

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

**IN THE MATTER OF THE PETITION OF)
PUBLIC SERVICE COMPANY OF NEW)
MEXICO, PURSUANT TO THE EFFICIENT)
USE OF ENERGY ACT AND THE PUBLIC)
UTILITY ACT, FOR APPROVAL OF A RATE)
ADJUSTMENT MECHANISM TO REMOVE)
REGULATORY DISINCENTIVES AND)
ORIGINAL RIDER NO. 52,)
)
)
)
PUBLIC SERVICE COMPANY OF NEW)
MEXICO,)
)
)
Applicant.)
_____)**

CASE NO. 20-_____-UT

**DIRECT TESTIMONY
OF
STELLA CHAN**

May 28, 2020

**NMPRC CASE NO. 20-_____-UT
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 STELLA CHAN**

**WITNESS FOR
PUBLIC SERVICE COMPANY OF NEW MEXICO**

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AFFIDAVIT

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1

I. INTRODUCTION AND PURPOSE

2 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

3 **A.** The purpose of my testimony is to:

- 4 • Support and describe the components of PNM’s proposed Original Rider No. 52
5 for the decoupling mechanism.
- 6 • Demonstrate the need for decoupling by reviewing the historical trends in average
7 use per customer for the residential and small power customer classes.
- 8 • Provide examples of the historical and monthly deferral amounts under the
9 decoupling mechanism.
- 10 • Provide an illustrative example of the customer bill impact for the decoupling
11 charge in 2022 based on PNM’s current forecast.

12

13 **Q. WHAT ARE YOUR QUALIFICATIONS TO SUPPORT THIS**
14 **TESTIMONY?**

15 **A.** My name is Stella Chan and I am the Director of Pricing for Public Service
16 Company of New Mexico (“PNM”). For my contact information and more about
17 my qualifications, including a list of cases in which I previously testified before the
18 New Mexico Public Regulation Commission (“Commission”), please see PNM
19 Exhibit SC-1.

20

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II. PNM'S PROPOSED SHARED COST OF SERVICE RIDER

Q. PLEASE DESCRIBE PNM'S PROPOSED DECOUPLING MECHANISM.

A. PNM is proposing a revenue per customer decoupling mechanism in the Shared Cost of Service rider, which is included in this testimony as PNM Exhibit SC-2. PNM's proposed rider establishes procedures that will permit PNM to recover (in the event of an under-collection) or credit (in the event of an over-collection) the difference between the authorized fixed costs per customer approved for recovery by the Commission in PNM's last litigated rate case, Case No. 15-00261-UT and the actual fixed costs recovered through base rates. These monthly fixed cost reconciliations are accumulated for twelve consecutive months in the Shared Cost of Service Deferral Account. Based upon this annual difference, PNM will have either over-recovered its fixed costs and will credit the overage to customers in the following year, or conversely, PNM will have under-recovered its fixed costs and will collect an amount that reflects this under-charge for each of the customer classes subject to the decoupling mechanism over the course of a subsequent twelve-month period. The ending balance in the Shared Cost of Service Deferral Account at the end of the twelve months is divided by the annual forecasted number of customers for each customer class that are subject to the rider to calculate the Shared Cost of Service Charge for each class. However, PNM proposes to limit the recovery of under-collection to three percent of forecasted revenue for each customer class. Any over-collection that is due to customers will not have a limit. By authorizing PNM to collect a pre-established amount of revenue toward fixed

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1 cost recovery regardless of the actual sales revenues received during any year, PNM
2 is indifferent to the usage levels of the customers to which the decoupling
3 mechanism applies.

4

5 **Q. TO WHICH CUSTOMER CLASSES WILL THE RIDER APPLY?**

6 **A.** The rider will apply to all residential (Rate 1A – Residential and Rate 1B –
7 Residential Service TOU) and small power (Rate 2A – Small Power and 2B – Small
8 Power TOU) customers. Separate accounting will be established for residential and
9 small power, which means that the deferrals and resulting rate adjustments will be
10 calculated separately for each customer class. This ensures that there will not be
11 any inter-class cross-subsidies.

