

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF SOUTHWESTERN)	
PUBLIC SERVICE COMPANY'S)	
APPLICATION FOR REVISION OF ITS)	
RETAIL RATES UNDER ADVICE)	CASE NO. 15-00139-UT
NOTICE NO. 255,)	
)	
SOUTHWESTERN PUBLIC SERVICE)	
COMPANY,)	
)	
APPLICANT.)	
)	

DIRECT TESTIMONY

of

RICHARD M. LUTH

on behalf of

SOUTHWESTERN PUBLIC SERVICE COMPANY

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GLOSSARY OF ACRONYMS AND DEFINED TERMS

<u>Acronym/Defined Term</u>	<u>Meaning</u>
AL	Area Lighting
C&I	Commercial and Industrial
Commission	New Mexico Public Regulation Commission
Irrigation	Irrigation Power Service
kVAR	Kilovolt Amperes Reactive
kV	Kilovolt
kW	Kilowatt
kWh	Kilowatt-Hour
LGS-T	Large General Service-Transmission
LMS	Large Municipal and School Service
New Mexico Retail	SPS's New Mexico Retail Jurisdiction
PG	Primary General Service
RFP	Rate Filing Package
SG	Secondary General Service
SGS	Small General Service
SL	Municipal Street Lighting
SMS	Small Municipal and School Service
SPS	Southwestern Public Service Company, a New Mexico corporation

<u>Acronym/Defined Term</u>	<u>Meaning</u>
Test Year	January 1, 2016 through December 31, 2016
TOU	Time of Use
Xcel Energy	Xcel Energy Inc.

LIST OF ATTACHMENTS

<u>Attachment</u>	<u>Description</u>
RML-1	Present Revenues (<i>Filename:</i> RML- Attachments.xls)
RML-2	Class Revenue Distribution (<i>Filename:</i> RML- Attachments.xls)
RML-3	Service Availability Charge Determination (<i>Filename:</i> RML- Attachments.xls)
RML-4	System Capacity Charge Determination (<i>Filename:</i> RML- Attachments.xls)
RML-5	Base Energy Charge Determination (<i>Filename:</i> RML- Attachments.xls)
RML-6	Revenue at Proposed Rates (<i>Filename:</i> RML- Attachments.xls)
RML-7	Rate Comparison – Present vs. Proposed (<i>Filename:</i> RML- Attachments.xls)
RML-8	Workpapers (<i>See Folder:</i> Testimony/024 – Luth/RML-8)

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I. WITNESS IDENTIFICATION AND QUALIFICATIONS

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

2 A. My name is Richard M. Luth. My business address is 600 South Tyler Street,
3 Amarillo, Texas 79101.

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

5 A. I am filing testimony on behalf of Southwestern Public Service Company
6 ("SPS"), a New Mexico corporation and wholly-owned electric utility subsidiary
7 of Xcel Energy Inc. ("Xcel Energy"). Xcel Energy is a registered holding
8 company that owns several electric and natural gas utility operating companies.¹

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.

¹ Xcel Energy is the parent company of four wholly-owned electric utility operating companies: Northern States Power Company, a Minnesota corporation; Northern States Power Company, a Wisconsin corporation; Public Service Company of Colorado, a Colorado corporation; and SPS. Xcel Energy's natural gas pipeline subsidiary is WestGas InterState, Inc. Xcel Energy also has two transmission-only operating companies, Xcel Energy Southwest Transmission Company, LLC and Xcel Energy Transmission Development Company, LLC, both of which are regulated by the Federal Energy Regulatory Commission.

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

2 A. I am responsible for the preparation of electric cost allocation studies and the
3 development and design of retail electric rates and tariffs for SPS. Those
4 responsibilities include development of rates, terms, and conditions for proposed
5 service contracts, and the analysis of various other regulatory and business issues.

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

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

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

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

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

17 A. Yes. I have attended numerous courses and seminars hosted by the Illinois State
18 University Institute for Regulatory Policy Studies.

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

2 A. Yes. I have testified on behalf of SPS in numerous cases before the New Mexico
3 Public Regulation Commission (“Commission”) regarding cost allocation, rate
4 design, and tariff issues, including SPS’s last three base rate cases, which were
5 Case Nos. 12-00350-UT,² 10-00395-UT,³ and 08-00354-UT.⁴ I have also filed
6 testimony on similar topics in numerous occasions with the Public Utility
7 Commission of Texas and the Illinois Commerce Commission.

² *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 (March 27, 2014).

³ *In the Matter of Southwestern Public Service Company’s Application for Revision of its Retail Rates Under Advice Notice No. 234*, Case No. 10-00395-UT, Final Order Adopting Amended Certification of Stipulation (Dec. 28, 2011).

⁴ *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).

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**II. ASSIGNMENT, INTRODUCTION OF COST ALLOCATION
AND RATE DESIGN WITNESSES, AND SUMMARY OF
RECOMMENDATIONS**

1 **Q. What are your assignments in this testimony?**

2 A. In my testimony, I support SPS's proposed rate design and sponsor the proposed
3 rate tariffs. Specifically, I will:

- 4 • describe the Rate Filing Package ("RFP") schedules that I sponsor or
5 co-sponsor;
- 6 • explain the development of the annual revenues by rate class for the period
7 of January 1, 2016 through December 31, 2016 ("Test Year");
- 8 • describe SPS's proposed distribution of the revenue requirement among the
9 rate classes, and present the proof of revenue for the proposed rates;
- 10 • explain how SPS has designed the rates necessary to recover the revenue
11 requirement;
- 12 • describe the proposed revisions to SPS's tariffs; and
- 13 • describe the relief that SPS is requesting as part of the Rate Design phase
14 in this docket.

15 I also sponsor or co-sponsor the following RFP Schedules:

Schedule No.	Description
A-2	Summary of the Revenue increase or decrease at the proposed rates by rate classes
N-1	Rate of Return by Rate Classification
O-1	Total Revenue Requirements by Rate Classification

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Schedule No.	Description
O-2	Proof of Revenue Analysis
O-3	Comparison of Rate for Service Under the Present and Proposed Schedules
O-4	Explanation of Proposed Changes to Existing Rate Schedules
P-5	Customer Information

1 **Q. Please summarize your testimony and recommendations.**

2 A. SPS's proposed rate design ensures that each class is billed the cost of providing
3 service to that class, balanced by consideration of increases that are significantly
4 greater than the overall SPS increase. In adjusting for above-average increases,
5 SPS proposes non-fuel base rate increases to some customer classes that are above
6 their class cost of service. SPS's proposed revenue increase distribution was
7 developed with target non-fuel base rate increases that were designed to ensure
8 that all customer class rate increases are at least a minimum of 75 percent of the
9 overall SPS increase, and that no customer class target increase is more than 125
10 percent of the average SPS's New Mexico retail jurisdiction ("New Mexico
11 retail") non-fuel base rate increase.

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1 I also explain the tariff changes that SPS is proposing in this case. The
2 proposed tariff changes are necessary to implement new policies or to simplify the
3 administration of the tariffs. I therefore recommend that the Commission approve
4 the proposed tariff revisions.

5 **Q. Are you the only SPS witness on cost allocation and rate design in this**
6 **proceeding?**

7 A. No. Two other SPS witnesses will explain elements or steps in SPS's cost
8 allocation and rate design process. SPS witness Ian Feters discusses jurisdictional
9 and customer class cost allocation. SPS witness Jannell Marks discusses the SPS
10 load research function and SPS customer, sales and peak demand forecasts.

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III. DEVELOPMENT OF TEST YEAR REVENUE AT PRESENT RATES

1 **Q. Why is it necessary to calculate Test Year revenue at present rates?**

2 A. It is necessary to calculate Test Year revenues at present rates to determine
3 whether the utility will recover its cost of service in the Test Year under those
4 rates. If the present revenues are lower than the utility's Test Year cost of service,
5 as adjusted for known and anticipated changes, the utility should be allowed to
6 increase rates.

7 **Q. Is the present revenue comparison performed by customer class?**

8 A. Yes. As reflected in my Attachment RML-1, the present revenues are calculated
9 by class and then aggregated to arrive at a total company number for present
10 revenues.

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

12 A. SPS must determine the number of billing determinants for each class. Those
13 billing determinants are metered kilowatt ("kW") for demand charges, metered
14 kilovolt-ampere reactive ("kVAR") for large demand-billed customers, metered
15 kilowatt-hour ("kWh") for energy charges, and the number of bills in each class
16 for the service availability charge. The billing determinants are then multiplied
17 by the present rates set forth in SPS's approved tariffs.

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1 **Q. How does SPS develop billing determinants?**

2 A. SPS obtains the billing determinants from its sales forecast of kWh by class and
3 its forecast of customer count by class. For each demand-metered class, billing
4 demand is determined based on customer billings in each month of the Base
5 Period compared to kWh over the same period to develop a kW billing demand
6 factor, which is then applied to forecast kWh.

7 **Q. Do the billing determinants reflect 12 months of billing?**

8 A. Yes. I used the forecasted calendar-month billing data for each of the 12 months
9 in the Test Year.

10 **Q. Please explain how you calculated the Test Year revenues.**

11 A. I applied the Test Year number of adjusted customer bills, billing demands, and
12 energy totals for each class to the rate components of each present rate to
13 determine annual revenues by rate class. I then summed the revenues by rate
14 class to determine the New Mexico retail revenues. The resulting present
15 revenues total \$417,918,431, an amount that includes fuel and purchased power in
16 base rates at the current levels. Net of fuel and purchased power included in base
17 rates, the non-fuel total base revenues at present rates is \$218,416,018. Both total

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1 revenue at present rates and the non-fuel total at present rates are shown on
2 Attachment RML-1, line no. 113.

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IV. RATE DESIGN

A. Overview

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

2 A. I am referring to the way in which the cost of service, also referred to as revenue
3 requirement, attributable to a particular rate class is recovered through demand
4 charges, energy charges, and customer charges for that particular class.
5 Collectively, the charges should be sufficient to recover the revenue requirement
6 for each customer class, as adjusted for gradualism considerations.

7 **Q. What are the desirable outcomes in designing rates under the Commission’s**
8 **jurisdiction?**

9 A. Rates approved by the Commission should:

- 10 (1) allow SPS to recover its total revenue requirement;
- 11 (2) provide revenue stability to SPS and rate stability to customers;
- 12 (3) discourage wasteful, and encourage efficient, use of electricity;
- 13 (4) reflect the cost of service in total and for specific groups of
14 customers;
- 15 (5) provide price signals to customers of the cost to provide service;
- 16 (6) avoid undue discrimination among rate classes, or among
17 customers within a rate class; and

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1 (7) be simple, understandable, easily applied, and easily interpreted.

2 At times, rate design objectives can conflict to some degree and judgment is
3 necessary to determine a reasonable balance among those objectives.

4 **Q. How should rate design reflect cost of service?**

5 A. The first step in designing rates is to properly classify costs. There are three basic
6 classes of costs to provide electric service: customer-related costs, demand costs,
7 and energy costs. In general, rates should be structured to recover the three types
8 of costs through their respective components: the customer charge should recover
9 fixed customer-related costs; the demand charge should recover fixed capacity-
10 related costs; and the energy charge should recover variable costs, which apply to
11 all energy consumed by the customer. When each charge recovers corresponding
12 costs, rates are cost-tracking and customers within rate classes are appropriately
13 charged for their share of costs. When rates are designed in this manner, an
14 appropriate balance is achieved in the amount charged between customer classes
15 and among customers within a rate class.

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1 **Q. Are there reasons to depart from a strict cost-based revenue requirement by**
2 **function or component to design rates?**

3 A. Yes. For example, rates based strictly on a test year cost allocation may send an
4 inappropriate price signal. Another reason could be a desire to promote rate
5 stability and avoid significant rate shifts or the sudden imposition of higher rates.

6 **Q. Please provide an example of the type of inappropriate price signal you**
7 **mentioned.**

8 A. An example of an inappropriate price signal would be a situation in which
9 otherwise similarly situated customers take service at different voltages, but the
10 rate for service to customers served at secondary voltages is lower than the rate
11 for customers served at primary voltages. Secondary voltage customers require
12 additional transformation facilities and secondary facilities compared to primary
13 voltage customers. In this example, the production and transmission costs
14 allocated to each rate class are similar. However, if secondary voltage customers
15 are forecasted to have lower billing load factors compared to primary voltage
16 customers during the test year, a strict adherence to allocated costs could result in
17 a lower rate for secondary customers because a similar level of production and
18 transmission capacity-related costs would be recovered over a larger level of kW

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1 demand billing determinants. Since secondary voltage customers require
2 additional facilities to provide service at secondary voltage, that outcome would
3 provide an inappropriate incentive to primary voltage-level customers to request
4 service at the lower-voltage rate.

5 **Q. Did you make any specific adjustments to the revenue requirement**
6 **distribution in this case to prevent inappropriate price signals?**

7 A. Yes. Among Commercial and Industrial (“C&I”) customers, production,
8 transmission, and primary capacity costs for Secondary General Service and
9 Primary General Service are combined and allocated according to line loss-
10 adjusted billing demand. Secondary voltage capacity costs are allocated only to
11 Secondary General Service because Primary General Service customers do not
12 take service from secondary voltage equipment.

13 Secondary General Service and Primary General Service represent
14 essentially the same type of C&I service, except that Primary General Service
15 customers do not require secondary voltage facilities. Therefore, the demand
16 charges for the General Service classes are designed to recover the production,
17 transmission, and primary distribution costs in total, and the incremental demand

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1 cost related to secondary voltage facilities are added to the primary voltage costs
2 to develop the secondary voltage rate.

3 Similarly, capacity costs allocated to Large General Service –
4 Transmission (“LGS-T”) capacity costs are merged or blended with rates based
5 upon the combined capacity costs divided by the respective metered kW demand
6 for the Test Year. The merging or blending provides a line loss-adjusted rate
7 between the two service voltage rates applicable under LGS-T.

8 **Q. What guidelines did SPS follow to ensure that rate increases are gradual?**

9 A. Although the Commission’s rules do not specify any ceiling on rate increases,
10 SPS developed its revenue distribution targets to customer classes that utilized a
11 maximum rate increase to any customer class of no more than 125 percent of the
12 overall non-fuel base rate increase. SPS also utilized a minimum rate increase to
13 any customer class of no less than 75 percent of the overall non-fuel base rate
14 increase. As a result, some of the total New Mexico non-fuel base rate increase
15 will be recovered from all customer classes. This proposal is a basis for moving
16 New Mexico retail customers to cost of service-based rates while applying the
17 gradualism concept.

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1 **Q. Why is SPS proposing a minimum of 75 percent of the average non-fuel base**
2 **rate increase and a maximum of 125 percent of the average non-fuel base**
3 **rate increase with this filing?**

4 A. SPS believes that application of greater gradualism is warranted in this rate case.
5 SPS's previous New Mexico rate case, Case No. 12-00350-UT, was a fully
6 litigated case and the Final Order was issued on March 26, 2014, approximately
7 14 months ago. In that rate case and in the resulting Final Order, all issues,
8 including revenue increase distribution and rate design were considered by the
9 Commission. In addition, the change in the composition of SPS's investment and
10 cost of service in this filing result in a required non-fuel base revenue increase of
11 14.43 percent. If the more typical 150 percent maximum had been applied,
12 increases in excess of 20 percent would have occurred for customer classes such
13 as Residential, Small General Service, and Municipal & Schools in which non-
14 fuel base rate charges comprise a greater portion of their bills.

15 **Q. Are rates designed for all rate classes in the same way?**

16 A. No. The rate design for a rate class is partly dependent on the resources available
17 to measure the rate class's electric usage. Residential customers, for example, do
18 not have demand meters, so there are no demand charges. Instead, all of

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1 residential costs are recovered through customer charges and energy charges. As
2 another example, it is not feasible to install a demand or energy meter on each
3 street light, so rates for street lights are based on a per-light charge that reflects
4 the demand costs, energy and customer component costs to serve the different
5 types of street lights.

B. Customer Charges

6 **Q. You stated earlier that the customer charge should recover customer-related**
7 **costs. Please describe these costs in more detail.**

8 A. Generally speaking, a customer charge is a monthly charge that recovers fixed
9 costs related to customer care. The customer charge, identified as the service
10 availability charge in SPS's rates, is designed to recover costs associated with
11 establishing and maintaining individual customer accounts, such as the costs
12 associated with meter reading, billing, customer account record keeping,
13 responding to customer inquiries, and associated administrative overhead costs.
14 The costs also include the fixed costs and operation and maintenance expenses
15 associated with the facilities installed specifically to serve an individual customer.
16 For example, for a residential customer, the facilities include the meter and
17 service lateral installed at an individual residence. For an LGS-T customer, the

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1 specific facility consists of an Interval Demand Recorder meter installed
2 specifically to serve that customer. The investment in customer-related facilities
3 and the revenue required to support such investment do not vary as the customer's
4 demand and energy usage levels fluctuate from month to month. Therefore, to
5 properly reflect the nature of these costs in the rate structure, recovery should take
6 place through a fixed monthly charge.

7 **Q. Have you calculated the service availability charges for the various rate**
8 **classes?**

9 A. Yes. Attachment RML-3 shows the derivation of the service availability charges
10 for all rate classes. I calculated the charges by dividing the appropriate class
11 customer revenue requirement as determined in the class allocation study by the
12 class annual bills. Because of rounding, or if the increase in the calculated service
13 availability charge is considerably greater than 125 percent of the overall New
14 Mexico increase, the service availability charge for a particular class multiplied
15 by the annual bills for that class may recover more or less than the allocated
16 customer revenue requirement. These differences, shown in the last column of
17 Attachment RML-7, are added to costs recoverable through the demand charge or
18 energy charge for the corresponding rate classes.

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C. Demand Charges

1 **Q. What costs are recovered through the demand charge element of base rates?**

2 A. The demand charge recovers the fixed capacity portion of the production,
3 transmission, distribution substation, primary distribution and secondary
4 distribution systems. For customers with meters that measure demand, which is
5 the maximum level of electricity provided to the customer over a 30-minute
6 period each billing period, system capacity costs are recovered through a demand
7 charge measured on a kW basis. Customers in the Residential, Small General
8 Service (“SGS”), and Small Municipal and Schools (“SMS”) classes are not
9 metered for demand, so their fixed capacity costs are recovered through the per-
10 kWh energy charge.

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

12 A. Other than Area Lighting (“AL”) and Municipal Street Lighting (“SL”), both of
13 which are unmetered and are charged a fixed monthly charge, rates are seasonally
14 differentiated. A seasonal differential is applied to kW demand charges during
15 the summer months of June through September. If a kW demand charge is not
16 billed to a rate class, the capacity charge aspect of the kWh rate is seasonally
17 differentiated. In addition, as discussed later, the SPS proposal to establish Time

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1 of Use (“TOU”)-based rates will have a year-round kW demand charge and kWh
2 charge, however, the TOU rates will have a differentiation in the charge applied
3 to kWh metered during peak summer hours in the four summer months.

