATE NO. 89

X

ELECTRIC AFFORDABILITY PROGRAM RIDER

APPLICABILITY: The Electric Affordability Program (EAP) is available to residential customers who have been qualified for and receive assistance from the Low-Income Home Energy Assistance Program (LIHEAP) during the federal fiscal Year (Program Year). Further, such customers must agree to be placed on SPS's Average Monthly Payment Plan (AMPP) and must also agree to a payment schedule as described below to be considered a Qualified Customer. To qualify, customers must be receiving a financial benefit as set forth herein.

TERRITORY: Area served by Company in New Mexico.

PROGRAM DESCRIPTION AND BILL IMPACT FOR QUALIFIED CUSTOMERS:

The Program has two components: 1) Affordability and 2) Arrearage Forgiveness.

A customer applying for the EAP must provide and SPS will review:

- 1) billing and consumption information for the most recent twelve-month period, or estimate usage for Qualified Customers with no usage history;
- 2) approved LIHEAP benefits; and
- 3) household income information as available in the LIHEAP file submitted to SPS to determine a Qualified Customer's financial benefit and payment schedule amount under the AMPP. A Qualified Customer's payment schedule shall include both payment of their current Month's bill after inclusion of the Affordability bill credit, and payment of a portion of the Qualified Customer's pre-EAP arrears, if any.

Affordability Component

- a) The EAP consists of a bill credit determined as one-twelfth of the difference between SPS's estimate of the Qualified Customer's annual electric bill and three percent (3%) of 150% of the Department of Health and Human Services Poverty Guidelines for a household of four. This bill credit is a Program cost that will be included in the Tracker Account. Any LIHEAP benefit shall not be considered in the calculation of the EAP credit. Any LIHEAP benefit shall be applied to that portion of the Qualified Customer's full annual bill that exceeds the Qualified Customer's affordable percentage of income payment. Any LIHEAP benefit not applied to the Qualified Customer's current bill will be applied to a Qualified

312

X

Advice Notice No.

/s/ Brooke A. Trammell

REGIONAL VICE PRSIDENT –
REGULATORY AND PRICING

SOUTHWESTERN PUBLIC SERVICE COMPANY

ORIGINAL RATE NO. 89

X

ELECTRIC AFFORDABILITY PROGRAM RIDER

Customer's arrears. No portion of any LIHEAP benefit provided to a Qualified Customer may be applied to the account of a customer other than the Qualified Customer to whom the LIHEAP benefit was rendered.

- b) Qualified Customers who report a monthly income of zero dollars (\$0.00) shall pay ten dollars (\$10.00) each month towards their current bill and must re-apply and receive LIHEAP benefits annually to continue in the Program. In the event that a Qualified Customer fails to re-verify their income, they shall be suspended from the Program until the earlier of the date that SPS receives a re-verification or the expiration of the Program Year. If a re-verification is not received before the expiration of the Program Year, the Qualified Customer will be removed from the Program.
- c) The minimum benefit under each of these options shall not be less than five dollars (\$5.00) per Month.

EAP Arrearage Forgiveness Component

A monthly credit will be applied each Month after receipt of the Qualified Customer's payment. Payments under the EAP Arrearage Forgiveness Component shall not exceed one percent (1%) of the Qualified Customer's annual income. The credit will be designed to retire pre-EAP arrears over a period of twelve (12) months for Qualified Customers with arrears of \$200.00 or less and twenty-four (24) months for Qualified Customers with arrears of more than \$200.00. Amounts credited through the EAP Arrearage Forgiveness Component will be included in the EAP Tracker Account for recovery through the EAP Rider.

CONDITIONS OF SERVICE

- a) There is no specific enrollment period. Qualified Customers are auto-enrolled in the program when SPS is notified that a customer has enrolled in LIHEAP.
- b) Enrollment participation is limited to a first-come, first-served basis.
- c) Regardless of arrears balances, SPS agrees to maintain service and suspend collection activities under the SPS Discontinuance of Service section to Qualified Customers if they maintain their payment schedule hereunder.
- d) With respect to payment default provisions, a single missed, partial, or late

312

X

Advice Notice No.

/s/ Brooke A. Trammell

REGIONAL VICE PRSIDENT –
REGULATORY AND PRICING

SOUTHWESTERN PUBLIC SERVICE COMPANY

ORIGINAL RATE NO. 89

X

ELECTRIC AFFORDABILITY PROGRAM RIDER

payment within any Program Year shall not result in the automatic removal of a Qualified Customer from the Program. However, two (2) or more missed, partial, or late payments within any Program Year will result in SPS initiating its regular collection and Discontinuance of Service process.

- e) To be eligible for the EAP, Qualified Customers must maintain an active SPS account for electric service in their own name at their permanent primary residence. In the event the Qualified Customer resides at a primary residence in which the Qualified Customer is not the customer of record, and conditioned upon the residence being qualified under LIHEAP, SPS will allow the Qualified Customer to be eligible for the Program.
- f) Qualified Customers agree to notify the SPS of any change of address. Such a change may result in revisions to the Qualified Customer's payment amounts and schedules or removal from the Program, as determined by SPS. Additionally, Qualified Customers who do not continue to qualify under the provisions herein may be removed from the Program by SPS.

CUSTOMER REQUEST FOR REMOVAL FROM PROGRAM

In the event a Qualified Customer desires to be removed from the EAP, the Qualified Customer must make such request to SPS in writing, through email, or by phone. Upon receipt of the request from a Qualified Customer, the customer will be removed from the EAP as of the date of the request. Once a customer is removed from the EAP, such customer may not re-enroll for one year after the date of the removal request.

PROGRAM FUNDING

SPS shall include as a part of the Service Availability Charge for all rate schedules, or as a part of the Monthly Rate for rate schedules without a Service Availability Charge, an amount approved by the Commission to recover the costs associated with SPS's EAP.

312

X

Advice Notice No.

/s/ Brooke A. Trammell

REGIONAL VICE PRSIDENT –
REGULATORY AND PRICING

SOUTHWESTERN PUBLIC SERVICE COMPANY

ORIGINAL RATE NO. 89

X

ELECTRIC AFFORDABILITY PROGRAM RIDER

ELECTRIC AFFORDABILITY PROGRAM (EAP) Rider

Rate Schedule	EAP Charge (\$/month)
Residential Service	\$ 0.37
Residential with Space Heating Service	\$ 0.37
Small General Service	\$ 0.37
Irrigation Service	\$ 0.68
Secondary General Service	\$ 0.69
Primary General Service	\$ 1.11
Large General Service - Transmission 69 kV	\$ 137.75
Large General Service - Transmission 115kV+	\$ 137.75
Small Municipal & School Service	\$ 0.35
Large Municipal & School Service	\$ 0.79
Municipal Street Lighting	\$ 0.33
Area Lighting	\$ 0.33

- a) A permanent tracking mechanism (EAP Tracker Account) will be established to provide for tracking the amounts recovered to fund the Program as compared to the actual Program expenditures. The EAP Tracker Account balance (positive or negative) shall be provided to the Commission on an annual basis. SPS may petition the Commission to adjust the EAP Rider to adjust the EAP Tracker Account balance.
- b) If there is an over-recovered balance in the Tracker Account at the end of a Year, the over-recovered balance may be rolled over to the subsequent Year and can be used to supplement benefits in the subsequent Year.

312

X

Advice Notice No.

/s/ Brooke A. Trammell

REGIONAL VICE PRSIDENT –
REGULATORY AND PRICING

**Attachment RML-9 is
provided in electronic format**