12

13 **Q. WHY IS PNM'S DECOUPLING PROPOSAL LIMITED TO THESE TWO**
14 **CUSTOMER CLASSES?**

15 **A.** Under current rate structures for the residential and small power customer classes,
16 PNM collects a significant share of its fixed costs through volumetric (per-kWh)
17 rates. These two customer classes recover fixed costs through a monthly fixed
18 customer charge and energy charge that is applied to monthly usage. Historically,
19 a significant portion of the fixed costs for these two classes of customers is
20 recovered through the energy charge as compared to other customer classes.

21

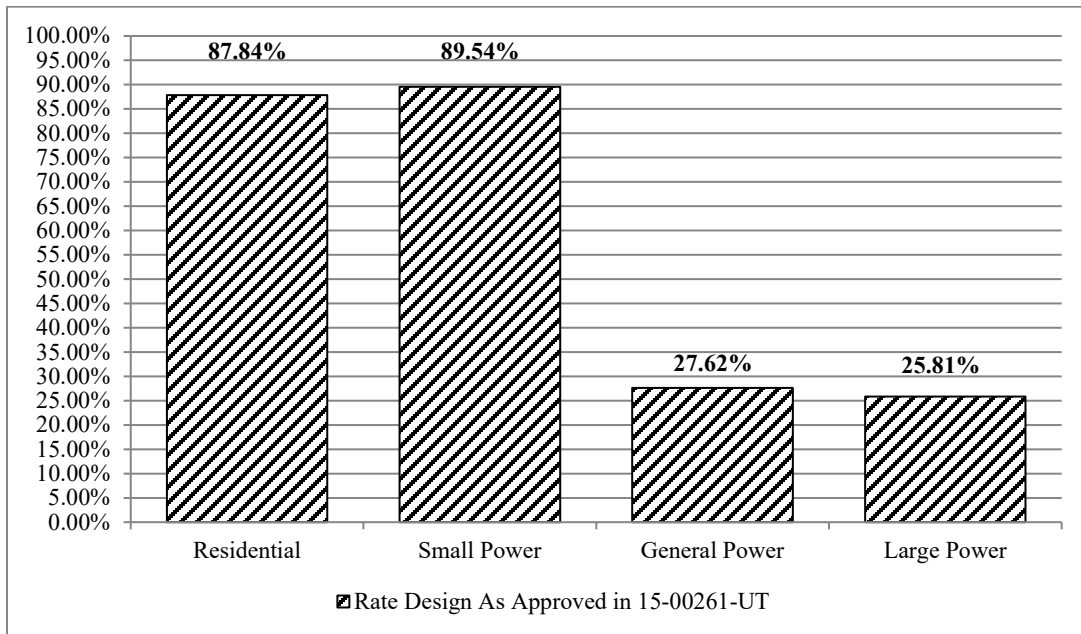
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1 PNM has not identified the same issues related to the Company’s fixed cost
2 recovery within other customer classes. Other customer classes that have a demand
3 charge in addition to the monthly customer charge are able to recover additional
4 fixed costs through the demand charge. These demand charges better align rates
5 with costs and reduce the probability of PNM not recovering its fixed costs from
6 these customers. PNM Figure SC-1 below demonstrates this concept by comparing
7 the amount of fixed costs recovered through volumetric rates for selected customer
8 classes, using the final revenue requirements (after banding)¹ and rates as approved
9 in PNM’s last litigated rate case, Case No. 15-00261-UT.

10

PNM Figure SC-1

Fixed Costs Recovered through Volumetric Rates for Select Classes



11

¹ A “banding” mechanism was applied to the final allocation of revenue requirements in PNM’s last litigated rate case to mitigate rate impacts for certain customer classes and facilitate a gradual movement towards cost-based rates.

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1 **Q. HOW DOES PNM PROPOSE TO IDENTIFY DECOUPLING CHARGES OR**
2 **CREDITS ON CUSTOMERS' BILLS?**

3 **A.** A per-customer decoupling charge (or credit) would appear on customer bills in a
4 line item titled "Shared Cost of Service Charge."
5

6 **Q. DOES PNM'S DECOUPLING PROPOSAL INCLUDE ANY CUSTOMER**
7 **PROTECTIONS?**

8 **A.** Yes. If the decoupling mechanism produces a rate increase that is more than three
9 percent of each customer class's forecasted revenues before taxes and fees, the
10 excess deferral amount above the three percent will be carried over in the Shared
11 Cost of Service Deferral Account for recovery in a future year.² Equally important,
12 there will be no limit on the credit that the decoupling mechanism produces.
13

14 The proposed decoupling mechanism is also preferable from a customer
15 perspective due to its symmetry. When factors such as energy efficiency,
16 distributed generation, mild weather and the economy reduce energy usage and
17 contribute to the under-recovery of PNM's fixed costs, the Company will be
18 allowed to collect money from customers under the decoupling mechanism. At the
19 same time, when extreme weather (such as a hot summer or a very cold winter)
20 occurs, and/or where there is an increase in beneficial end-uses of electricity (such
21 as electric heat pumps, grid-enabled water heaters, and electric vehicles), PNM may

² This is referred to as the "3% Annual Shared Cost of Service Charge Limitation" in the proposed rider.