4 **Q. Why are kW and kWh rates seasonally differentiated?**

5 A. Rates are seasonally differentiated to send a price signal to customers that it is
6 more costly for SPS to provide service during peak summer months. During peak
7 summer months, a higher level of production, transmission, and distribution
8 capacity is necessary to provide reliable service for increased demand. Additional
9 capacity requirement results in higher costs to provide service during those peak
10 summer months. The difference in seasonal costs is reflected through seasonally
11 differentiated rates.

12 **Q. Have you incorporated a seasonal differential in the charges that recover**
13 **demand costs?**

14 A. Yes. The demand charge for each rate includes a seasonal cost adjustment factor
15 for the value of summer peaking capacity. Generally, the maximum seasonal
16 differential between summer and winter is 1.25, which is slightly higher than the
17 New Mexico retail system monthly average peak demand during the four peak
18 months compared to the New Mexico retail system monthly average peak demand

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1 during the eight non-peak months. The seasonal differential is used to adjust the
2 summer billing units to produce billing units that are equivalent to the winter
3 billing units in order to establish a base capacity, or kW demand, rate that applies
4 in the non-summer months of October through May. Some rates have seasonal
5 differentials that are greater than or less than a 1.25 ratio, but the 1.25 ratio serves
6 as a starting point for developing peak season rates and off-peak season rates.

7 **Q. Please describe the calculations on Attachment RML-4.**

8 A. Attachment RML-4 shows the production and delivery portions of the demand
9 charges (also known as system capacity charges), if applicable, or the capacity
10 charge aspect of the energy charge for each rate class. Page 1 shows the
11 calculations for the Residential rate classes, SGS, and SMS. Page 2 shows the
12 calculation for the LMS. The calculations for the C&I classes (SG, PG, LGS-T,
13 and Irrigation) appear on pages 3, 4, and 5. The calculation consists of dividing
14 each component of the system capacity revenue requirement, as determined in the
15 class cost allocation study for each rate class, by the sum of the annual billing
16 units for that specific rate class. Since the billing structures for the Residential,
17 SGS, and SMS rate classes do not include a demand charge, recovery of demand-
18 related costs are based upon the Test Year energy consumption amounts measured

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1 in kWh. For rate classes with billing structures that include kW demand rates, the
2 annual billing units are the sum of the monthly kW billing demands associated
3 with each specific rate.

D. Energy Charges

4 **Q. What costs are recovered through the energy charge?**

5 A. For rate classes that include a demand charge, the energy charge is generally
6 intended to recover those costs that vary directly with the amount of energy sold.
7 Energy costs also include a portion of administrative and general overhead
8 expenses and cash working capital-related overhead expenses assigned through
9 the functional cost allocation process to arrive at the total revenue requirement for
10 the Production Energy function. Attachment RML-5 shows the calculation of the
11 energy charges by rate class. The energy charge for each class is determined by
12 dividing energy-related costs allocated to each rate class by the Test Year
13 forecasted kWh at the meter.

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E. Proposed Rates

1 *I. Residential*

2 **Q. How were the Residential rates designed?**

3 A. The Residential rate is split into the Residential Service and Residential Space
4 Heating rates. The distinction between the two rates is that the overall load factor
5 of space heating customers is higher than the load factor of non-space heating
6 customers because space heating customers use electricity as the primary source
7 for heating their homes during the winter months, whereas Residential Service
8 customers do not.

9 Accordingly, the per-kWh energy charges for Residential Space Heating
10 customers are lower than the per-kWh charge for Residential Service during non-
11 summer months to recognize that costs are spread over a greater number of kWh
12 energy billing units. The residential summer per-kWh energy rate is the same for
13 both Residential Service customers and Residential Space Heating customers
14 because both types of residential customers can be expected to use air
15 conditioning, with the result that customers in both classes contribute to the
16 summer peak. In designing the residential winter rates, SPS proposes to narrow
17 the current difference between the Residential Space Heating summer and winter

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1 energy charges. As a result, the increase to Residential Space Heating customers
2 is higher than the general maximum of 125 percent of the overall retail New
3 Mexico increase, while the increase to basic Residential Service is less than the
4 general maximum. Overall, at 18.03 percent, the combined Residential increase
5 is 125 percent of the overall 14.43 percent New Mexico retail increase.

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

8 A. No. A cost-based non-fuel base rate increase to both Residential Services, basic
9 Residential and Residential Space Heating would exceed 125 percent of the
10 overall 14.43 percent increase, or 18.03 percent. If the basic Residential Service
11 increase was designed to recover the allocated cost of service at New Mexico
12 average rate of return, the non-fuel base rate increase would have been 20.10
13 percent and the Residential Space Heat increase would have been 36.87 percent.

14 **Q. What customer charge is SPS proposing for the Residential and Residential**
15 **Space Heating subclasses?**

16 A. SPS is recommending a service availability charge of \$9.50 per month for both
17 Residential rate classes, which is slightly less than 79 percent of the \$12.23
18 charge that would result if the total amount of customer-related costs were

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1 recovered through the customer charge. By limiting the increase in the residential
2 customer charge, SPS is mitigating the impact that an increase to full cost
3 recovery would have on low-usage residential customers, while moving the
4 charge closer to full cost recovery to limit intra-class subsidies. Unrecovered
5 residential customer-related costs are recovered through the applicable summer
6 and winter energy charges.

7 **Q. What changes to the energy charges are SPS proposing for the Residential**
8 **and Residential Space Heating subclasses?**

9 A. The proposed summer energy charge for both Residential services includes an
10 increase of \$0.003780 per kWh, or 3.9 percent, to \$0.100170 per kWh. Excluding
11 fuel and purchased power costs in the energy charge, the non-fuel summer
12 Residential energy charge increase is \$0.008784 per kWh, or 13.7 percent. For
13 basic Residential Service, the proposed winter energy charge will increase
14 \$0.003823 per kWh, or 4.4 percent, to \$0.090781 per kWh. Excluding fuel and
15 purchased power costs in the energy charge, the non-fuel winter basic Residential
16 energy charge increase is \$0.008827 per kWh, or 16.2 percent.

17 For Residential Space Heating, the proposed winter energy charge will
18 increase \$0.005181 per kWh, or 7.7 percent, to \$0.72893 per kWh. Excluding

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1 fuel and purchased power costs in the energy charge, the non-fuel winter
2 Residential Space Heat energy charge increase is \$0.010185 per kWh, or 28.9
3 percent. As mentioned previously, the proposed summer energy charge for
4 Residential Space Heating is the same as Residential Service.

5 2. Small General Service

6 **Q. Please summarize the proposed changes to Small General Service.**

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

11 Overall, base rate revenue from SGS will increase by approximately
12 \$1,640,331, or 18.03 percent. Based upon the allocated cost of service at New
13 Mexico average rate of return, the SGS increase would have been \$2,664,798, or
14 29.3 percent. Under SPS's proposal, the service availability charge will not
15 increase, and remain \$14.40 per month. The summer energy charge will increase
16 \$0.007461 per kWh, or 9.7 percent, to \$0.084623 per kWh. The winter energy
17 charge will increase \$0.004934 per kWh, or 24.6 percent, to \$0.073126 per kWh.
18 Excluding fuel and purchased power costs in the energy charge, the non-fuel

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1 summer SGS energy charge increase is \$0.012465 per kWh, or 27.9 percent, and
2 the non-fuel winter SGS energy charge increase is \$0.007525 per kWh, or 19.7
3 percent.

4 3. Secondary General Service

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

6 A. The base rate structure of Secondary General Service (“SG”) will not change, in
7 that 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 Overall, non-fuel base rate revenue from SG will increase \$2.6 million, or
11 8.52 percent. Since the SG demand capacity and energy charge costs are
12 combined with Primary General Service (“PG”) to develop line loss-adjusted
13 rates, at 8.52 percent, the SG increase is less than the minimum 75 percent of the
14 14.43 percent overall New Mexico retail increase, or 10.82 percent. Combined,
15 however, the SG and PG non-fuel base rate increase is 10.82 percent.

16 Under SPS’s proposal, the service availability charge will increase \$3.50
17 per month, or 14.8 percent, to \$27.10. The energy charge will decrease by
18 \$0.005633 per kWh, or 15.2 percent, to \$0.031507 per kWh. Excluding fuel and

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1 purchased power costs in the energy charge, the non-fuel SG energy charge
2 decrease is \$0.000629 per kWh, or 13.5 percent. The summer demand charge
3 will increase \$2.02 per kW, or 13.1 percent, to \$17.46 per kW. The winter
4 demand charge will increase \$1.23 per kW, or 9.6 percent, to \$13.99 per kW.
5 Additionally, SPS is proposing a change in the power factor charge, from a
6 kVAR-based charge to a kW-based charge, which I will later discuss more
7 generally because the change affects more than one rate class.

8 *4. Primary General Service*

9 **Q. Please summarize the proposed changes to Primary General Service.**

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

14 Overall, non-fuel base rate revenue from PG will increase \$6.7 million, or
15 12.11 percent. Under SPS's proposal, the service availability charge will decrease
16 \$20.10 per month, or 26.8 percent, to \$54.90, closer to a cost of service-based
17 level of \$46.94. The energy charge will decrease \$0.004498 per kWh, or 13.0
18 percent, to \$0.030071 per kWh. Excluding fuel and purchased power costs in the

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1 energy charge, the non-fuel PG energy charge will increase \$0.000431 per kWh,
2 or 16.0 percent. The summer demand charge will increase \$2.02 per kW, or 14.5
3 percent, to \$15.93 per kW. The winter demand charge will increase \$1.82 per
4 kW, or 15.8 percent, to 13.32 per kW. The proposed change in the power factor
5 charge, from a kVAR-based charge to a kW-based charge, discussed later, will
6 also apply to PG customers.

7 5. Irrigation Power Service

8 **Q. Please summarize the proposed changes to Irrigation Power Service rates.**

9 **A.** The base rate structure of Irrigation Power Service (“Irrigation”) will not change,
10 in that applicable charges include a service availability charge, a year-round
11 energy charge, and a demand charge that increases during the months of June
12 through September compared to other months. Unlike the other C&I rate classes,
13 however, a large percentage of capacity-related costs are recovered through the
14 energy charge. SPS proposes to recover more of the capacity costs for Irrigation
15 through the demand charge, particularly in the summer months. Although the
16 proposed energy charge for Irrigation continues to recover a large portion of the
17 capacity costs, the proposed rate design will reduce the overall percentage from
18 the current level.

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1 Overall, non-fuel base rate revenue from Irrigation will increase \$745,235,
2 or 18.03 percent, which is \$1.86 million less than level that would have been
3 recovered if rates were increased to cost of service at the New Mexico average
4 rate of return. Under SPS's proposal, the service availability charge will increase
5 by \$4.20 per month, or 18.8 percent, to a cost of service-based level of \$26.50.
6 The energy charge will increase \$0.001801 per kWh, or 2.5 percent, to \$0.075203
7 per kWh. Excluding fuel and purchased power costs in the energy charge, the
8 non-fuel Irrigation energy charge will increase \$0.006805 per kWh, or 16.6
9 percent. The summer demand charge will increase \$0.60 per kW, or 36.4 percent,
10 to \$2.25 per kW. The winter demand charge will increase \$0.24 per kW, or 18.2
11 percent, to \$1.56 per kW. Both the current and proposed summer and winter
12 Irrigation demand charges are considerably lower than demand cost-based rates.

13 **Q. Why is SPS proposing a larger increase in the Irrigation summer demand**
14 **charge?**

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

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1 during seasons in which greater irrigation is necessary. This is due to the fact that
2 during these periods it will be necessary for Irrigation customers to pump more,
3 thus consuming significantly more energy, but their demands should remain
4 relatively constant. As a result, the proposed change in the summer demand
5 charge and rate structure is reasonable.

6 Furthermore, even with the proposed summer demand charge increase, the
7 proposed summer demand charge is only 11 percent of the \$19.87 per kW
8 demand charge that would result if the charge recovered Irrigation demand costs,
9 with the general seasonal differentiation factor, and rates were established at fully
10 allocated cost of service.

11 6. Large General Service - Transmission

12 **Q. Please summarize the proposed changes to Large General Service -**
13 **Transmission.**

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

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1 Overall, non-fuel base rate revenue from LGS-T 69 kV will increase
2 \$978,000, or 12.13 percent. Under SPS's proposal, the service availability charge
3 will decrease \$622.30 per month, or 47.5 percent, to a cost of service-based level
4 of \$689.00. The energy charge will decrease \$0.004285 per kWh, or 12.8
5 percent, to \$0.029084 per kWh. Excluding fuel and purchased power costs in the
6 energy charge, the LGS-T 69 kV energy charge will decrease \$0.006805 per
7 kWh, or 0.5 percent. The summer demand charge will increase \$0.91 per kW, or
8 9.7 percent, to \$10.33 per kW. The winter demand charge will increase \$1.62 per
9 kW, or 20.8 percent, to \$9.42 per kW.

10 Overall, non-fuel base rate revenue from LGS-T 115 kV and higher will
11 increase \$4.8 million, or 14.47 percent. Under SPS's proposal, the same
12 reduction in the 69 kV LGS-T service availability charge will apply to service at
13 115 kV and higher, as the service availability for both voltages is the same. The
14 energy charge will decrease \$0.004229 per kWh, or 12.8 percent, to \$0.028893
15 per kWh. Excluding fuel and purchased power costs in the energy charge, the
16 LGS-T 115 kV and higher energy charge will increase \$0.000008 per kWh, or 0.2
17 percent. The summer demand charge will increase \$1.15 per kW, or 12.6 percent,

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1 to \$10.28 per kW. The winter demand charge will increase \$1.82 per kW, or 24.1
2 percent, to \$9.37 per kW.

3 The proposed change in the power factor charge, from a kVAR-based
4 charge to a kW-based charge, discussed later, will also apply to LGS-T
5 customers.

6 7. Schools and Municipals

7 **Q. Please summarize the changes to Small Municipal and School Service.**

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
10 months of June through September compared to other months.

11 Overall, non-fuel base rate revenue from SMS will increase approximately
12 \$113,900, or 18.03 percent, which is \$46,000 less than would be required to
13 recover the allocated cost of service at New Mexico average rate of return. Under
14 SPS's proposal, the service availability charge will increase \$0.10 per month, or
15 0.7 percent, to \$14.50. The summer energy charge will increase \$0.0005470 per
16 kWh, or 8.2 percent, to \$0.072573 per kWh. The winter energy charge will
17 increase \$0.002063 per kWh, or 3.3 percent, to \$0.0063927 per kWh. Excluding
18 fuel and purchased power costs in the energy charge, the SMS summer energy

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1 charge will increase \$0.010474 per kWh, or 30.2 percent, and the winter energy
2 charge will increase \$0.007067 per kWh, or 24.0 percent.

3 **Q. Please summarize the changes to Large Municipal and School Service.**

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

8 Overall, non-fuel base rate revenue from LMS will increase \$955,000, or
9 18.03 percent, which is \$837,000 less than a cost of service-based increase as a
10 result of rate support provided by other rate classes. Under SPS's proposal, the
11 service availability charge will increase \$4.10 per month, or 17.8 percent, to
12 \$27.10. The energy charge will decrease \$0.004037 per kWh, or 10.7 percent, to
13 \$0.033815. Excluding fuel and purchased power costs in the energy charge, the
14 LMS energy charge will increase \$0.000967 per kWh, or 18.0 percent. The
15 summer demand charge will increase \$2.02 per kW, or 18.5 percent, to \$12.91.
16 The winter demand charge will increase \$1.56 per kW, or 17.7 percent, to \$10.37
17 per kW. The proposed change in the power factor charge from a kVAR-based

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1 charge to a kW-based charge, which is discussed later in more detail, will also
2 apply to LMS customers.

3 8. Area Lighting and Municipal Street Lighting

4 **Q. Please summarize the changes to Area Lighting.**

5 A. The base rate structure of AL will not change, in that the applicable charge is a set
6 monthly charge that varies according to light type and installation.

7 Overall, non-fuel base rate revenue from AL will increase approximately
8 \$330,000, or 18.05 percent, which, as a result of rate support provided by other
9 rate classes, is \$229,000 less than cost of service-based rates. Current monthly
10 rates are increased 10.5 percent to recover the AL revenue requirement, including
11 fuel and purchased power costs in base rates.

12 **Q. Please summarize the changes to Municipal Street Lighting.**

13 A. The base rate structure of SL will not change, in that applicable charges include a
14 set monthly charge that varies according to light type and installation.

15 Overall, base rate revenue from SL will increase by approximately
16 \$292,000, or 18.01 percent, which, as a result of rate support provided by other
17 rate classes, is \$609,000 less than cost of service-based rates. Current monthly

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1 rates are increased 10.9 percent to recover the SL revenue requirement, including
2 fuel and purchased power costs in base rates.

F. Proposed Revenue Reconciliation

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

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

13 **Q. Have you prepared a summary of all proposed base rates?**

14 A. Yes. In Attachment RML-7, I have prepared a summary of proposed base rates
15 compared to current base rates.

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V. PROPOSED TIME OF USE RATES

1 **Q. Is SPS proposing any new types of rates in this proceeding?**

2 A. Yes. SPS is proposing to offer experimental TOU rate options to Residential,
3 SGS, SG, Irrigation, PG, SMS, and LMS customers.

4 **Q. Why is SPS offering experimental TOU rates?**

5 A. SPS is offering experimental TOU rates in order to provide better pricing signals
6 to customers, to encourage reduction in load growth during peak periods, and to
7 encourage efficient use of SPS's production and transmission facilities.

8 **Q. Why are TOU rates being offered as experimental rate options?**

9 A. TOU rates are being offered to limited numbers of customers as experimental rate
10 options in order to better evaluate the interest in time-differentiated rates, enabling
11 SPS to ensure that it has sufficient TOU metering equipment and adequate billing
12 processes and systems before offering this option to an unlimited number of
13 customers.

14 In addition, SPS proposes to limit availability as an experimental option in
15 order to determine whether adjustments in the rates, structures or time intervals
16 can make the rates more effective and attractive to participants. By limiting the

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1 number of participants, SPS will be able to evaluate the structure and responses
2 by customers without affecting a large number of customers.

3 Finally, due to the fact that SPS is unsure of the number of participants
4 and the level of reduction in participants' on-peak loads, SPS cannot adequately
5 estimate the total savings that participants will achieve and the impact on SPS's
6 revenues. Therefore, limiting the number of participants at this time will also
7 limit the potential loss of base rate revenue for SPS.

8 **Q. Has SPS identified any specific groups of customers that it is reasonably**
9 **certain will participate in one of the experimental TOU rates options?**

10 A. Yes, based upon SPS's knowledge of load characteristics and discussions with
11 customer representatives, SPS expects that its cotton gin, cattle feed lot, and dairy
12 customers will be interested in participating in the TOU rates and can readily
13 adjust their operations to earn savings under TOU rates. Therefore, as will be
14 discussed later in this testimony, SPS adjusted the calculation of the standard SG
15 rate and the calculation of the SG Experimental TOU rate option to reflect the
16 participation of these customers.

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1 **Q. Generally, what type of customers does SPS expect will be among early**
2 **participants in the TOU rates?**

3 A. SPS expects that participants in these rates will be customers that are actively
4 engaged in managing their consumption and customers that already operate
5 primarily off-peak. Examples are commercial and industrial customers that have
6 annual peak loads in off-peak months, or residential customers that do not
7 typically use significant amounts of electricity during the summer peak hours.

8 **Q. How many customers by rate class will be permitted to participate in the**
9 **experimental TOU rates at this time?**

10 A. At this time, SPS is requesting to limit participation in the experimental TOU rate
11 options to a total of 50 Residential Service and Residential Space Heating
12 customers, 25 Small General Service customers, 20 Secondary General Service
13 customers, 20 Irrigation Power Service customers, 20 Primary General Service
14 customers, 20 Small Municipal and School Service customers, and 20 Large
15 Municipal and School Service customers.

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1 **Q. What will be the on-peak period for purposes of the TOU rates?**

2 A. The peak period established for all of the TOU rates will be 12:00 noon to 6:00
3 p.m. MDT, Monday through Friday, during the peak months of June through
4 September. All other hours will be off-peak.

5 **Q. How did SPS determine the appropriate on-peak period for purposes of the**
6 **TOU rates?**

7 A. SPS sought to identify the hours that included virtually all hours above 95 percent
8 of its annual system peak and the vast majority of hours above 90 percent of its
9 annual system peak, without including an unreasonable number of hours that are
10 typically not considered to be peak usage hours. The hours defined as the TOU
11 peak period included 96 percent of all hours within 5 percent of system peak and
12 76 percent of the hours within 10 percent of SPS's peak hours in calendar year
13 2014. Similar patterns occurred during calendar year 2013, with the TOU peak
14 hours representing 100 percent of the hours within 5 percent of system peak and
15 84 percent of the hours within 10 percent of SPS's peak hours.

16 **Q. What is the structure of the TOU rates?**

17 A. The TOU rates for each customer class are based upon the corresponding
18 standard, non-TOU rates. In addition, each TOU rate has an additional on-peak

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1 energy adder that significantly increases the cost of energy for all consumption
2 that occurs during the on-peak hours. This structure sends customers a strong
3 incentive to reduce consumption during the peak hours. This structure will enable
4 customers to operate equipment periodically during peak hours without incurring
5 a significant on-peak demand charge for infrequent loads. In addition, the Service
6 Availability Charge for each TOU rate is \$1.00 per month more than the charge
7 under the standard rate for smaller customers in kWh-metered rate classes and
8 \$2.00 per month for larger customers in kW demand-metered rate classes. The
9 additional monthly charge is to recover the cost of removing meters for existing
10 customers, installing new meters that are slightly more costly than the current
11 meters on all participating customers, and programming the meters for the TOU
12 rate option.

13 **Q. How are on-peak energy charges developed?**

14 A. The TOU rates are designed for each rate based on the load characteristics for the
15 customers served under that rate. These rates are each designed to recover 70
16 percent of SPS's avoided capacity costs through an on-peak energy adder. In

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1 SPS's most recent Renewable Portfolio Standard filing, Case No. 14-00198-UT,⁵
2 the 2016 avoided capacity cost is \$65.196 per kW-year at the generator. The off-
3 peak energy charges and demand charges, where applicable, are modified to
4 reflect the amount of capacity costs recovered through the on-peak energy charge,
5 based upon the average consumption during on-peak hours for customers served
6 under each rate. As a result, excluding the slightly increased monthly Service
7 Availability Charge that accounts for changes in metering, each rate is designed
8 such that the average customer in each rate will be billed the same amount over a
9 year under the TOU rates as it would under the applicable standard rate, unless
10 that customer changes its load characteristics.

11 **Q. Please summarize the proposed experimental Residential TOU rate rider.**

12 A. The elements of the Residential TOU rate option are comparable to Residential
13 Service, in that the Residential TOU customer's bill will include a service
14 availability charge and an energy charge. The TOU rate will have an off-peak
15 energy charge of \$0.080182 per kWh, and an on-peak energy charge that totals

⁵ *In the Matter of Southwestern Public Service Company's Application Requesting: (1) Acceptance of its 2013 Annual Renewable Portfolio Report; (2) Approval of its Annual Renewable Energy Portfolio Procurement Plan for 2015; and (3) Other Associated Relief*, Case No. 14-00198-UT, Order on Certification of Uncontested Stipulation (Dec. 10, 2014).

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1 \$0.213466 per kWh with the on-peak adder of \$0.133284. In addition, the service
2 availability charge with TOU rate option will be \$1.00 more than the Residential
3 service availability charge to account for meter replacement and meter
4 programming for the TOU option.

5 **Q. Please summarize the proposed experimental SGS TOU rate rider.**

6 A. The elements of the SGS TOU rate rider are comparable to SGS, in that the SGS
7 TOU customer's bill will include a service availability charge and an energy
8 charge. The TOU rate will have an off-peak energy charge of \$0.065466 per
9 kWh, and an on-peak energy charge that totals \$0.215008 per kWh with the on-
10 peak adder of \$0.149542. In addition, the service availability charge with TOU
11 rate option will be \$1.00 more than the SGS service availability charge to account
12 for meter replacement and meter programming for the TOU option.

13 **Q. Please summarize the proposed experimental SG TOU rate rider.**

14 A. The elements of the SG TOU rate are comparable to the SG rate, in that the SG
15 TOU customer's bill will include a service availability charge, an energy charge,
16 and a demand charge. A year-round TOU demand charge per kW will apply, at
17 \$11.87 per kW. The TOU rate will have the same energy charge as SG per kWh,
18 but the on-peak energy charge will total \$0.155660 per kWh with the on-peak

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1 adder of \$0.124153. In addition, the service availability charge with TOU rate
2 option will be \$2.00 more than the SG service availability charge to account for
3 meter replacement and meter programming for the TOU option.

4 **Q. Please summarize the proposed experimental PG TOU rate rider.**

5 A. The elements of the PG TOU rate are comparable to PG, in that the PG TOU
6 customer's bill will include a service availability charge, an energy charge, and a
7 demand charge. A year-round TOU demand charge per kW will apply, at \$11.20
8 per kW. The TOU rate will have the same energy charge as PG per kWh, but the
9 on-peak energy charge will total \$0.134376 per kWh with the on-peak adder of
10 \$0.104305. In addition, the service availability charge with TOU rate option will
11 be \$2.00 more than the PG service availability charge to account for meter
12 replacement and meter programming for the TOU option.

13 **Q. Please summarize the proposed experimental Irrigation TOU rate rider.**

14 A. The elements of the Irrigation TOU rate are comparable to Irrigation, in that the
15 Irrigation TOU customer's bill will include a service availability charge, an
16 energy charge, and a demand charge. The same demand charge per kW will
17 apply, at \$2.25 per kW in the summer and \$1.56 per kW in the winter. The TOU
18 rate will have an off-peak energy charge of \$0.059957 per kWh, but the on-peak

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1 energy charge will total \$0.227604 per kWh with the on-peak adder of \$0.167647.

2 In addition, the service availability charge with TOU rate option will be \$2.00
3 more than the Irrigation service availability charge to account for meter
4 replacement and meter programming for the TOU option.

5 **Q. Please summarize the proposed experimental SMS TOU rate rider.**

6 A. The elements of the SMS TOU rate rider are comparable to SMS, in that the SMS
7 TOU customer's bill will include a service availability charge and an energy
8 charge. The TOU rate will have an off-peak energy charge of \$0.058853 per
9 kWh, and an on-peak energy charge that totals \$0.199761 per kWh with the on-
10 peak adder of \$0.140908. In addition, the service availability charge with TOU
11 rate option will be \$1.00 more than the SMS service availability charge to account
12 for meter replacement and meter programming for the TOU option.

13 **Q. Please summarize the proposed experimental LMS TOU rate rider.**

14 A. The elements of the LMS TOU rate are comparable to LMS, in that the LMS
15 TOU customer's bill will include a service availability charge, an energy charge,
16 and a demand charge. The differences are in the demand charge and the on-peak
17 energy adder. A year-round TOU demand charge per kW will apply, at \$8.37 per
18 kW. The TOU rate will have the same energy charge as LMS per kWh, but the

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1 on-peak energy charge will total \$0.159678 per kWh with the on-peak adder of
2 \$0.125863. In addition, the service availability charge with the LMS TOU rate
3 option will be \$2.00 more than the LMS service availability charge to account for
4 meter replacement and meter programming for the TOU option.

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VI. TARIFFS

A. Rule Tariffs

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

2 A. The Rules, Regulations, and Conditions of Service are commonly referred to as
3 rule tariffs. Rule tariffs contain SPS's policies on services such as application for
4 service, customer installation, customer deposits, service disconnection, billing
5 adjustments, metering, and extension of service.

6 **Q. Is SPS proposing any changes or additions to its rule tariffs?**

7 A. Yes. SPS is proposing the following changes to its rule tariffs:

8 **Table RML-6**

Rule Tariff No.	Change
16, Extension to Customers	Changes the wording of the formula in one section of the rule so that it is consistent with other sections of the rule that exclude the cost of fuel and purchased power in determining the amount the Customer is required to fund for line extensions.
27, Temporary or Permanent Relocation/Modification of Company Facilities (original)	Add Rule Tariff for Temporary or Permanent Relocation of Company Facilities

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1 **Q. Please explain Rule Tariff No. 27.**

2 A. This rule clarifies the process by which SPS will agree to move SPS facilities at
3 the request of a customer or the customer's agent, and specifies that the customer
4 or the customer's agent is responsible for the cost of the relocation. SPS witness
5 Brad Baldrige further discusses some of the circumstances why it is necessary to
6 clarify the process for relocating SPS facilities through this rule.

B. Rate Tariffs

7 **Q. What are rate tariffs?**

8 A. Rate tariffs specify the terms and conditions under which SPS will provide
9 service, including the rates at which it will provide service. The following table
10 summarizes minor updates to SPS tariffs:

11 **Table RML-7**

Rate Tariff No.	Change
34, Large General Service – Transmission	Page 5. Updated net present value calculation of lease termination charge to 8.10 percent SPS cost of capital filed in this case.

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1 **Q. In addition to this minor update, are there are other proposed changes to**
2 **SPS's rate tariffs in this proceeding?**

3 A. Yes. SPS has proposed rate changes that reflect the updated revenue requirement,
4 and in addition, SPS is proposing three other changes. First, SPS proposes a
5 revision to Rate No. 14, Municipal Street Lighting Service, to provide a customer-
6 owned lighting option, in which SPS will provide electric service to lighting
7 fixtures owned by customers.

8 Second, SPS is proposing a change to Rate No. 26, Miscellaneous Service
9 Charges to eliminate the Field Collection Charge.

10 Third, SPS is proposing a change to the Power Factor Adjustment in
11 several rate tariffs that applies to large demand-metered customers that have, or
12 will have, kVAR metering in place so that the charge for low power factors is
13 based upon the ratio of the customer's power factor to a 95 percent power factor
14 multiplied by the customer's kW demand charge, rather than \$0.50 per kVAR in
15 excess of a below 95 percent power factor.

16 **Q. What change does SPS propose to Rate No. 14?**

17 A. SPS proposes to re-open a Customer-owned Street Lighting option for year-round
18 illumination of public streets and parkways by electric lamps mounted on

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of
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1 standards where a customer owns SPS-approved ornamental street light systems
2 complete with standards, luminaries with globes, lamps, and other appurtenances,
3 together with all necessary cables extending between standards and to the point of
4 connection to SPS's facilities as designated by the SPS. Currently, a Customer-
5 owned Street Lighting option is closed to new customers. In particular, SPS
6 expects that this option will appeal to some municipal customers that have
7 expressed an interest in LED systems, and as such has added representative
8 estimated kWh energy usage information for four LED lumen levels for the
9 purpose of billing the capacity and energy-related costs of LED systems. Actual
10 energy usage for Customer-owned lighting systems that go into place if the
11 Commission approves this revision may vary from the levels listed in Rate No.
12 14, in which case SPS will determine the average monthly kWh of the fixtures
13 before the customer-owned lighting systems go into service. In addition, although
14 SPS cannot be responsible for maintenance of Customer-owned lighting systems,
15 the Customer may request SPS to provide maintenance, with charges determined
16 on a case-by-case basis and detailed through a service agreement.

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of
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1 **Q. Why is SPS proposing to eliminate the Field Collection Charge in Rate No.**
2 **26?**

3 A. SPS is proposing to terminate Field Collection as a listed service in Rate No. 26,
4 first, because the service has not been provided for several years and, second,
5 because field collection adds to the difficulties and potential safety risks its
6 service employees face. Requiring service employees to potentially handle
7 payment in the field at the time an account is to be discontinued as a result of lack
8 of payment is an unnecessary risk to SPS employees and contractors. It is
9 appropriate for customers holding delinquent accounts to arrange payment of
10 previous unpaid balances at SPS offices before disconnection occurs, rather than
11 at the time the unpaid account has advanced to disconnection.

12 **Q. Please describe the proposed change in the power factor charge.**

13 A. SPS is proposing to clarify that the power factor charge will apply to all
14 customers with kVAR metering, and to clarify that SPS will install kVAR
15 metering at premises that are expected to require 200 kW or more load. The
16 proposed change will apply to Secondary General Service, Primary General
17 Service, Large General Service – Transmission, and Large Municipal and School

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of
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1 Service, including the proposed Time of Use rate options, and is consistent with
2 the same SPS proposal in its Texas retail service area.

3 SPS is also proposing to revise the tariffs to change billing for power
4 factors below 90 percent from a kVAR-based charge to a kW-based charge. The
5 proposed revision will base the charge upon the ratio of a 95 percent power factor
6 to the customer's actual metered monthly power factor, with the ratio applied to
7 the customer's metered kW demand billed at the applicable demand charge rate.
8 Currently, the power factor charge is based upon the relationship of the metered
9 kVAR to metered kW that results in a 95 percent power factor. If kVAR is
10 sufficiently high to cause a power factor lower than 95 percent, the customer is
11 charged 50 cents per kVAR in excess of a 95 percent power factor. Additionally,
12 SPS currently offers a comparable power factor credit if a customer's power
13 factor is greater than 95 percent. SPS proposes to withdraw the credit because it
14 should no longer be necessary to provide a credit to encourage a customer to
15 exceed a 95 percent power factor requirement. For new transmission loads, the
16 target power factor is now 98 percent.

17 The change will provide an allowance of 5 percent that will result in
18 customers not incurring a penalty unless their power factor falls below 90 percent.

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1 However, if their power factor drops below 90%, they will incur a power factor
2 charge that will reflect the full amount that their power factor is below 95 percent.
3 The change in the power factor charge will clearly indicate to the customer that
4 there are cost implications from lower power factors on system supply and
5 delivery planning, so that the customer is encouraged to make power factor
6 improvements.

7 **Q. Has SPS adjusted revenue based upon the proposed change in the power**
8 **factor charge?**

9 A. No. SPS expects that customers with low power factors will react to the revised
10 power factor charge and take the steps necessary to increase their power factors
11 and minimize the charge shortly after the revision takes effect.

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VII. CONCLUSION

- 1
- 2 **Q. Were Attachments RML-1 through RML-8 and the RFP Schedules you**
3 **sponsor or co-sponsor prepared by you or under your direct supervision and**
4 **control?**
- 5 A. Yes.
- 6 **Q. Do you incorporate the RFP Schedules shown to be sponsored or**
7 **co-sponsored by you into your testimony?**
- 8 A. Yes.
- 9 **Q. Does this conclude your direct pre-filed testimony?**
- 10 A. Yes.

VERIFICATION

STATE OF TEXAS)
) ss.
COUNTY OF POTTER)

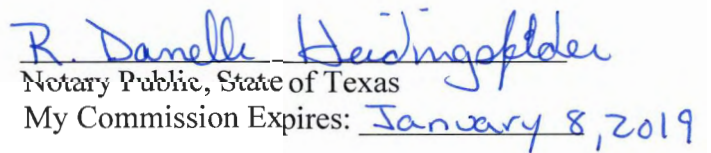
RICHARD M. LUTH, first being sworn on his oath, states:

I am the witness identified in the preceding direct testimony. I have read the testimony and the accompanying attachments and am familiar with their contents. Based upon my personal knowledge, the facts stated in the testimony are true. In addition, in my judgment and based upon my professional experience, the opinions and conclusions stated in the testimony are true, valid, and accurate.


RICHARD M. LUTH

SUBSCRIBED AND SWORN TO before me this 27 day of May, 2015.