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1 over-collect its fixed costs due to increased energy sales. If this were to occur,
2 PNM would credit customers on their bills. Decoupling ensures that PNM recovers
3 its authorized fixed costs, no more and no less.

4

5 **Q. HOW WILL REVENUE ACCRUED PURSUANT TO DECOUPLING**
6 **AFFECT PNM'S EARNINGS TEST FOR THE RENEWABLE ENERGY**
7 **RIDER?**

8 **A.** PNM proposes to include any revenues that are accrued pursuant to the Shared Cost
9 of Service rider in the calculation of its current Earnings Test performed annually,
10 in compliance with the language contained and approved in PNM's Renewable
11 Energy Rider No. 36.

12

13 **Q. PLEASE EXPLAIN THE COMPONENTS OF PNM'S PROPOSED**
14 **DECOUPLING MECHANISM.**

15 **A.** As noted above, PNM will reconcile authorized fixed cost revenues and actual fixed
16 cost revenues each month. PNM Exhibit SC-3, Pages 1 through 3 set forth the
17 formula and examples to calculate the monthly reconciliations and Shared Cost of
18 Service charges for the residential and small power customer classes. In particular,
19 Page 1 of PNM Exhibit SC-3 calculates the two key components of the
20 reconciliation, which are: (1) the Authorized Fixed Cost per Customer ("FCC") for
21 a customer class, which is expressed in \$/customer per month; and (2) the

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1 Authorized Fixed Cost per kWh (“FCE”) for a customer class, which is expressed
2 in \$/kWh.

3

4 **Q. WHAT TYPE OF COSTS ARE CONSIDERED “FIXED” IN THE**
5 **CONTEXT OF PNM’S DECOUPLING PROPOSAL?**

6 **A.** Fixed costs in the context of PNM’s decoupling proposal are the approved revenue
7 requirements associated with customer-related and demand-related functions,
8 which do not vary as a result of volumetric energy sales (kWh). The fixed costs
9 consist of all after-banding production, transmission, distribution demand-related
10 costs and customer-related costs allocated to each customer class. The
11 identification of these costs and the associated revenue requirements are calculated
12 within the Company’s filed Embedded Class Cost of Service Study Model
13 (“ECCOSS”) after banding from PNM’s last litigated rate case in Case No. 15-
14 00261-UT, which is the source for the values in PNM Exhibit SC-3, Page 1 of 6.

15

16 **Q. WHY IS PNM PROPOSING TO USE COSTS AND RATES FROM CASE**
17 **NO. 15-00261-UT INSTEAD OF CASE NO. 16-00276-UT?**

18 **A.** As PNM Witness Fenton explains in his testimony, the use of costs and rates from
19 Case No. 15-00261-UT is consistent with the mandate of the Efficient Use of
20 Energy Act that PNM use “the revenue per customer approved by the commission
21 in a general rate case” to accomplish decoupling. PNM is not using costs and rates
22 from the most recently approved rate case in Case No. 16-00276-UT as they were

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1 the result of a negotiated settlement as modified by the Commission, and PNM did
2 not conduct an ECCOSS based on the ultimately approved revenue requirements
3 that would allow for fixed costs to be identified.