Notary Public, State of Texas
My Commission Expires: January 8, 2019

**Southwestern Public Service Company
New Mexico Retail
Proof of Revenue Analysis
Forecast Test Year Ending December 31, 2016**

Test Year Information

Line No.	Rate Class	Base Rate Revenue at Present Base Rates		
	Present Rate	Billing Units	Rate	Revenue - \$
<u>Residential Service</u>				
Residential Basic				
1	Service Availability Charge	708,286 Bills	\$ 7.90 / Month	\$ 5,595,459
2	Energy Charge - Summer	245,587,052 kWh	\$ 0.096390 / kWh	23,672,136
3	Energy Charge - Winter	372,670,059 kWh	\$ 0.086958 / kWh	32,406,643
4	Total	618,257,111 kWh		\$ 61,674,238
Residential Heating				
5	Service & Facility Charge	358,152 Bills	\$ 7.90 / Month	\$ 2,829,401
6	Energy Charge - Summer	179,895,316 kWh	\$ 0.096390 / kWh	17,340,110
7	Energy Charge - Winter	353,386,627 kWh	\$ 0.067712 / kWh	23,928,515
8	Total	533,281,943 kWh		\$ 44,098,026
Residential Lighting Standby				
9	Production Standby Charge	325,229 kWh	\$ 0.005499 / kWh	\$ 1,788
10	Transmission and Distribution Standby Charge	325,229 kWh	\$ 0.031157 / kWh	10,133
11	Total	325,229 kWh		\$ 11,922
<u>Total Residential Service</u>				
12	Base Rate Revenue	1,151,539,054 kWh (kWh total excludes standby)		\$ 105,784,186
<u>Commercial & Industrial Service</u>				
<u>Small Commercial Service</u>				
SGS - Small General Service				
13	Service Availability Charge	140,098 Bills	\$ 14.40 / Month	\$ 2,017,411
14	Energy Charge - Summer	66,656,797 kWh	\$ 0.077162 / kWh	5,143,372
15	Energy Charge - Winter	107,206,992 kWh	\$ 0.070605 / kWh	7,569,350
16	Total	173,863,789 kWh		\$ 14,730,133
Small General Service Standby				
17	Production Standby Charge	423,731 kWh	\$ 0.004011 / kWh	\$ 1,700
18	Transmission and Distribution Standby Charge	423,731 kWh	\$ 0.020097 / kWh	8,516
19	Total	423,731 kWh		\$ 10,215
<u>Total Small Commercial Service</u>				
20	Base Rate Revenue	173,863,789 kWh (kWh total excludes standby)		\$ 14,740,348

**Southwestern Public Service Company
New Mexico Retail
Proof of Revenue Analysis
Forecast Test Year Ending December 31, 2016**

Test Year Information

Line No.	Rate Class Present Rate	Fuel in Base Rate	Fuel Revenue	Nonfuel Revenue
<u>Residential Service</u>				
Residential Basic				
1	Service Availability Charge			\$ 5,595,459
2	Energy Charge - Summer	\$ 0.032465 /kWh	\$ 7,972,984	15,699,152
3	Energy Charge - Winter	\$ 0.032465 /kWh	12,098,733	20,307,910
4	Total		\$ 20,071,717	\$ 41,602,521
Residential Heating				
5	Service & Facility Charge			\$ 2,829,401
6	Energy Charge - Summer	\$ 0.032465 /kWh	\$ 5,840,301	11,499,808
7	Energy Charge - Winter	\$ 0.032465 /kWh	11,472,697	12,455,818
8	Total		\$ 17,312,998	\$ 26,785,027
Residential Lighting Standby				
9	Production Standby Charge			\$ 1,788
10	Transmission and Distribution Standby Charge			10,133
11	Total			\$ 11,922
<u>Total Residential Service</u>				
12	Base Rate Revenue		\$ 37,384,715	\$ 68,399,470
<u>Commercial & Industrial Service</u>				
<u>Small Commercial Service</u>				
SGS - Small General Service				
13	Service Availability Charge			\$ 2,017,411
14	Energy Charge - Summer	\$ 0.032465 /kWh	\$ 2,164,013	2,979,359
15	Energy Charge - Winter	\$ 0.032465 /kWh	3,480,475	4,088,875
16	Total		\$ 5,644,488	\$ 9,085,645
Small General Service Standby				
17	Production Standby Charge			\$ 1,700
18	Transmission and Distribution Standby Charge			8,516
19	Total			\$ 10,215
<u>Total Small Commercial Service</u>				
20	Base Rate Revenue		\$ 5,644,488	\$ 9,095,860

**Southwestern Public Service Company
New Mexico Retail
Proof of Revenue Analysis
Forecast Test Year Ending December 31, 2016**

Test Year Information

Line No.	Rate Class Present Rate	Billing Units	Base Rate Revenue at Present Base Rates	
			Rate	Revenue - \$
<u>Commercial & Industrial Service (Continued)</u>				
SG - Secondary General Service				
21	Service Availability Charge	39,001 Bills	\$ 23.60 / Month	\$ 920,424
22	Demand Charge - Summer	709,293 kW-Mo	\$ 15.44 / kW-Mo	10,951,490
23	Demand Charge - Winter	1,249,895 kW-Mo	\$ 12.76 / kW-Mo	15,948,663
24	Energy Charge	679,617,273 kWh	\$ 0.037140 / kWh	25,240,986
25	Power Factor Charge	129,803 kVar	\$ 0.50 / kVar	64,901
26	Power Factor Credit	4,434 kVar	\$ (0.50) / kVar	(2,217)
27	Total	679,617,273 kWh		\$ 53,124,246
IR - Irrigation Service				
28	Service Availability Charge	12,680 Bills	\$ 22.30 / Month	\$ 282,764
29	Demand Charge - Summer	147,248 kW-Mo	\$ 1.65 / kW-Mo	242,960
30	Demand Charge - Winter	197,538 kW-Mo	\$ 1.32 / kW-Mo	260,750
31	Energy Charge	81,736,289 kWh	\$ 0.073402 / kWh	5,999,607
32	Total	81,736,289 kWh		\$ 6,786,080
PG - Primary General Service				
33	Customer Months	56,629 Bills	\$ 75.00 / Month	\$ 4,247,175
34	Demand Charge - Summer	1,268,759 kW-Mo	\$ 13.91 / kW-Mo	17,648,436
35	Demand Charge - Winter	2,430,817 kW-Mo	\$ 11.50 / kW-Mo	27,954,392
36	Energy Charge	1,825,545,118 kWh	\$ 0.034569 / kWh	63,107,269
37	Power Factor Charge	876,338 kVar	\$ 0.50 / kVar	438,169
38	Power Factor Credit	97,952 kVar	\$ (0.50) / kVar	(48,976)
39	Total	1,825,545,118 kWh		\$ 113,346,466
LGS-T - Large General Service - Transmission				
40	Service Availability Billing Charge	72 Bills	\$ 1,311.30 / Month	\$ 94,414
41	Demand Charge - Summer	247,210 kW-Mo	\$ 9.42 / kW-Mo	2,328,714
42	Demand Charge - Winter	497,386 kW-Mo	\$ 7.80 / kW-Mo	3,879,609
43	Energy Charge	408,445,099 kWh	\$ 0.033369 / kWh	13,629,404
44	Power Factor Charge	424,375 kVar	\$ 0.50 / kVar	212,188
45	Power Factor Credit	kVar	\$ (0.50) / kVar	-
46	Total	408,445,099 kWh		\$ 20,144,329
LGS-T - Large General Service - Backbone Transmission				
47	Service Availability Billing Charge	240 Bills	\$ 1,311.30 / Month	\$ 314,712
48	Demand Charge - Summer	1,082,943 kW-Mo	\$ 9.13 / kW-Mo	9,887,266
49	Demand Charge - Winter	1,978,432 kW-Mo	\$ 7.55 / kW-Mo	14,937,163
50	Energy Charge	1,906,015,581 kWh	\$ 0.033122 / kWh	63,131,048
51	Power Factor Charge	719,323 kVar	\$ 0.50 / kVar	359,662
52	Power Factor Credit	40,536 kVar	\$ (0.50) / kVar	(20,268)
53	Total	1,906,015,581 kWh		\$ 88,609,583
Total Commercial & Industrial - General Service				
54	Total at Current Rates	4,901,359,360 kWh		\$ 282,010,704

**Southwestern Public Service Company
New Mexico Retail
Proof of Revenue Analysis
Forecast Test Year Ending December 31, 2016**

Test Year Information

Line No.	Rate Class Present Rate	Fuel in Base Rate	Fuel Revenue	Nonfuel Revenue
<u>Commercial & Industrial Service (Continued)</u>				
SG - Secondary General Service				
21	Service Availability Charge			\$ 920,424
22	Demand Charge - Summer			10,951,490
23	Demand Charge - Winter			15,948,663
24	Energy Charge	\$ 0.032465 /kWh	\$ 22,063,775	3,177,211
25	Power Factor Charge			64,901
26	Power Factor Credit			(2,217)
27	Total		\$ 22,063,775	\$ 31,060,472
IR - Irrigation Service				
28	Service Availability Charge			\$ 282,764
29	Demand Charge - Summer			242,960
30	Demand Charge - Winter			260,750
31	Energy Charge	\$ 0.032465 /kWh	\$ 2,653,569	3,346,038
32	Total		\$ 2,653,569	\$ 4,132,512
PG - Primary General Service				
33	Customer Months			\$ 4,247,175
34	Demand Charge - Summer			17,648,436
35	Demand Charge - Winter			27,954,392
36	Energy Charge	\$ 0.031871 /kWh	\$ 58,181,948	4,925,321
37	Power Factor Charge			438,169
38	Power Factor Credit			(48,976)
39	Total		\$ 58,181,948	\$ 55,164,517
LGS-T - Large General Service - Transmission				
40	Service Availability Billing Charge			\$ 94,414
41	Demand Charge - Summer			2,328,714
42	Demand Charge - Winter			3,879,609
43	Energy Charge	\$ 0.029581 /kWh	\$ 12,082,214	1,547,190
44	Power Factor Charge			212,188
45	Power Factor Credit			-
46	Total		\$ 12,082,214	\$ 8,062,114
LGS-T - Large General Service - Backbone Transmission				
47	Service Availability Billing Charge			\$ 314,712
48	Demand Charge - Summer			9,887,266
49	Demand Charge - Winter			14,937,163
50	Energy Charge	\$ 0.029362 /kWh	\$ 55,964,429	7,166,619
51	Power Factor Charge			359,662
52	Power Factor Credit			(20,268)
53	Total		\$ 55,964,429	\$ 32,645,153
Total Commercial & Industrial - General Service				
54	Total at Current Rates		\$ 150,945,936	\$ 131,064,768

**Southwestern Public Service Company
New Mexico Retail
Proof of Revenue Analysis
Forecast Test Year Ending December 31, 2016**

Test Year Information

Line No.	Rate Class Present Rate	Billing Units	Base Rate Revenue at Present Base Rates	
			Rate	Revenue - \$
<u>Commercial & Industrial - Standby Service</u>				
PQFSSNM				
55	Service Availability Charge	60 Bills	\$ 75.00 / Month	\$ 4,500
56	Tran & Dist Standby Capacity Fee - Summer	704 kW-Mo	\$ 7.49 / kW-Mo	5,273
57	Tran & Dist Standby Capacity Fee - Winter	1,408 kW-Mo	\$ 6.20 / kW-Mo	8,730
58	Gen Standby Cap Reservation Fee - Summer	704 kW-Mo	\$ 1.61 / kW-Mo	1,133
59	Gen Standby Cap Reservation Fee - Winter	1,408 kW-Mo	\$ 1.33 / kW-Mo	1,873
60	Firm Demand Charge - Summer	156 kW-Mo	\$ 13.91 / kW-Mo	2,170
61	Firm Demand Charge - Winter	268 kW-Mo	\$ 11.50 / kW-Mo	3,082
62	Energy Charge	570,833 kWh	\$ 0.034569 / kWh	19,733
63	Total	570,833 kWh		\$ 46,494
TQFSSNM				
115kV +				
64	Service Availability Charge-Non Firm stand-by	12 Bills	\$ 1,311.30 / Month	\$15,736
65	Transmission Standby Capacity Fee - Summer	32,148 kW-Mo	\$ 3.41 / kW-Mo	109,625
66	Transmission Standby Capacity Fee - Winter	64,296 kW-Mo	\$ 2.82 / kW-Mo	181,315
67	Gen Standby Cap Reservation Fee - Summer	32,148 kW-Mo	\$ 1.43 / kW-Mo	45,972
68	Gen Standby Cap Reservation Fee - Winter	64,296 kW-Mo	\$ 1.18 / kW-Mo	75,869
69	Firm Demand Charge - Summer	kW-Mo	\$ 9.13 / kW-Mo	0
70	Firm Demand Charge - Winter	1,708 kW-Mo	\$ 7.55 / kW-Mo	12,895
71	Energy Charge	3,066,428 kWh	\$ 0.033122 / kWh	101,566
72	Total	3,066,428 kWh		\$542,978
73	Total Commercial & Industrial - Standby Service	3,637,261 kWh		\$589,472
<u>Total Commercial & Industrial Service</u>				
74	Base Rate Revenue	4,904,996,621 kWh		\$ 282,600,176
<u>Public Authority Service</u>				
<u>Large Municipal and School Service</u>				
75	Service Availability Charge	6,251 Bills	\$ 23.00 / Month	\$ 143,773
77	Demand Charge - Summer	175,079 kW-Mo	\$ 10.89 / kW-Mo	1,906,615
78	Demand Charge - Winter	291,904 kW-Mo	\$ 8.81 / kW-Mo	2,571,673
79	Energy Charge	123,917,633 kWh	\$ 0.037852 / kWh	4,690,530
80	Power Factor Charge	10,329 kVar	\$ 0.50 / kVar	5,165
81	Power Factor Credit	693 kVar	\$ (0.50) / kVar	(346)
82	Total	123,917,633 kWh		\$ 9,317,410
<u>Small Municipal and School Service</u>				
83	Service Availability Charge	14,674 Bills	\$ 14.40 / Month	\$ 211,306
84	Energy Charge - Summer	5,287,513 kWh	\$ 0.067103 / kWh	354,808
85	Energy Charge - Winter	8,077,744 kWh	\$ 0.061864 / kWh	499,722
86	Total	13,365,257 kWh		\$ 1,065,835
<u>Small Municipal and School Standby</u>				
87	Production Standby Charge	kWh	\$ 0.003087 / kWh	\$ -
88	Transmission and Distribution Standby Charge	kWh	\$ 0.016923 / kWh	-
89	Total	kWh		\$ -
<u>Total Public Authority Service</u>				
90	Base Rate Revenue	137,282,890 kWh		\$ 10,383,245
(kWh total excludes standby)				

**Southwestern Public Service Company
New Mexico Retail
Proof of Revenue Analysis
Forecast Test Year Ending December 31, 2016**

Test Year Information

Line No.	Rate Class Present Rate	Fuel in Base Rate	Fuel Revenue	Nonfuel Revenue
<u>Commercial & Industrial - Standby Service</u>				
PQFSSNM				
55	Service Availability Charge			\$ 4,500
56	Tran & Dist Standby Capacity Fee - Summer			5,273
57	Tran & Dist Standby Capacity Fee - Winter			8,730
58	Gen Standby Cap Reservation Fee - Summer			1,133
59	Gen Standby Cap Reservation Fee - Winter			1,873
60	Firm Demand Charge - Summer			2,170
61	Firm Demand Charge - Winter			3,082
62	Energy Charge	\$ 0.031871 /kWh	\$ 18,193	1,540
63	Total		\$ 18,193	\$ 28,301
TQFSSNM				
115kV +				
64	Service Availability Charge-Non Firm stand-by			\$ 15,736
65	Transmission Standby Capacity Fee - Summer			109,625
66	Transmission Standby Capacity Fee - Winter			181,315
67	Gen Standby Cap Reservation Fee - Summer			45,972
68	Gen Standby Cap Reservation Fee - Winter			75,869
69	Firm Demand Charge - Summer			-
70	Firm Demand Charge - Winter			12,895
71	Energy Charge	\$ 0.029362 /kWh	\$ 90,036	11,530
72	Total		\$ 90,036	\$ 452,942
73	Total Commercial & Industrial - Standby Service		\$ 108,229	\$ 481,243
<u>Total Commercial & Industrial Service</u>				
74	Base Rate Revenue		\$ 151,054,165	\$ 131,546,011
<u>Public Authority Service</u>				
<u>Large Municipal and School Service</u>				
75	Service Availability Charge			\$ 143,773
76	Demand Charge - Summer			1,906,615
77	Demand Charge - Winter			2,571,673
78	Energy Charge	\$ 0.032465 /kWh	\$ 4,022,986	667,544
79	Power Factor Charge			5,165
80	Power Factor Credit			(346)
81	Total		\$ 4,022,986	\$ 5,294,424
<u>Small Municipal and School Service</u>				
82	Service Availability Charge			\$ 211,306
83	Energy Charge - Summer	\$ 0.032465 /kWh	\$ 171,659	183,149
84	Energy Charge - Winter	\$ 0.032465 /kWh	\$ 262,244	237,478
85	Total		\$ 433,903	\$ 631,932
<u>Small Municipal and School Standby</u>				
86	Production Standby Charge			\$ -
87	Transmission and Distribution Standby Charge			-
88	Total			\$ -
<u>Total Public Authority Service</u>				
89	Base Rate Revenue		\$ 4,456,889	\$ 5,926,356

**Southwestern Public Service Company
New Mexico Retail
Proof of Revenue Analysis
Forecast Test Year Ending December 31, 2016**

Test Year Information

Line No.	Rate Class		Base Rate Revenue at Present Base Rates	
	Present Rate		Billing Units	Rate Revenue - \$
<u>Street and Area Lighting Service</u>				
<u>Area Lights</u>				
91	7,000	MV	175 watt	32,331 \$ 11.87 \$ 383,772
92	15,000	HPS	150 watt	111,839 \$ 11.14 \$ 1,245,881
93	27,500	HPS	250 watt	610 \$ 13.70 8,357
94	50,000	HPS	400 watt	8,215 \$ 17.50 143,762
95	140,000	HPS	1,000 watt	10,002 \$ 30.25 \$ 302,553
96	14,000	MTHL	175 watt	120 \$ 12.37 \$ 1,480
97	20,500	MTHL	250 watt	179 \$ 14.53 2,607
98	36,000	MTHL	400 watt	3,495 \$ 16.92 59,142
99	110,000	MTHL	1,000 watt	6,527 \$ 31.85 \$ 207,900
100	Subtotal		173,318 lights	
101			16,215,207 kWh	\$ 2,355,454
<u>Street Lights</u>				
102	7,000	MV	175 watt	55,999 \$ 11.87 \$ 664,708
103	20,000	MV	400 watt	14,049 \$ 17.10 240,245
104	35,000	MV	700 watt	351 \$ 24.88 8,739
105	50,000	MV	1,000 watt	170 \$ 30.43 \$ 5,160
106	15,000	HPS	150 watt	41,002 \$ 11.14 \$ 456,768
107	27,500	HPS	250 watt	41,082 \$ 13.70 562,829
108	50,000	HPS	400 watt	6,661 \$ 17.50 \$ 116,574
109	Subtotal		159,315 lights	
110			13,421,501 kWh	\$ 2,055,022
111	<u>Total Lighting Service</u>		332,634 Lights	
112	Base Rate Revenue		29,636,708 kWh	\$ 4,410,477
<u>Total Company</u>				
113	Total NM Retail Revenue Requirement		6,397,319,061 kWh	\$ 417,918,431

**Southwestern Public Service Company
New Mexico Retail
Proof of Revenue Analysis
Forecast Test Year Ending December 31, 2016**

Test Year Information

Line No.	Rate Class Present Rate	Fuel in Base Rate	Fuel Revenue	Nonfuel Revenue
<u>Street and Area Lighting Service</u>				
<u>Area Lights</u>				
91	7,000 MV 175 watt			
92	15,000 HPS 150 watt			
93	27,500 HPS 250 watt			
94	50,000 HPS 400 watt			
95	140,000 HPS 1,000 watt			
96	14,000 MTHL 175 watt			
97	20,500 MTHL 250 watt			
98	36,000 MTHL 400 watt			
99	110,000 MTHL 1,000 watt			
100	Subtotal	\$ 0.032465 /kWh	\$ 526,427	\$ 1,829,028
101	<u>Street Lights</u>			
102	7,000 MV 175 watt			
103	20,000 MV 400 watt			
104	35,000 MV 700 watt			
105	50,000 MV 1,000 watt			
106	15,000 HPS 150 watt			
107	27,500 HPS 250 watt			
108	50,000 HPS 400 watt			
109	Subtotal	\$ 0.032465 /kWh	\$ 435,729	\$ 1,619,293
110				
111	<u>Total Lighting Service</u>			
112	Base Rate Revenue		\$ 962,156	\$ 3,448,321
113	<u>Total Company</u>			
	Total NM Retail Revenue Requirement		\$ 199,502,413	\$ 218,416,018

Southwestern Public Service Company
Proposed Revenue Distribution
at 75% to 125% of Average
Forecast Test Year Ending December 31, 2016

Line No.	Description	Residential Service with				General Service, Secondary and			
		Total	Residential Service	Electric Space Heating	Total Residential	Small General Service	Secondary General Service	Primary General Service	Primary
1	Total Revenues at Present Rates	\$ 417,918,431	\$ 61,681,391	\$ 44,102,794	\$ 105,784,186	\$ 14,740,348	\$ 53,124,246	\$ 113,392,960	\$ 166,517,206
2	Fuel at Present Fuel Rate	\$ (199,502,413)	\$ (20,071,717)	\$ (17,312,998)	\$ (37,384,715)	\$ (5,644,488)	\$ (22,063,775)	\$ (58,200,141)	\$ (80,263,916)
3	Total Non-Fuel Base Revenues at Present Rates	\$ 218,416,018	\$ 41,609,674	\$ 26,789,796	\$ 68,399,470	\$ 9,095,860	\$ 31,060,472	\$ 55,192,818	\$ 86,253,290
4	Total Cost of Service at Equalized ROR	\$ 419,320,107	\$ 66,950,394	\$ 51,310,779	\$ 118,261,173	\$ 16,535,121	\$ 51,173,942	\$ 102,773,970	\$ 153,947,912
5	Less: Test Year Fuel and Purchased Power Costs	\$ (169,393,095)	\$ (16,977,923)	\$ (14,644,425)	\$ (31,622,348)	\$ (4,774,463)	\$ (18,662,931)	\$ (49,198,559)	\$ (67,861,490)
6	Total Non-Fuel Cost of Service	\$ 249,927,012	\$ 49,972,471	\$ 36,666,354	\$ 86,638,826	\$ 11,760,658	\$ 32,511,011	\$ 53,575,412	\$ 86,086,423
7	Non-Fuel Revenue Deficiency At Equalized ROR	\$ 31,510,995	\$ 8,362,797	\$ 9,876,558	\$ 18,239,355	\$ 2,664,798	\$ 1,450,539	\$ (1,617,407)	\$ (166,867)
8	% Revenue Deficiency	14.43%	20.10%	36.87%	26.67%	29.30%	4.67%	-2.93%	-0.19%
9	Initial Application of 75% to 125% Bandwidth								
10	Initial Revenue Increase Distribution	\$ 31,497,392	\$ 7,503,812	\$ 4,831,223	\$ 12,335,035	\$ 1,640,331	\$ 3,360,833	\$ 5,972,023	\$ 9,332,856
11	Initial Unrecovered Increase due to Limits	\$ 13,602	\$ 858,985	\$ 5,045,335	\$ 5,904,321	\$ 1,024,467	\$ (1,910,294)	\$ (7,589,430)	\$ (9,499,723)
12	Maximum Increases for Classes Not Subject to Limits	\$ 4,880,965	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	Allocator for Initial Unrecovered Increase	100.00%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
14	Allocation of Initial Unrecovered Increase	\$ 13,602	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15	Non-Fuel Base Rate Revenue Increase	\$ 31,510,995	\$ 7,503,812	\$ 4,831,223	\$ 12,335,035	\$ 1,640,331	\$ 3,360,833	\$ 5,972,023	\$ 9,332,856
16	% Non-Fuel Base Rate Revenue Increase	14.43%	18.03%	18.03%	18.03%	18.03%	10.82%	10.82%	10.82%
17	Total Non-Fuel Base Rate Revenue	\$ 249,927,012	\$ 49,113,486	\$ 31,621,019	\$ 80,734,505	\$ 10,736,191	\$ 34,421,305	\$ 61,164,841	\$ 95,586,146
18	Fuel Adjustment	\$ (30,109,318)	\$ (3,093,794)	\$ (2,668,574)	\$ (5,762,368)	\$ (870,024)	\$ (3,400,844)	\$ (9,001,583)	\$ (12,402,427)
19	% Fuel Adjustment	-15.09%	-15.41%	-15.41%	-15.41%	-15.41%	-15.41%	-15.47%	-15.45%
20	Total Base Rate Increase (Decrease)	\$ 1,401,677	\$ 4,410,018	\$ 2,162,649	\$ 6,572,667	\$ 770,306	\$ (40,011)	\$ (3,029,560)	\$ (3,069,571)
21	% Base Rate Revenue Increase	0.34%	7.15%	4.90%	6.21%	5.23%	-0.08%	-2.67%	-1.84%
22	Total Base Rate Revenue, including Fuel	\$ 419,320,107	\$ 66,091,409	\$ 46,265,443	\$ 112,356,853	\$ 15,510,654	\$ 53,084,235	\$ 110,363,400	\$ 163,447,635

Southwestern Public Service Company
Proposed Revenue Distribution
at 75% to 125% of Average
Forecast Test Year Ending December 31, 2016

Line No.	Description	Large General Service		Large General Service		Total Large General Service		Small Municipal and School Service		Large Municipal and School Service		Municipal Street Lighting Service		Area Lighting Service	
		Irrigation Power Service	Transmission, 69 kV	Transmission, 115 kV +	Transmission, 115 kV +	Transmission, 69 kV	Transmission, 115 kV +	Transmission, 69 kV	Transmission, 115 kV +	Transmission, 69 kV	Transmission, 115 kV +	Transmission, 69 kV	Transmission, 115 kV +	Transmission, 69 kV	Transmission, 115 kV +
1	Total Revenues at Present Rates	\$ 6,786,080	\$ 20,144,329	\$ 89,152,561	\$ 109,296,889	\$ 1,065,835	\$ 9,317,410	\$ 2,055,022	\$ 2,355,454	\$ 2,055,022	\$ 2,355,454	\$ 2,055,022	\$ 2,355,454	\$ 2,055,022	\$ 2,355,454
2	Fuel at Present Fuel Rate	\$ (2,653,569)	\$ (12,082,214)	\$ (56,054,466)	\$ (68,136,680)	\$ (435,903)	\$ (4,022,986)	\$ (435,903)	\$ (4,022,986)	\$ (435,903)	\$ (4,022,986)	\$ (435,903)	\$ (4,022,986)	\$ (435,903)	\$ (4,022,986)
3	Total Non-Fuel Base Revenues at Present Rates	\$ 4,132,512	\$ 8,062,114	\$ 33,098,095	\$ 41,160,209	\$ 631,932	\$ 5,294,424	\$ 631,932	\$ 5,294,424	\$ 631,932	\$ 5,294,424	\$ 631,932	\$ 5,294,424	\$ 631,932	\$ 5,294,424
4	Total Cost of Service at Equalized ROR	\$ 8,980,217	\$ 18,278,994	\$ 85,945,536	\$ 104,224,530	\$ 1,159,213	\$ 10,489,565	\$ 2,888,594	\$ 2,833,782	\$ 2,888,594	\$ 2,833,782	\$ 2,888,594	\$ 2,833,782	\$ 2,888,594	\$ 2,833,782
5	Less: Test Year Fuel and Purchased Power Costs	\$ (2,244,556)	\$ (10,339,994)	\$ (47,966,476)	\$ (58,306,469)	\$ (367,023)	\$ (3,402,895)	\$ (368,567)	\$ (445,285)	\$ (368,567)	\$ (445,285)	\$ (368,567)	\$ (445,285)	\$ (368,567)	\$ (445,285)
6	Total Non-Fuel Cost of Service	\$ 6,735,662	\$ 7,939,001	\$ 37,979,060	\$ 45,918,061	\$ 792,191	\$ 7,086,670	\$ 2,520,027	\$ 2,388,497	\$ 2,520,027	\$ 2,388,497	\$ 2,520,027	\$ 2,388,497	\$ 2,520,027	\$ 2,388,497
7	Non-Fuel Revenue Deficiency At Equalized ROR	\$ 2,603,150	\$ (123,114)	\$ 4,880,965	\$ 4,757,852	\$ 160,259	\$ 1,792,246	\$ 900,733	\$ 559,470	\$ 160,259	\$ 1,792,246	\$ 900,733	\$ 559,470	\$ 160,259	\$ 1,792,246
8	% Revenue Deficiency	62.99%	-1.53%	14.75%	11.56%	25.36%	33.85%	55.63%	30.59%	25.36%	33.85%	55.63%	30.59%	25.36%	33.85%
9	Initial Application of 75% to 125% Bandwidth	18.03%	10.82%	14.75%	11.56%	18.03%	18.03%	18.03%	18.03%	18.03%	18.03%	18.03%	18.03%	18.03%	18.03%
10	Initial Revenue Increase Distributor	\$ 745,250	\$ 872,344	\$ 4,880,965	\$ 5,753,309	\$ 113,961	\$ 954,787	\$ 292,020	\$ 329,843	\$ 113,961	\$ 954,787	\$ 292,020	\$ 329,843	\$ 113,961	\$ 954,787
11	Initial Unrecovered Increase due to Limits	\$ 1,857,900	\$ (995,458)	\$ -	\$ (995,458)	\$ 46,297	\$ 837,460	\$ 608,713	\$ 229,626	\$ 46,297	\$ 837,460	\$ 608,713	\$ 229,626	\$ 46,297	\$ 837,460
12	Maximum Increases for Classes Not Subject to Limits	\$ -	\$ -	\$ 4,880,965	\$ 4,880,965	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	Allocator for Initial Unrecovered Increase	\$ 0.0000%	\$ 0.0000%	\$ 100.0000%	\$ 100.0000%	\$ 0.0000%	\$ 0.0000%	\$ 0.0000%	\$ 0.0000%	\$ 0.0000%	\$ 0.0000%	\$ 0.0000%	\$ 0.0000%	\$ 0.0000%	\$ 0.0000%
14	Allocation of Initial Unrecovered Increase	\$ -	\$ -	\$ 13,602	\$ 13,602	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15	Non-Fuel Base Rate Revenue Increase	\$ 745,250	\$ 872,344	\$ 4,894,568	\$ 5,766,912	\$ 113,961	\$ 954,787	\$ 292,020	\$ 329,843	\$ 113,961	\$ 954,787	\$ 292,020	\$ 329,843	\$ 113,961	\$ 954,787
16	% Non-Fuel Base Rate Revenue Increase	18.03%	10.82%	14.79%	14.01%	18.03%	18.03%	18.03%	18.03%	18.03%	18.03%	18.03%	18.03%	18.03%	18.03%
17	Total Non-Fuel Base Rate Revenue	\$ 4,877,761	\$ 8,934,458	\$ 37,992,662	\$ 46,927,121	\$ 745,894	\$ 6,249,210	\$ 1,911,314	\$ 2,158,871	\$ 745,894	\$ 6,249,210	\$ 1,911,314	\$ 2,158,871	\$ 745,894	\$ 6,249,210
18	Fuel Adjustment	\$ (409,013)	\$ (1,742,221)	\$ (8,087,990)	\$ (9,830,211)	\$ (66,881)	\$ (620,091)	\$ (67,162)	\$ (81,142)	\$ (66,881)	\$ (620,091)	\$ (67,162)	\$ (81,142)	\$ (66,881)	\$ (620,091)
19	% Fuel Adjustment	-15.41%	-14.42%	-14.43%	-14.43%	-15.41%	-15.41%	-15.41%	-15.41%	-15.41%	-15.41%	-15.41%	-15.41%	-15.41%	-15.41%
20	Total Base Rate Increase (Decrease)	\$ 336,236	\$ (869,877)	\$ (3,193,423)	\$ (4,063,299)	\$ 47,081	\$ 334,696	\$ 224,858	\$ 248,702	\$ 47,081	\$ 334,696	\$ 224,858	\$ 248,702	\$ 47,081	\$ 334,696
21	% Base Rate Revenue Increase	4.95%	-4.32%	-3.58%	-3.72%	4.42%	3.59%	10.94%	10.56%	4.42%	3.59%	10.94%	10.56%	4.42%	3.59%
22	Total Base Rate Revenue, including Fuel	\$ 7,122,317	\$ 19,274,452	\$ 85,959,138	\$ 105,233,590	\$ 1,112,916	\$ 9,652,105	\$ 2,279,881	\$ 2,604,156	\$ 1,112,916	\$ 9,652,105	\$ 2,279,881	\$ 2,604,156	\$ 1,112,916	\$ 9,652,105

Southwestern Public Service Company
Illustrative Revenue Distribution by Customer
Class at 50 to 150% of Average
Forecast Test Year Ending December 31, 2016

Line No.	Description	Residential Service with Electric Space Heating			Total Residential	Small General Service	Secondary General Service	General Service, Secondary and Primary	
		Total New Mexico	Residential Service	Electric Space Heating				General Service	Primary
1	Total Revenues at Present Rates	\$ 417,918,431	\$ 61,681,391	\$ 44,102,794	\$ 105,784,186	\$ 14,740,348	\$ 53,124,246	\$ 113,392,960	\$ 166,517,206
2	Fuel at Present Fuel Rate	\$ (199,502,413)	\$ (20,071,717)	\$ (17,312,998)	\$ (37,384,715)	\$ (5,644,488)	\$ (22,063,775)	\$ (58,200,141)	\$ (80,263,916)
3	Total Non-Fuel Base Revenues at Present Rates	\$ 218,416,018	\$ 41,609,674	\$ 26,789,796	\$ 68,399,470	\$ 9,095,860	\$ 31,060,472	\$ 55,192,818	\$ 86,253,290
4	Total Cost of Service at Equalized ROR	\$ 419,320,107	\$ 66,950,394	\$ 51,310,779	\$ 118,261,173	\$ 16,535,121	\$ 51,173,942	\$ 102,773,970	\$ 153,947,912
5	Less: Test Year Fuel and Purchased Power Costs	\$ (169,393,095)	\$ (16,977,923)	\$ (14,644,425)	\$ (31,622,348)	\$ (4,774,463)	\$ (18,662,931)	\$ (49,198,559)	\$ (67,861,490)
6	Total Non-Fuel Cost of Service	\$ 249,927,012	\$ 49,972,471	\$ 36,666,354	\$ 86,638,826	\$ 11,760,658	\$ 32,511,011	\$ 53,575,412	\$ 86,086,423
7	Non-Fuel Revenue Deficiency At Equalized ROR	\$ 31,510,995	\$ 8,362,797	\$ 9,876,558	\$ 18,239,355	\$ 2,664,798	\$ 1,450,539	\$ (1,617,407)	\$ (166,867)
8	% Revenue Deficiency	14.43%	20.10%	36.87%	26.67%	29.30%	4.67%	-2.93%	-0.19%
9	Initial Application of 50% to 150% Bandwidth	14.07%	20.10%	21.64%	21.64%	21.64%	7.21%	7.21%	7.21%
10	Initial Revenue Increase Distribution	\$ 30,736,127	\$ 8,362,797	\$ 5,797,467	\$ 14,160,264	\$ 1,968,397	\$ 2,240,555	\$ 3,981,349	\$ 6,221,904
11	Initial Unrecovered Increase due to Limits	\$ 774,868	\$ -	\$ 4,079,091	\$ 4,079,091	\$ 696,401	\$ (790,016)	\$ (5,598,755)	\$ (6,388,771)
12	Maximum Increases for Classes Not Subject to Limits	\$ 13,243,763	\$ 8,362,797	\$ -	\$ 8,362,797	\$ -	\$ -	\$ -	\$ -
13	Allocator for Initial Unrecovered Increase	100.00%	63.1452%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
14	Allocation of Initial Unrecovered Increase	\$ 774,868	\$ 489,292	\$ -	\$ 489,292	\$ -	\$ -	\$ -	\$ -
15	Non-Fuel Base Rate Revenue Increase	\$ 31,510,995	\$ 8,852,089	\$ 5,797,467	\$ 14,649,556	\$ 1,968,397	\$ 2,240,555	\$ 3,981,349	\$ 6,221,904
16	% Non-Fuel Base Rate Revenue Increase	14.43%	21.27%	21.64%	21.42%	21.64%	7.21%	7.21%	7.21%
17	Total Non-Fuel Base Rate Revenue	\$ 249,927,012	\$ 50,461,763	\$ 32,587,263	\$ 83,049,026	\$ 11,064,257	\$ 33,301,027	\$ 59,174,167	\$ 92,475,194
18	Fuel Adjustment	\$ (30,109,318)	\$ (3,093,794)	\$ (2,668,574)	\$ (5,762,368)	\$ (870,024)	\$ (3,400,844)	\$ (9,001,583)	\$ (12,402,427)
19	% Fuel Adjustment	-15.09%	-15.41%	-15.41%	-15.41%	-15.41%	-15.41%	-15.47%	-15.45%
20	Total Base Rate Increase (Decrease)	\$ 1,401,677	\$ 5,758,295	\$ 3,128,894	\$ 8,887,188	\$ 1,098,372	\$ (1,160,289)	\$ (5,020,234)	\$ (6,180,523)
21	% Base Rate Revenue Increase	0.34%	9.34%	7.09%	8.40%	7.45%	-2.18%	-4.43%	-3.71%
22	Total Base Rate Revenue, including Fuel	\$ 419,320,107	\$ 67,439,686	\$ 47,231,688	\$ 114,671,374	\$ 15,838,720	\$ 51,963,958	\$ 108,372,726	\$ 160,336,683

**Southwestern Public Service Company
Illustrative Revenue Distribution by Customer
Class at 50 to 150% of Average
Forecast Test Year Ending December 31, 2016**

Line No.	Description	Large General			Total Large			Municipal		
		Irrigation Power Service	Service Transmission, 69 kV	Service Transmission, 115 kV +	General Service Transmission	Small Municipal School Service	Large Municipal School Service	Street Lighting Service	Area Lighting Service	
1	Total Revenues at Present Rates	\$ 6,786,080	\$ 20,144,329	\$ 89,152,561	\$ 109,296,889	\$ 1,065,835	\$ 9,317,410	\$ 2,055,022	\$ 2,355,454	
2	Fuel at Present Fuel Rate	\$ (2,653,569)	\$ (12,082,214)	\$ (56,054,466)	\$ (68,136,680)	\$ (433,903)	\$ (4,022,986)	\$ (435,729)	\$ (526,427)	
3	Total Non-Fuel Base Revenues at Present Rates	\$ 4,132,512	\$ 8,062,114	\$ 33,098,095	\$ 41,160,209	\$ 631,932	\$ 5,294,424	\$ 1,619,293	\$ 1,829,028	
4	Total Cost of Service at Equalized ROR	\$ 8,980,217	\$ 18,278,994	\$ 85,945,536	\$ 104,224,530	\$ 1,159,213	\$ 10,489,565	\$ 2,888,594	\$ 2,833,782	
5	Less: Test Year Fuel and Purchased Power Costs	\$ (2,244,556)	\$ (10,339,994)	\$ (47,966,476)	\$ (58,306,469)	\$ (367,023)	\$ (3,402,895)	\$ (368,567)	\$ (445,285)	
6	Total Non-Fuel Cost of Service	\$ 6,735,662	\$ 7,939,001	\$ 37,979,060	\$ 45,918,061	\$ 792,191	\$ 7,086,670	\$ 2,520,027	\$ 2,388,497	
7	Non-Fuel Revenue Deficiency At Equalized ROR	\$ 2,603,150	\$ (123,114)	\$ 4,880,965	\$ 4,757,852	\$ 160,259	\$ 1,792,246	\$ 900,733	\$ 559,470	
8	% Revenue Deficiency	62.99%	-1.53%	14.75%	11.56%	25.36%	33.85%	55.63%	30.59%	
9	Initial Application of 50% to 150% Bandwidth	21.64%	7.21%	14.75%	11.56%	21.64%	21.64%	21.64%	21.64%	
10	Initial Revenue Increase Distribution	\$ 894,299	\$ 581,563	\$ 4,880,965	\$ 5,462,528	\$ 136,754	\$ 1,145,744	\$ 350,424	\$ 395,812	
11	Initial Unrecovered Increase due to Limits	\$ 1,708,850	\$ (704,676)	\$ -	\$ (704,676)	\$ 23,505	\$ 646,502	\$ 550,309	\$ 163,657	
12	Maximum Increases for Classes Not Subject to Limits	\$ -	\$ -	\$ 4,880,965	\$ 4,880,965	\$ -	\$ -	\$ -	\$ -	
13	Allocator for Initial Unrecovered Increase	0.0000%	0.0000%	36.8548%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	
14	Allocation of Initial Unrecovered Increase	\$ -	\$ -	\$ 285,576	\$ 285,576	\$ -	\$ -	\$ -	\$ -	
15	Non-Fuel Base Rate Revenue Increase	\$ 894,299	\$ 581,563	\$ 5,166,541	\$ 5,748,104	\$ 136,754	\$ 1,145,744	\$ 350,424	\$ 395,812	
16	% Non-Fuel Base Rate Revenue Increase	21.64%	7.21%	15.61%	13.97%	21.64%	21.64%	21.64%	21.64%	
17	Total Non-Fuel Base Rate Revenue	\$ 5,026,811	\$ 8,643,677	\$ 38,264,636	\$ 46,908,313	\$ 768,686	\$ 6,440,168	\$ 1,969,718	\$ 2,224,840	
18	Fuel Adjustment	\$ (409,013)	\$ (1,742,221)	\$ (8,087,990)	\$ (9,830,211)	\$ (66,881)	\$ (620,091)	\$ (67,162)	\$ (81,142)	
19	% Fuel Adjustment	-15.41%	-14.42%	-14.43%	-14.43%	-15.41%	-15.41%	-15.41%	-15.41%	
20	Total Base Rate Increase (Decrease)	\$ 485,286	\$ (1,160,658)	\$ (2,921,449)	\$ (4,082,107)	\$ 69,873	\$ 525,653	\$ 283,263	\$ 314,670	
21	% Base Rate Revenue Increase	7.15%	-5.76%	-3.28%	-3.73%	6.56%	5.64%	13.78%	13.36%	
22	Total Base Rate Revenue, including Fuel	\$ 7,271,367	\$ 18,983,671	\$ 86,231,112	\$ 105,214,783	\$ 1,135,708	\$ 9,843,063	\$ 2,338,285	\$ 2,670,125	

Line No.	Class Rate	Annual Bills	Total Customer Rev. Req.	Total \$/Month	Service Availability Charge \$/Month	Customer Costs Recovered through Monthly Service Availability Charge	Customer Costs to be Recovered through Other Charges	Current Charge	
1	<u>Residential</u>	1,066,438	\$ 13,042,170	\$ 12.23	\$ 9.50	\$ 10,131,161	\$ 2,911,009	\$ 7.90	20.25%
2	<u>Small General Service</u>	140,098	\$ 2,010,880	\$ 14.35	\$ 14.40	\$ 2,017,411	\$ (6,531)	\$ 14.40	0.00%
3	<u>Secondary General</u>	39,001	\$ 1,716,031	\$ 44.00	\$ 27.10	\$ 1,056,927	\$ 659,104	\$ 23.60	14.83%
4	<u>Irrigation Service</u>	12,680	\$ 336,575	\$ 26.54	\$ 26.50	\$ 336,020	\$ 555	\$ 22.30	18.83%
5	<u>Primary General</u>	56,689	\$ 2,661,084	\$ 46.94	\$ 54.90	\$ 3,112,226	\$ (451,142)	\$ 75.00	-26.80%
6	<u>Large General Transmission</u> service at or above 69 KV	324	\$ 223,450	\$ 689.66	\$ 689.00	\$ 223,236	\$ 214	\$ 1,311.30	-47.46%
7	<u>Small Municipal and School</u>	14,674	\$ 213,123	\$ 14.52	\$ 14.50	\$ 212,773	\$ 350	\$ 14.40	0.69%
8	<u>Large Municipal and School</u>	6,251	\$ 265,833	\$ 42.53	\$ 27.10	\$ 169,402	\$ 96,431	\$ 23.00	17.83%
9	<u>Street Lighting</u>		\$ 2,043,059	(1)					
10	<u>Area Lighting</u>		\$ 1,811,258	(1)					

(1) Street and Area Lighting customer costs are included with other costs in monthly charge

**Southwestern Public Service Company
New Mexico
System Capacity Charge
Forecast Test Year Ending December 31, 2016**

Line No.	System Capacity Revenue Requirement	Residential Service	Residential Space Heating	Small General Service	Small Municipal & School
1	Production Capacity Cost:	\$ 15,899,495	\$ 11,095,896	\$ 3,715,790	\$ 193,391
	Delivery Capacity Cost:				
2	Transmission System	\$ 11,791,897	\$ 8,254,011	\$ 2,765,174	\$ 145,165
3	Distribution Substations	3,328,014	3,254,460	770,726	55,997
4	Primary Distribution System	4,930,505	4,821,535	1,141,843	82,960
5	Secondary Distribution System	2,788,112	2,726,491	645,692	46,912
6	Subtotal Delivery Capacity Cost	\$ 22,838,527	\$ 19,056,498	\$ 5,323,435	\$ 331,033
7	Excess Customer Cost	\$ 1,933,377	\$ 977,632	\$ (6,531)	\$ 350
	Gradualism Support	\$ (858,985)	\$ (5,045,335)	\$ (1,024,467)	\$ (46,297)
8	Total Delivery Cost	\$ 23,912,919	\$ 14,988,794	\$ 4,292,437	\$ 285,086
	Total System Capacity Revenue Requirement:	\$ 39,812,414	\$ 26,084,690	\$ 8,008,226	\$ 478,477
9	System Capacity Cost	\$ 38,738,022	\$ 30,152,394	\$ 9,039,224	\$ 524,424
10	Gradualism Support	(858,985)	(5,045,335)	(1,024,467)	(46,297)
11	Excess Customer Cost	1,933,377	977,632	(6,531)	350
12	Total	\$ 39,812,414	\$ 26,084,690	\$ 8,008,226	\$ 478,477
Annual Billing Units					
Energy					
13	Summer	245,587,052 kWh	179,895,316 kWh	66,656,797 kWh	5,287,513 kWh
14	Standby	69,361 kWh	50,808 kWh	162,452 kWh	- kWh
15		245,656,413	179,946,124	66,819,249	5,287,513
16	Seasonal Ratio	1.191096	1.191096	1.241367	1.241367
17	Equivalent Summer	292,600,371 kWh	214,333,109 kWh	82,947,210 kWh	6,563,744 kWh
18	Winter	372,670,059 kWh	353,386,627 kWh	107,206,992 kWh	8,077,744 kWh
19	Standby	105,253 kWh	99,807 kWh	261,279 kWh	- kWh
20	Total Equivalent	665,375,683 kWh	567,819,543 kWh	190,415,481 kWh	14,641,488 kWh
21	Total Metered	618,431,725 kWh	533,432,558 kWh	174,287,520 kWh	13,365,257 kWh
Production Capacity Charge					
Production Capacity Charges:					
22	Winter	\$ 0.023899 / kWh	\$ 0.019544 / kWh	\$ 0.019536 / kWh	\$ 0.013208 / kWh
23	Seasonal Ratio	1.191096	1.191096	1.241367	1.241367
24	Summer	\$ 0.028466 / kWh	\$ 0.023279 / kWh	\$ 0.024251 / kWh	\$ 0.016396 / kWh
Delivery Capacity Charge					
25	Winter Delivery Capacity Unit Cost	\$ 0.034324 / kWh	\$ 0.033561 / kWh	\$ 0.027957 / kWh	\$ 0.022609 / kWh
26	Seasonal Ratio	1.191096	1.191096	1.241367	1.241367
27	Summer Delivery Capacity Unit Cost	\$ 0.040883	\$ 0.039974	\$ 0.034705	\$ 0.028066
28	Gradualism Support	\$ (0.001389) / kWh	\$ (0.009458) / kWh	\$ (0.005878) / kWh	\$ (0.003464) / kWh
29	Excess Customer Cost	\$ 0.003126 / kWh	\$ 0.001833 / kWh	\$ (0.000037) / kWh	\$ 0.000026 / kWh
Total Capacity Charges:					
30	Summer	\$ 0.071086 / kWh	\$ 0.055628 / kWh	\$ 0.053041 / kWh	\$ 0.041024 / kWh
31	Winter	\$ 0.059960 / kWh	\$ 0.045480 / kWh	\$ 0.041578 / kWh	\$ 0.032379 / kWh
Adjusted Residential					
32	Summer	\$ 0.068622 / kWh	\$ 0.068622 / kWh		
33	Winter	\$ 0.059222 / kWh	\$ 0.041345 / kWh		
34	Summer Recovery	\$ 16,857,434	\$ 12,348,263		
35	Winter Recovery	\$ 22,076,500	\$ 14,614,897		
36		\$ 38,933,934	\$ 26,963,160		
37	Total Capacity Cost allocated	\$ 39,812,414	\$ 26,084,690		
38	Difference	\$ (878,480)	\$ 878,469		

Southwestern Public Service Company
New Mexico
System Capacity Charge
Forecast Test Year Ending December 31, 2016

Line
No.

Production Capacity Charge

		Large Municipal and School
1	Production Capacity Costs	\$ 2,414,016
	Total Annual Equivalent Production Billing Demands - at Meter	
2	Summer	175,079
3	Seasonal Ratio	<u>1.241367</u>
4	Equivalent Summer Billing Demands	217,338
5	Winter	<u>291,904</u>
6	Total	509,242
		466,983
	Production Capacity Unit Costs	
7	Winter	\$ 4.740 /kW
8	Summer Differential	<u>1.241367</u>
9	Summer	\$ 5.885 /kW

Delivery Capacity Charge

	Delivery Capacity Revenue Requirement by System Component	
10	Transmission System	\$ 1,799,777
11	Distribution Substations	633,309
12	Primary Distribution System	938,258
13	Secondary Distribution System	530,568
14	Less: Power Factor Charges	<u>(5,165)</u>
15	Subtotal Delivery Capacity Cost	\$ 3,896,747
	Total Annual Equivalent Production Billing Demands - at Meter	
16	Summer	175,079
17	Seasonal Ratio	<u>1.241</u>
18	Equivalent Summer Billing Demands	217,338
19	Winter	<u>291,904</u>
20	Total	509,242
	Delivery Capacity Unit Costs:	
21	Winter	\$ 7.652 /kW
22	Summer Differential	<u>1.241367</u>
23	Summer	\$ 9.499 /kW
24	Gradualism Support	\$ (837,460)
25	Winter	\$ (1.793) /kW
26	Summer	\$ (1.793) /kW
27	Excess Customer Costs	\$ 96,431
28	Winter	\$ 0.206 /kW
29	Summer	\$ 0.206 /kW
	<u>Total Capacity Charges:</u>	
30	Summer	\$ 13.80 /kW
31	Winter	\$ 10.81 /kW

**Southwestern Public Service Company
New Mexico
Capacity Charge
Forecast Test Year Ending December 31, 2016**

1) Blends Secondary and Primary
2) Blends LGS-T, 69 kV and 115 kV +

		Commercial & Industrial Service					
		Production Capacity Charges					
Line No.		(1)	(1)	(2)	(2)		
		Secondary General	Primary General	Total Primary and Secondary General	Large General Service Transmission 69 - 115kV	Large General Service Transmission 115kV	Total LGS-T
Production Capacity Charge							
1	Allocated Production Capacity Costs	\$ 11,504,406	\$ 18,478,724	\$ 29,983,130	\$ 3,604,592	\$ 17,422,842	\$ 21,027,433
2	Rate Support	\$ 1,910,294	\$ 7,589,430	\$ 9,499,723	\$ 995,458	\$ 13,602	\$ 1,009,060
		<u>\$ 13,414,700</u>	<u>\$ 26,068,154</u>	<u>\$ 39,482,853</u>	<u>\$ 4,600,049</u>	<u>\$ 17,436,444</u>	<u>\$ 22,036,493</u>
Billing Demand, at Customer's Meter							
3	General Service, Summer	692,261	1,268,915	1,961,176	247,210	1,082,943	1,330,152
4	General Service, Winter	1,225,535	2,431,085	3,656,620	497,386	1,980,140	2,477,526
5	Total	<u>1,917,797</u>	<u>3,700,000</u>	<u>5,617,796</u>	<u>744,595</u>	<u>3,063,083</u>	<u>3,807,678</u>
6	Standby Service, Summer	-	704	-	-	32,148	32,148
7	Standby Service, Winter	-	1,408	-	-	64,296	64,296
8	Total	<u>-</u>	<u>2,112</u>	<u>-</u>	<u>-</u>	<u>96,444</u>	<u>96,444</u>
9	Summer Seasonal Ratio	1.250000	1.250000		1.096525	1.096525	
10	Line loss-adjustment Factor	1.158647	1.127359		1.035392	1.026174	
11	Seasonally-adjusted Billing Demand --						
12	General Service:	2,090,862	4,017,228		768,457	3,167,614	3,936,071
13	Standby (at 25% for Production Capacity Charge):	-	572		-	24,887	24,887
14	Total (for Winter kW Charge calculation)	<u>2,090,862</u>	<u>4,017,800</u>		<u>768,457</u>	<u>3,192,501</u>	
15	Line loss and Seasonally-adjusted Billing Demand (for capacity cost distribution)	<u>2,422,571</u>	<u>4,529,503</u>	<u>6,952,074</u>	<u>795,654</u>	<u>3,276,061</u>	<u>4,071,716</u>
16		<u>34.85%</u>	<u>65.15%</u>	<u>100.00%</u>	<u>19.54%</u>	<u>80.46%</u>	<u>100.00%</u>
17	Production Revenue Requirement	<u>\$ 13,758,485</u>	<u>\$ 25,724,368</u>	<u>\$ 39,482,853</u>	<u>\$ 4,306,154</u>	<u>\$ 17,730,339</u>	<u>\$ 22,036,493</u>
Production Capacity Charges:							
18	Summer (Winter x Summer Seasonal Ratio)	\$ 8.23	\$ 8.00		\$ 6.14	\$ 6.09 / kW-Mo	
19	Winter	\$ 6.58	\$ 6.40		\$ 5.60	\$ 5.55 / kW-Mo	
Delivery Capacity Charges:							
20	Summer	\$ 9.23	\$ 7.86		\$ 4.19	\$ 4.19 / kW-Mo	
21	Winter	\$ 7.38	\$ 6.29		\$ 3.82	\$ 3.82 / kW-Mo	
Total Capacity Charges:							
22	Summer	\$ 17.46	\$ 15.86		\$ 10.33	\$ 10.28 / kW-Mo	
23	Winter	\$ 13.96	\$ 12.69		\$ 9.42	\$ 9.37 / kW-Mo	
Standby kW Billing							
24	Summer	-	704		-	32,148	
25	Summer Differential	1,250	1,250		1,097	1,097	
26	Equivalent Summer kW	-	880		-	35,251	
27	Winter	-	1,408		-	64,296	
Production Charges							
General Service							
28	Summer	\$ 5,697,311	\$ 10,151,319		\$ 1,517,867	\$ 6,595,121	
29	Winter	\$ 8,064,022	\$ 15,558,942		\$ 2,787,168	\$ 10,997,197	
Standby							
30	Summer	\$ -	\$ 1,408		\$ -	\$ 48,865	
31	Winter	\$ -	\$ 2,253		\$ -	\$ 89,371	
32	Total	<u>\$ 13,761,333</u>	<u>\$ 25,713,922</u>	<u>\$ 39,475,255</u>	<u>\$ 4,305,035</u>	<u>\$ 17,730,553</u>	<u>\$ 22,035,588</u>
T&D Charges							
33	Summer	\$ 6,389,573	\$ 9,979,205	\$ 16,368,777	\$ 1,035,808	\$ 4,672,230	\$ 5,708,038
34	Winter	\$ 9,044,450	\$ 15,300,379	\$ 24,344,829	\$ 1,899,193	\$ 7,805,960	\$ 9,705,153
		<u>\$ 15,434,023</u>	<u>\$ 25,279,584</u>	<u>\$ 40,713,606</u>	<u>\$ 2,935,001</u>	<u>\$ 12,478,190</u>	<u>\$ 15,413,191</u>
Total General Service Capacity Charge							
35	Recovery	\$ 29,195,355	\$ 50,993,506	\$ 80,188,861	\$ 7,240,036	\$ 30,208,743	\$ 37,448,779

**Southwestern Public Service Company
New Mexico
System Capacity Charge
Forecast Test Year Ending December 31, 2016**

Line No.		Secondary General	Primary General	Total Primary and Secondary General	Large General Service-Transmission		Total LGS-T
					69 - 115kV	115kV+	
	Total Annual Delivery Billing Demands						
1	Summer, at meter	692,261	1,269,619		247,210	1,115,091	
2	Winter, at meter	1,225,535	2,432,493		497,386	2,044,436	
		<u>1,917,797</u>	<u>3,702,112</u>		<u>744,595</u>	<u>3,159,527</u>	<u>3,904,122</u>
	Adjusted Annual Delivery Billing Demands:						
	At Meter						
3	Summer	692,261	1,269,619		247,210	1,115,091	1,362,300
4	Seasonal Differential	1.250000	1.250000		1.096525	1.096525	
5	Equivalent Summer Billing Demands	865,327	1,587,024		271,071	1,222,725	1,493,796
6	Winter	1,225,535	2,432,493		497,386	2,044,436	2,541,822
7	Seasonal-adjusted Total Billing Demands	<u>2,090,862</u>	<u>4,019,516</u>	<u>6,110,378</u>	<u>768,457</u>	<u>3,267,161</u>	<u>4,035,618</u>
8		<u>34.22%</u>	<u>65.78%</u>	<u>100.00%</u>	<u>19.04%</u>	<u>80.96%</u>	<u>100.00%</u>
	Delivery Costs based upon Weighted Billing Demand:						
9	Transmission System	\$ 7,549,964	\$ 14,514,207	\$ 22,064,170	\$ 2,968,276	\$ 12,619,878	\$ 15,588,154
10	Radial Transmission Lines	192,103	369,303	561,406	74,687	317,538	392,224
11	Distribution Substations	2,343,200	4,504,616	6,847,816			
12	Primary Distribution System	3,471,488	6,673,660	10,145,148			
13	Secondary Distribution System	587,546		587,546			
	Line Transformers	1,409,446		1,409,446			
14	Less: Power Factor Revenues	<u>(172,142)</u>	<u>(330,929)</u>	<u>(503,071)</u>	<u>(108,891)</u>	<u>(462,958)</u>	<u>(571,849)</u>
15	Subtotal Delivery Capacity Cost	\$ 15,381,605	\$ 25,730,858	\$ 41,112,463	\$ 2,934,072	\$ 12,474,457	\$ 15,408,529
16	Excess Customer Cost	<u>659,104</u>	<u>(451,142)</u>	<u>207,962</u>	<u>166</u>	<u>47</u>	<u>\$ 214</u>
17	Total Delivery Cost	\$ 16,040,709	\$ 25,279,716	\$ 41,320,425	\$ 2,934,239	\$ 12,474,504	\$ 15,408,743
18	Less: Time of Use Recovery	<u>\$ (603,045)</u>					
19	Total to be Recovered from General Service	\$ 15,437,664					
	Divided by:						
20	Seasonal-adjusted Total Billing Demands	<u>2,090,862</u>	<u>4,019,516</u>	<u>6,110,378</u>	<u>768,457</u>	<u>3,267,161</u>	
21	Winter Delivery Capacity Charge	\$ 7.38	\$ 6.29		\$ 3.82	\$ 3.82	per kW per month
22	Multiplied by: Summer Demand Ratio	<u>1.250</u>	<u>1.250</u>		<u>1.097</u>	<u>1.097</u>	
23	Summer Delivery Capacity Charge	\$ 9.23	\$ 7.86		\$ 4.19	\$ 4.19	per kW per month
24	Summer Recoveries	\$ 6,389,573	\$ 9,979,205	\$ 16,368,777	\$ 1,035,808	\$ 4,672,230	\$ 5,708,038
25	Winter Recoveries	<u>9,044,450</u>	<u>15,300,379</u>	<u>24,344,829</u>	<u>1,899,193</u>	<u>7,805,960</u>	<u>9,705,153</u>
26		<u>\$ 15,434,023</u>	<u>\$ 25,279,584</u>	<u>\$ 40,713,606</u>	<u>\$ 2,935,001</u>	<u>\$ 12,478,190</u>	<u>\$ 15,413,191</u>

Southwestern Public Service Company
New Mexico
Irrigation Capacity Charge per kW
Forecast Test Year Ending December 31, 2016

Line
No.

1	Current Summer kW Charge Billings	\$ 242,960
2	Proposed % Increase	36.07%
3	Proposed \$ Increase	<u>\$ 87,630</u>
4	Proposed Summer kW Charge Billings	\$ 330,589
5	Summer kW	<u>147,248</u>
6	Proposed Summer kW Charge	<u><u>\$ 2.25</u></u>
7	Current Winter kW Charge Billings	\$ 260,750
8	Proposed % Increase	18.03%
9	Proposed \$ Increase	<u>\$ 47,023</u>
10	Proposed Winter kW Charge Billings	\$ 307,773
11	Winter kW	<u>197,538</u>
12	Proposed Winter kW Charge	<u><u>\$ 1.56</u></u>
13	Total Proposed kW Charge Billings	\$ 639,467
14	Total Capacity Costs	(6,066,679)
15	Rate Support Received	1,857,900
16	Under-recovered Customer Costs	<u>(555)</u>
17	Under-recovered Costs to kWh Charge	<u><u>\$ (3,569,867)</u></u>

Southwestern Public Service Company
New Mexico
Base Energy Charge
Forecast Test Year Ending December 31, 2016

Line No.	Rate Class	Revenue Requirement -- Energy Costs	Divided by: Metered kWh	Energy Cost Recovery per kWh	Fuel Costs	Metered kWh	Base Fuel per kWh	As Billed
1	Residential	\$ 36,328,587	1,151,539,054	= \$ 0.031548	\$ 31,622,348	1,151,539,054	\$ 0.027461 (2)	\$ 31,622,414
2	Fuel	\$ 5,485,017	173,863,789	= \$ 0.031548	\$ 4,774,463	173,863,789	\$ 0.027461 (2)	\$ 4,774,473
3	Secondary General	\$ 77,972,133	2,505,733,224	= \$ 0.031507	\$ 18,662,931	679,617,273	\$ 0.027461 (2)	\$ 18,662,970
4	Primary General	\$ 6,146,830 (1)	81,736,289	= \$ 0.030973	\$ 49,198,559	1,826,115,951	\$ 0.026942	\$ 49,199,216
5	Irrigation	\$ 66,993,269	2,317,527,107	= \$ 0.029087	\$ 10,339,994	408,445,099	\$ 0.025316	\$ 10,340,196
6	Large General Transmission -- 69 kV - 115kV	\$ 151,112,232	4,904,996,621	= \$ 0.028811	\$ 47,966,476	1,909,082,009	\$ 0.025125	\$ 47,965,685
7	Large General Transmission -- 115KV+				\$ 128,412,515	4,904,996,621		\$ 128,412,638
8	Total C&I	\$ 421,666	13,365,257	= \$ 0.031549	\$ 367,023	13,365,257	\$ 0.027461 (2)	\$ 367,023
9	Small Municipal and School	\$ 3,907,805	123,917,633	= \$ 0.031536	\$ 3,402,895	123,917,633	\$ 0.027461 (2)	\$ 3,402,902
10	Large Municipal and School	\$ 4,329,471	137,282,890		\$ 3,769,918	137,282,890		
11	Street Lighting	\$ 423,278	Recovered through monthly charge		\$ 368,567	13,421,501	\$ 0.027461 (2)	\$ 368,568
12	Area Lighting	\$ 511,497			\$ 445,285	16,215,207	\$ 0.027461 (2)	\$ 445,286
13	Total Street and Area Lighting	\$ 934,774			\$ 813,852	29,636,708		
14	Total	\$ 198,190,081			\$ 169,393,095	6,397,319,061	\$ 0.026479	\$ 169,393,294

- (1) Irrigation includes unrecovered capacity costs, net of rate support received. See Irrigation kW demand charge calculation.
(2) Secondary voltage fuel and purchased power in base rates are combined to determine a uniform amount per kWh.

Total Energy Rate, including Capacity Costs		Residential	Residential Space Heating	Small General	Small Municipal and School
18	Summer				
19	Energy Costs	\$ 0.031548	\$ 0.031548	\$ 0.031548	\$ 0.031549
20	Capacity Costs	\$ 0.068622	\$ 0.068622	\$ 0.053041	\$ 0.041024
	Total	\$ 0.100170	\$ 0.100170	\$ 0.084589	\$ 0.072573
21	Winter				
22	Energy Costs	\$ 0.031548	\$ 0.031548	\$ 0.031548	\$ 0.031549
23	Capacity Costs	\$ 0.059222	\$ 0.041345	\$ 0.041578	\$ 0.032379
	Total	\$ 0.090770	\$ 0.072893	\$ 0.073126	\$ 0.063928

Southwestern Public Service Company
New Mexico Retail
Revenue at Proposed Rates
Forecast Test Year Ended December 31, 2016

Line No.	Rate Class	Present Rate	Billing Units	Base Rate Revenue at Proposed Base Rates Rate	Revenue - \$	Fuel in Base Rates per kWh	Fuel Revenue	Non-fuel Revenue	Change in Non-fuel Revenue
<u>Residential Service</u>									
Residential Basic									
1			708,286 Bills	\$ 9.50 /Month	\$ 6,728,717			\$ 6,728,717	20.25%
2			245,587,052 kWh	\$ 0.100170 /kWh	24,600,455	\$ 0.027461	\$ 6,744,066	17,856,389	13.74%
3			372,670,059 kWh	\$ 0.090781 /kWh	33,831,361	\$ 0.027461	10,233,892	23,597,468	16.20%
4			618,257,111 kWh		\$ 65,160,533		\$ 16,977,959	\$ 48,182,574	15.82%
				Target	65,212,929				
Residential Heating									
5			358,152 Bills	\$ 9.50 /Month	\$ 3,402,444			\$ 3,402,444	20.25%
6			179,895,316 kWh	\$ 0.100170 /kWh	18,020,114	\$ 0.027461	\$ 4,940,105	13,080,009	13.74%
7			353,386,627 kWh	\$ 0.072893 /kWh	25,759,411	\$ 0.027461	9,704,350	16,055,061	28.90%
8			533,281,943 kWh		\$ 47,181,969		\$ 14,644,455	\$ 32,537,514	21.48%
				Target	47,143,912				
Residential Lighting Standby									
9			325,229 kWh	\$ 0.006549 /kWh	\$ 2,130			\$ 2,130	19.10%
10			325,229 kWh	\$ 0.036774 /kWh	11,960			11,960	18.03%
11			325,229 kWh		\$ 14,090			\$ 14,090	18.19%
Total Residential Service									
12			1,151,539,054 kWh	Target	\$ 112,356,592		\$ 31,622,414	\$ 80,734,178	18.03%
					\$ 112,356,853				
					\$ (261)				

Southwestern Public Service Company
New Mexico Retail
Revenue at Proposed Rates
Forecast Test Year Ended December 31, 2016

Line No.	Rate Class	Present Rate	Billing Units	Base Rate Revenue at Proposed Base Rates Rate	Revenue - \$	Fuel in Base Rates per kWh	Fuel Revenue	Non-fuel Revenue	Change in Non-fuel Revenue
<u>Small Commercial Service</u>									
SGS - Small General Service									
13	Service Availability Charge		140,098 Bills	\$ 14.40 /Month	\$ 2,017,411			\$ 2,017,411	0.00%
14	Energy Charge - Summer		66,656,797 kWh	\$ 0.084623 /kWh	\$ 5,640,698	\$ 0.027461	\$ 1,830,462	\$ 3,810,236	27.89%
15	Energy Charge - Winter		107,206,992 kWh	\$ 0.073126 /kWh	\$ 7,839,618	\$ 0.027461	\$ 2,944,011	\$ 4,895,607	19.73%
16	Total		173,863,789 kWh		\$ 15,497,728		\$ 4,774,473	\$ 10,723,254	18.02%
Small General Service Standby									
17	Production Standby Charge		423,731 kWh	\$ 0.004818 /kWh	\$ 2,041			\$ 2,041	20.11%
18	Transmission and Distribution Standby Charge		423,731 kWh	\$ 0.025031 /kWh	\$ 10,606			\$ 10,606	24.55%
19	Total		423,731 kWh		\$ 12,648			\$ 12,648	23.81%
Total Small Commercial Service									
20	Base Rate Revenue		173,863,789 kWh		\$ 15,510,376		\$ 4,774,473	\$ 10,735,902	18.03%
(279)									
<u>Commercial & Industrial Service</u>									
SG - Secondary General Service									
21	Service Availability Charge		38,761 Bills	\$ 27.10 /Month	\$ 1,050,423			\$ 1,050,423	14.83%
22	Demand Charge - Summer		692,261 kW-Mo	\$ 17.46 /kW-Mo	\$ 12,086,884			\$ 12,086,884	13.08%
23	Demand Charge - Winter		1,225,535 kW-Mo	\$ 13.99 /kW-Mo	\$ 17,145,237			\$ 17,145,237	9.64%
24	Energy Charge		662,791,280 kWh	\$ 0.031507 /kWh	\$ 20,882,565	\$ 0.027461	\$ 18,200,911	\$ 2,681,654	-13.45%
25	Power Factor Charge				\$ 64,901			\$ 64,901	0.00%
26	Total		662,791,280 kWh		\$ 51,230,011		\$ 18,200,911	\$ 33,029,100	8.64%
SG - Secondary General Service Time of Use option									
27	Service Availability Charge		240 Bills	\$ 29.10 /Month	\$ 6,984			\$ 6,984	23.31%
28	Demand Charge - Summer		17,032 kW-Mo	\$ 11.87 /kW-Mo	\$ 202,170			\$ 202,170	19.36%
29	On-peak Energy Charge		899,870 kWh	\$ 0.124153 /kW-Mo	\$ 111,722			\$ 111,722	-6.97%
30	Demand Charge - Winter		24,360 kW-Mo	\$ 11.87 /kW-Mo	\$ 289,153			\$ 289,153	-13.45%
31	Energy Charge		16,825,993 kWh	\$ 0.031507 /kWh	\$ 530,137	\$ 0.027461	\$ 462,059	\$ 68,078	3.03%
32	Total		16,825,993 kWh		\$ 1,140,165		\$ 462,059	\$ 678,107	
					target				
					includes Secondary General Service				
					\$ 52,369,616				
					561				

Southwestern Public Service Company
New Mexico Retail
Revenue at Proposed Rates
Forecast Test Year Ended December 31, 2016

Line No.	Rate Class	Present Rate	Billing Units	Base Rate Revenue at Proposed Base Rates	Fuel in Base Rates per kWh	Fuel Revenue	Non-fuel Revenue	Change in Non-fuel Revenue
				Revenue - \$				
IR - Irrigation Service								
33	Service Availability Charge		12,680 Bills	\$ 26.50 / Month		\$ 336,020	\$ 336,020	18.83%
34	Demand Charge - Summer		147,248 kW-Mo	\$ 2.25 / kW-Mo		331,309	331,309	36.36%
35	Demand Charge - Winter		197,538 kW-Mo	\$ 1.56 / kW-Mo		308,159	308,159	18.18%
36	Energy Charge		81,736,289 kWh	\$ 0.075203 / kWh		6,146,814	3,902,254	16.62%
37	Total		81,736,289 kWh	\$ 7,122,301 target		\$ 2,244,560	\$ 4,877,741	18.03%
PG - Primary General Service								
38	Customer Months		56,629 Bills	\$ 54.90 / Month		\$ 3,108,932	\$ 3,108,932	-26.80%
39	Demand Charge - Summer		1,268,759 kW-Mo	\$ 15.93 / kW-Mo		20,211,329	20,211,329	14.52%
40	Demand Charge - Winter		2,430,817 kW-Mo	\$ 13.32 / kW-Mo		32,378,479	32,378,479	15.83%
41	Energy Charge		1,825,545,118 kWh	\$ 0.030071 / kWh		54,895,967	5,712,130.67	15.97%
42	Power Factor Charge					438,169.13	438,169.13	0.00%
43	Total		1,825,545,118 kWh	\$ 111,032,876 target		\$ 49,183,837	\$ 61,849,040	12.12%
LGS-T - Large General Service - Transmission								
44	Service Availability Billing Charge		72 Bills	\$ 689.00 / Month		\$ 49,608	\$ 49,608	-47.46%
45	Demand Charge - Summer		247,210 kW-Mo	\$ 10.33 / kW-Mo		2,553,674.75	2,553,674.75	9.66%
46	Demand Charge - Winter		497,386 kW-Mo	\$ 9.42 / kW-Mo		4,685,373.92	4,685,373.92	20.77%
47	Energy Charge		408,445,099 kWh	\$ 0.029084 / kWh		11,879,217.25	1,539,021.13	-0.53%
48	Power Factor Charge					212,187.66	212,187.66	0.00%
49	Total		408,445,099 kWh	\$ 19,380,062 target		\$ 10,340,196	\$ 9,039,865	12.13%
LGS-T - Large General Service - Backbone Transmission								
50	Service Availability Billing Charge		240 Bills	\$ 689.00 / Month		\$ 165,360	\$ 165,360	-47.46%
51	Demand Charge - Summer		1,082,943 kW-Mo	\$ 10.28 / kW-Mo		11,132,650	11,132,650	12.60%
52	Demand Charge - Winter		1,978,432 kW-Mo	\$ 9.37 / kW-Mo		18,537,910	18,537,910	24.11%
53	Energy Charge		1,906,015,581 kWh	\$ 0.028893 / kWh		55,070,508	7,181,867	0.21%
54	Power Factor Charge					359,662	359,662	0.00%
55	Total		1,906,015,581 kWh	\$ 85,266,089 target		\$ 47,888,641	\$ 37,377,448	14.50%
Total Commercial & Industrial - General Service								
56	Total at Current Rates		4,884,533,367 kWh	\$ 275,171,505 net of standby				

Southwestern Public Service Company
New Mexico Retail
Revenue at Proposed Rates
Forecast Test Year Ended December 31, 2016

Line No.	Rate Class	Present Rate	Billing Units	Base Rate Revenue at Proposed Base Rates Rate	Fuel in Base Rates per kWh	Fuel Revenue	Non-fuel Revenue	Change in Non-fuel Revenue
<u>Commercial & Industrial - Standby Service</u>								
POFSSNM								
57	Service Availability Charge		60 Bills	\$ 54.90 / Month		\$ 3,294		
58	Tran & Dist Standby Capacity Fee - Summer		704 kW-Mo	\$ 8.06 / kW-Mo		5,674	\$ 3,294	-26.80%
59	Tran & Dist Standby Capacity Fee - Winter		1,408 kW-Mo	\$ 6.37 / kW-Mo		8,969	5,674	7.60%
60	Gen Standby Cap Reservation Fee - Summer		704 kW-Mo	\$ 1.89 / kW-Mo		1,331	8,969	2.74%
61	Gen Standby Cap Reservation Fee - Winter		1,408 kW-Mo	\$ 1.56 / kW-Mo		2,196	1,331	17.48%
62	Usage Demand Charge - Summer		156 kW-Mo	\$ 15.93 / kW-Mo		2,485	2,196	17.25%
63	Usage Demand Charge - Winter		268 kW-Mo	\$ 13.32 / kW-Mo		3,570	2,485	14.52%
64	Energy Charge		570,833 kWh	\$ 0.030071 / kWh	\$ 0.025125	\$ 15,379	3,570	15.83%
65	Total		570,833 kWh			\$ 15,379	\$ 29,306	16.02%
Standby Service								
115KV +								
66	Service Availability Charge		12 Bills	\$ 689.00 / Month		\$ 8,268		
67	Transmission Standby Capacity Fee - Summer		32,148 kW-Mo	\$ 3.70 / kW-Mo		118,948	\$ 8,268	-47.46%
68	Transmission Standby Capacity Fee - Winter		64,296 kW-Mo	\$ 3.31 / kW-Mo		212,701	118,948	8.50%
69	Gen Standby Cap Reservation Fee - Summer		32,148 kW-Mo	\$ 1.68 / kW-Mo		54,089	212,701	17.31%
70	Gen Standby Cap Reservation Fee - Winter		64,296 kW-Mo	\$ 1.39 / kW-Mo		89,271	54,089	17.66%
71	Usage Demand Charge - Summer		- kW-Mo	\$ 10.28 / kW-Mo		-	89,271	17.66%
72	Usage Demand Charge - Winter		1,708 kW-Mo	\$ 9.37 / kW-Mo		16,004	-	
73	Energy Charge		3,066,428 kWh	\$ 0.028893 / kWh	\$ 0.025125	\$ 77,044	16,004	24.11%
74	Total		3,066,428 kWh			\$ 77,044	\$ 11,554	0.21%
75	Total Commercial & Industrial - Standby Service		3,637,261 kWh			\$ 587,879	\$ 510,835	12.78%
<u>Total Commercial & Industrial Service</u>								
76	Base Rate Revenue		4,888,170,628 kWh	Target		\$ 128,412,628	\$ 147,391,441	12.05%
						526		

Southwestern Public Service Company
New Mexico Retail
Revenue at Proposed Rates
Forecast Test Year Ended December 31, 2016

Line No.	Rate Class	Present Rate	Billing Units	Base Rate Revenue at Proposed Base Rates Rate	Revenue - \$	Fuel in Base Rates per kWh	Fuel Revenue	Non-fuel Revenue	Change in Non-fuel Revenue
<u>Public Authority Service</u>									
<u>Large Municipal and School Service</u>									
77	Service Availability Charge		6,251 Bills	\$ 27.10 /Month	\$ 169,402			\$ 169,402	17.83%
78	Demand Charge - Summer		175,079 kW-Mo	\$ 12.91 /kW-Mo	2,260,275			2,260,275	18.55%
79	Demand Charge - Winter		291,904 kW-Mo	\$ 10.37 /kW-Mo	3,027,043			3,027,043	17.71%
80	Energy Charge		123,917,633 kWh	\$ 0.033815 /kWh	4,190,275	\$ 0.027461	\$ 3,402,902	787,373	17.95%
81	Power Factor Charge				5,165			5,165	0.00%
82	Total		123,917,633 kWh	Target	\$ 9,652,160		\$ 3,402,902	\$ 6,249,258	18.03%
<u>Small Municipal and School Service</u>									
83	Service Availability Charge		14,674 Bills	\$ 14.50 /Month	\$ 212,773			\$ 212,773	0.69%
84	Energy Charge - Summer		5,287,513 kWh	\$ 0.072573 /kWh	383,731	\$ 0.027461	\$ 145,200	238,530	30.24%
85	Energy Charge - Winter		8,077,744 kWh	\$ 0.063927 /kWh	516,386	\$ 0.027461	\$ 221,823	294,563	24.04%
86	Total		13,365,257 kWh	Target	\$ 1,112,890		\$ 367,023	\$ 745,866	18.03%
<u>Small Municipal and School Standby</u>									
87	Production Standby Charge		kWh	\$ 0.003835 /kWh	\$ -			\$ -	
88	Transmission and Distribution Standby Charge		kWh	\$ 0.024794 /kWh	\$ -			\$ -	
89	Total		kWh		\$ -			\$ -	
90	<u>Total Public Authority Service</u>		137,282,890 kWh	Target	\$ 10,765,050		\$ 3,769,925	\$ 6,995,124	18.03%

Southwestern Public Service Company
New Mexico Retail
Revenue at Proposed Rates
Forecast Test Year Ended December 31, 2016

Line No.	Rate Class Present Rate	Billing Units	Base Rate Revenue at Proposed Base Rates Rate	Revenue - \$	Fuel in Base Rates per kWh	Fuel Revenue	Non-fuel Revenue	Change in Non-fuel Revenue
<u>Street and Area Lighting Service</u>								
<u>Area Lights</u>								
91	7,000 MV 175 watt	32,331	\$ 13.12	\$ 424,186				
92	15,000 HPS 150 watt	111,839	\$ 12.32	\$ 1,377,851				
93	27,500 HPS 250 watt	610	\$ 15.15	9,242				
94	50,000 HPS 400 watt	8,215	\$ 19.35	158,960				
95	140,000 HPS 1,000 watt	10,002	\$ 33.44	\$ 334,458				
96	14,000 MTHL 175 watt	120	\$ 13.68	\$ 1,636				
97	20,500 MTHL 250 watt	179	\$ 16.06	2,881				
98	36,000 MTHL 400 watt	3,495	\$ 18.71	65,399				
99	110,000 MTHL 1,000 watt	6,527	\$ 35.21	\$ 229,833				
100	Subtotal	173,318 lights 16,215,207 kWh		\$ 2,604,446	\$ 0.027461	\$ 445,286	\$ 2,159,160.18	18.05%
<u>Street Lights</u>								
101	7,000 MV 175 watt	55,999	\$ 13.17	\$ 737,507				
102	20,000 MV 400 watt	14,049	\$ 18.97	266,517				
103	35,000 MV 700 watt	351	\$ 27.60	9,694				
104	50,000 MV 1,000 watt	170	\$ 33.76	\$ 5,724				
105	15,000 HPS 150 watt	41,002	\$ 12.35	\$ 506,381				
106	27,500 HPS 250 watt	41,082	\$ 15.20	624,453				
107	50,000 HPS 400 watt	6,661	\$ 19.41	\$ 129,297				
108	Subtotal	159,315 lights 13,421,501 kWh		\$ 2,279,573	\$ 0.027461	\$ 368,568	\$ 1,911,005.60	18.01%
109	<u>Total Lighting Service</u>			Target				
110	Base Rate Revenue			\$ 4,884,019				
				\$ 4,884,037				
111	<u>Total Company</u>			Target				
	Total NM Retail Revenue Requirement			\$ 419,320,105				
				\$ 419,320,107				
				\$ (2)				

Line No.	Rate Class	Proposed Rate	(A)			(B)			(B-A)			Proposed Non-Fuel Increase	Rates Per kWh				
			Present		Change %	Proposed		Change %	Current Fuel in Base	Proposed Fuel in Base Rates	Present Rate Minus Fuel		Proposed Rate Minus Fuel	Change \$	%		
<u>Residential Service</u>																	
Residential Lighting																	
1	Service Availability Charge	/ Month	\$	7.90	\$	9.50	\$	1.60	20.3%	18.03%							
2	Energy Charge - Summer	/ kWh	\$	0.096390	\$	0.100170	\$	0.003780	3.9%		\$ 0.032465	\$ 0.027461	\$ 0.063925	\$ 0.072709	\$ 0.008784	13.7%	
3	Energy Charge - Winter	/ kWh	\$	0.086958	\$	0.090781	\$	0.003823	4.4%		\$ 0.032465	\$ 0.027461	\$ 0.054493	\$ 0.063320	\$ 0.008827	16.2%	
Residential Time of Use (TOU)																	
4	Service Availability Charge	/ Month	\$	-	\$	10.50	\$	-	-								
5	Optional Time of Use (TOU) - Off Peak	/ kWh	\$	-	\$	0.080182	\$	-	-		\$ 0.027461						
6	Optional Time of Use (TOU) - On Peak Hours	/ kWh	\$	-	\$	0.213466	\$	-	-		\$ 0.027461						
Residential Heating																	
7	Service Availability Charge	/ Month	\$	7.90	\$	9.50	\$	1.60	20.3%	18.03%							
8	Energy Charge - Summer	/ kWh	\$	0.096390	\$	0.100170	\$	0.003780	3.9%		\$ 0.032465	\$ 0.027461	\$ 0.063925	\$ 0.072709	\$ 0.008784	13.7%	
9	Energy Charge - Winter	/ kWh	\$	0.067712	\$	0.072893	\$	0.005181	7.7%		\$ 0.032465	\$ 0.027461	\$ 0.035247	\$ 0.045432	\$ 0.010185	28.9%	
Residential Heating Time of Use (TOU)																	
10	Service Availability Charge	/ Month	\$	-	\$	10.50	\$	-	-								
11	Optional Time of Use (TOU) - Off Peak	/ kWh	\$	-	\$	0.080182	\$	-	-		\$ 0.027461						
12	Optional Time of Use (TOU) - On Peak Hours	/ kWh	\$	-	\$	0.213466	\$	-	-		\$ 0.027461						
Residential Lighting Standby																	
13	Production Standby Charge	/ kWh	\$	0.005499	\$	0.006549	\$	0.001050	19.1%	18.03%							
14	Trans and Dist Standby Charge	/ kWh	\$	0.031157	\$	0.036774	\$	0.005617	18.0%								
<u>Small Commercial Service</u>																	
Small General Service																	
15	Service Availability Charge	/ Month	\$	14.40	\$	14.40	\$	-	0.0%								
16	Energy Charge - Summer	/ kWh	\$	0.077162	\$	0.084623	\$	0.007461	9.7%		\$ 0.032465	\$ 0.027461	\$ 0.044697	\$ 0.057162	\$ 0.012465	27.9%	
17	Energy Charge - Winter	/ kWh	\$	0.070605	\$	0.073126	\$	0.002521	3.6%		\$ 0.032465	\$ 0.027461	\$ 0.038140	\$ 0.045665	\$ 0.007525	19.7%	
Small General Time of Use (TOU)																	
18	Service Availability Charge	/ Month	\$	-	\$	15.40	\$	-	-								
19	Optional Time of Use (TOU) - Off Peak	/ kWh	\$	-	\$	0.065466	\$	-	-		\$ 0.027461						
20	Optional Time of Use (TOU) - On Peak Hours	/ kWh	\$	-	\$	0.215008	\$	-	-		\$ 0.027461						
Small General Service Standby																	
21	Production Standby Charge	/ kWh	\$	0.004011	\$	0.004818	\$	0.000807	20.1%								
22	Trans and Dist Standby Charge	/ kWh	\$	0.020097	\$	0.025031	\$	0.004934	24.6%								

Southwestern Public Service Company
New Mexico Retail
Rate Comparison - Present vs Proposed
Forecast Test Year Ending December 31, 2016

Line No.	Rate Class	Proposed Rate	(A)			(B)			(B-A)			Proposed Non-Fuel Increase	Rates Per kWh					Change %
			Present	Proposed	\$	Change	Current Fuel in Base	Proposed Fuel in Base Rates	Present Rate Minus Fuel	Proposed Rate Minus Fuel	\$							
Commercial & Industrial Service																		
Secondary General Service																		
23	Service Availability Charge		/ Month	\$	23.60	\$	27.10	\$	3.50			18.03%						
24	Demand Charge - Summer		/ kW-Mo	\$	15.44	\$	17.46	\$	2.02									
25	Demand Charge - Winter		/ kW-Mo	\$	12.76	\$	13.99	\$	1.23									
26	Energy Charge		/ kWh	\$	0.037140	\$	0.031507	\$	(0.005633)									
27	Power Factor Charge		/ kVar	\$	0.50													
28	Power Factor Credit		/ kVar	\$	(0.50)													
Secondary General Time of Use (TOU)																		
29	Service Availability Charge		/ Month	\$	-	\$	29.10	\$	-									
30	Optional Time of Use (TOU) - Off Peak		/ kWh	\$	-	\$	0.031507	\$	-									
31	Optional Time of Use (TOU) - On Peak Hours		/ kWh	\$	-	\$	0.155660	\$	-									
32	Demand Charge		/ kW	\$	-	\$	11.87	\$	-									
Irrigation Service																		
33	Service Availability Charge		/ Month	\$	22.30	\$	26.50	\$	4.20			10.82%						
34	Demand Charge - Summer		/ kW-Mo	\$	1.65	\$	2.25	\$	0.60									
35	Demand Charge - Winter		/ kW-Mo	\$	1.32	\$	1.56	\$	0.24									
36	Energy Charge		/ kWh	\$	0.073402	\$	0.075203	\$	0.001801									
													\$ 0.032465	\$ 0.027461	\$ 0.040937	\$ 0.047742	\$ 0.006805	16.6%

[illegible]

Southwestern Public Service Company
New Mexico Retail
Rate Comparison - Present vs Proposed
Forecast Test Year Ending December 31, 2016

Line No.	Rate Class	Proposed Rate	(A)		(B)		(B-A)		Proposed Non-Fuel Increase	Rates Per kWh				Change \$	%
			Present	Proposed	Present	Proposed	\$	%		Current Fuel in Base	Proposed Fuel in Base Rates	Present Rate Minus Fuel	Proposed Rate Minus Fuel		
Commercial & Industrial - Standby Service															
Primary General Standby Service															
64	Service Availability Charge		/Month	\$ 75.00	\$ 54.90	\$ (20.10)		-26.8%							
65	Tran & Dist Standby Cap Fee - Summer		/kW-Mo	\$ 7.49	\$ 8.06	\$ 0.57		7.6%							
66	Tran & Dist Standby Cap Fee - Winter		/kW-Mo	\$ 6.20	\$ 6.37	\$ 0.17		2.7%							
67	Gen Standby Cap Res Fee - Summer		/kW-Mo	\$ 1.61	\$ 1.89	\$ 0.28		17.4%							
68	Gen Standby Cap Res Fee - Winter		/kW-Mo	\$ 1.33	\$ 1.56	\$ 0.23		17.3%							
69	Usage Demand Charge - Summer		/kW-Mo	\$ 13.91	\$ 15.93	\$ 2.02									
70	Usage Demand Charge - Winter		/kW-Mo	\$ 11.50	\$ 13.32	\$ 1.82									
71	Energy Charge		/kWh	\$ 0.034569	\$ 0.030071	\$ (0.004498)		-13.0%		\$ 0.031871	\$ 0.026942	\$ 0.002698	\$ 0.003129	\$ 0.000431	16.0%
Standby Service															
115kV +															
72	Service Availability Charge		/Month	\$ 1,311.30	\$ 689.00	\$ (622.30)		-47.5%							
73	Tran & Dist Standby Cap Fee - Summer		/kW-Mo	\$ 3.41	\$ 3.70	\$ 0.29		8.5%							
74	Tran & Dist Standby Cap Fee - Winter		/kW-Mo	\$ 2.82	\$ 3.31	\$ 0.49		17.3%							
75	Gen Standby Cap Res Fee - Summer		/kW-Mo	\$ 1.43	\$ 1.68	\$ 0.25		17.7%							
76	Gen Standby Cap Res Fee - Winter		/kW-Mo	\$ 1.18	\$ 1.39	\$ 0.21		17.7%							
77	Usage Demand Charge - Summer		/kW-Mo	\$ 9.13	\$ 10.28	\$ 1.15									
78	Usage Demand Charge - Winter		/kW-Mo	\$ 7.55	\$ 9.37	\$ 1.82									
79	Energy Charge		/kWh	\$ 0.033122	\$ 0.028893	\$ (0.004229)		-12.8%		\$ 0.029362	\$ 0.025125	\$ 0.003760	\$ 0.003768	\$ 0.000008	0.2%

Line No.	Rate Class	Proposed Rate	(A)			(B)			(B-A)			Proposed Non-Fuel Increase	Rates Per kWh				
			Present		Change \$	Proposed	Change %	Current Fuel in Base	Proposed Fuel in Base Rates	Present Rate Minus Fuel	Proposed Rate Minus Fuel		Change \$	Change %			
<u>Public Authority Service</u>																	
Large Municipal and School Service																	
80	Service Availability Charge		/ Month	\$	23.00	\$	27.10	\$	4.10		14.79%						
81	Demand Charge - Summer		/ kW-Mo	\$	10.89	\$	12.91	\$	2.02		18.5%						
82	Demand Charge - Winter		/ kW-Mo	\$	8.81	\$	10.37	\$	1.56		17.7%						
83	Energy Charge		/ kWh	\$	0.037852	\$	0.033815	\$	(0.004037)		-10.7%		\$ 0.032465	\$ 0.027461	\$ 0.000967	18.0%	
84	Power Factor Charge		/ kVar	\$	0.50												
85	Power Factor Credit		/ kVar	\$	(0.50)												
Large Municipal and School Time of Use (TOU)																	
86	Service Availability Charge		/ Month	\$	-	\$	29.10	\$	-		-						
87	Optional Time of Use (TOU) - Off Peak		/ kWh	\$	-	\$	0.033815	\$	-		-		\$ 0.027461				
88	Optional Time of Use (TOU) - On Peak Hours		/ kWh	\$	-	\$	0.159678	\$	-		-		\$ 0.027461				
89	Demand Charge		/ kW	\$	-	\$	8.37	\$	-		-						
Small Municipal and School Service																	
90	Service Availability Charge		/ Month	\$	14.40	\$	14.50	\$	0.10		0.7%						
91	Energy Charge - Summer		/ kWh	\$	0.067103	\$	0.072573	\$	0.005470		8.2%		\$ 0.032465	\$ 0.027461	\$ 0.045112	30.2%	
92	Energy Charge - Winter		/ kWh	\$	0.061864	\$	0.063927	\$	0.002063		3.3%		\$ 0.032465	\$ 0.027461	\$ 0.036466	24.0%	
Small Municipal and School Time of Use (TOU)																	
93	Service Availability Charge		/ Month	\$	-	\$	15.50	\$	-		-						
94	Optional Time of Use (TOU) - Off Peak		/ kWh	\$	-	\$	0.058853	\$	-		-		\$ 0.027461				
95	Optional Time of Use (TOU) - On Peak Hours		/ kWh	\$	-	\$	0.199761	\$	-		-		\$ 0.027461				
Small Municipal and School Standby																	
96	Production Standby Charge		/ kWh	\$	0.003087	\$	0.003835	\$	0.000748		24.2%						
97	Trans and Dist Standby Charge		/ kWh	\$	0.016923	\$	0.024794	\$	0.007871		46.5%						

Southwestern Public Service Company
New Mexico Retail
Rate Comparison - Present vs Proposed
Forecast Test Year Ending December 31, 2016

Line No.	Rate Class	Proposed Rate	(A)		(B)		(B-A)		Proposed Non-Fuel Increase	Rates Per kWh				Change \$	Change %
			Present	Proposed			Change \$	Change %		Current Fuel in Base	Proposed Fuel in Base Rates	Present Rate Minus Fuel	Proposed Rate Minus Fuel		
Street and Area Lighting Service (MV = Mercury Vapor, HPS = High Pressure Sodium, MTHL = Metal Halide)															
Area Lights															
Lumens															
98	7,000 MV 175 watt		\$	11.87	\$	13.12	\$	1.25	10.5%	18.03%	0.032465	\$	0.027461		
99	15,000 HPS 150 watt		\$	11.14	\$	12.32	\$	1.18	10.6%						
100	27,500 HPS 250 watt		\$	13.70	\$	15.15	\$	1.45	10.6%						
101	50,000 HPS 400 watt		\$	17.50	\$	19.35	\$	1.85	10.6%						
102	140,000 HPS 1,000 watt		\$	30.25	\$	33.44	\$	3.19	10.5%						
103	14,000 MTHL 175 watt		\$	12.37	\$	13.68	\$	1.31	10.6%						
104	20,500 MTHL 250 watt		\$	14.53	\$	16.06	\$	1.53	10.5%						
105	36,000 MTHL 400 watt		\$	16.92	\$	18.71	\$	1.79	10.6%						
106	110,000 MTHL 1,000 watt		\$	31.85	\$	35.21	\$	3.36	10.5%						
Street Lights															
107	7,000 MV 175 watt		\$	11.87	\$	13.17	\$	1.30	11.0%	14.01%	0.032465	\$	0.027461		
108	20,000 MV 400 watt		\$	17.10	\$	18.97	\$	1.87	10.9%						
109	35,000 MV 700 watt		\$	24.88	\$	27.60	\$	2.72	10.9%						
110	50,000 MV 1,000 watt		\$	30.43	\$	33.76	\$	3.33	10.9%						
111	15,000 HPS 150 watt		\$	11.14	\$	12.35	\$	1.21	10.9%						
112	27,500 HPS 250 watt		\$	13.70	\$	15.20	\$	1.50	10.9%						
113	50,000 HPS 400 watt		\$	17.50	\$	19.41	\$	1.91	10.9%						