4
5 **Q. HOW WILL THE COMPONENTS OF THE DECOUPLING MECHANISM**
6 **BE SET?**

7 **A.** As set forth in the proposed rider and the residential and small power examples in
8 PNM Exhibit SC-3, Pages 2 and 3 of 6, the “Authorized Fixed Cost Revenue” is
9 the product of the actual number of customers in a given month and the Authorized
10 Fixed Cost per Customer (FCC) for each customer class. The FCC is derived by
11 first determining the Total Fixed Cost Requirements, using the information from
12 PNM’s last litigated ECCOSS and the final rates as approved in Case No. 15-
13 00261-UT. As discussed above, the Total Fixed Cost Requirements are calculated
14 as the sum of the customer and demand-related revenue requirements resulting from
15 the ECCOSS after banding is applied. Then, the revenue collected from the
16 customer charges approved in Case No. 15-00261-UT is subtracted from the Total
17 Fixed Cost Requirements, with the remainder representing the amount of fixed
18 costs recovered through the energy (volumetric) rates.³ This number is then divided
19 by the test period annual number of customers served in the applicable customer
20 groups to calculate the FCC amount.

³ Given that no demand charges apply to Rates 1A/1B – Residential or 2A/2B – Small Power, it is not necessary that PNM take demand charges into account in terms of calculating fixed cost recovery for these two classes.

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1 The FCE is calculated by subtracting the revenue collected from the customer
2 charges from the Total Fixed Cost Requirements, and dividing this number by
3 forecasted sales for the test period in Case No. 15-00261-UT.

4

5 As shown in PNM Exhibit SC-3, Page 1 of 6, the applicable FCC under the
6 approved revenues and rates from Case No. 15-00261-UT would be: for Rate
7 1A/1B – Residential, \$50.59 per customer per month and for Rate 2A/2B – Small
8 Power, \$132.97 per customer per month. PNM Exhibit SC-3, Page 1 of 6, also
9 shows that the applicable FCE would be: for Rate 1A/1B – Residential, \$0.0871373
10 per kWh and for Rate 2A/2B – Small Power, \$0.0900527 per kWh.

11

12 **Q. HOW ARE TIME-OF-USE RATES UNDER RATE SCHEDULES 1B**
13 **(RESIDENTIAL) AND 2B (SMALL POWER) ADDRESSED UNDER PNM’S**
14 **DECOUPLING PROPOSAL?**

15 **A.** The FCC and FCE components are derived based on the total residential class by
16 combining Rate Schedules 1A and 1B. The same method is applied to the small
17 power customer class. Therefore, the FCC and FCE reflect a class average. Rate
18 Schedules 1B and 2B make up a small percentage of the total residential and small
19 power customer classes, therefore averaging these components by rate class avoids
20 the need to compile billing data by rate block, or to apportion fixed cost recovery
21 across the rate blocks or pricing periods. For the monthly reconciliation, total sales
22 and number of customers served under each rate class are used to calculate the

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1 actual fixed cost revenue and the authorized fixed cost revenue. See PNM Exhibit
2 SC-3, Page 2 of 6 for an example for the residential class.

3

4 **Q. IF APPROVED, WHEN WILL THE AUTHORIZED FIXED COST PER**
5 **CUSTOMER AND AUTHORIZED FIXED COST PER KWH BE**
6 **ADJUSTED?**

7 **A.** The FCC and FCE components will be reset with each new general rate case filing
8 using the approved revenues, test-period sales, and test-period customer counts.
9 The new component values will go into effect during the same month as the
10 approved rates.

11

12 **Q. CAN YOU PROVIDE AN EXAMPLE OF HOW THE MONTHLY**
13 **DECOUPLING RECONCILIATION WILL BE CALCULATED?**

14 **A.** Yes. PNM Exhibit SC-3, Page 2 of 6, provides an illustrative example of the
15 monthly reconciliation amounts in calendar year 2021 for Rate 1A/1B (Residential)
16 based on PNM's current forecast, and Page 3 of 6 of PNM Exhibit SC-3 provides
17 an example for Rate 2A/2B (Small Power). In 2021, the illustrative Shared Cost of
18 Service Reconciliation amount for the residential class is approximately \$14.95
19 million dollars.⁴ Because this amount is approximately \$1.7 million dollars higher
20 than the 3 percent limitation of class revenue before taxes and fees, \$1.7 million
21 dollars would be carried over in the Shared Cost of Service Deferral Account for

⁴ See PNM Exhibit SC-3, Page 2 of 6, Line 14, Column I.

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1 recovery in a future year.⁵ And the amount that will be recovered is approximately
2 \$13.2 million dollars.⁶ For small power customers, the illustrative Shared Cost of
3 Service Reconciliation amount is approximately \$907,000.⁷

4

5 **Q. WHAT WOULD THE CUSTOMER BILL IMPACT BE UNDER THESE**
6 **ILLUSTRATIVE EXAMPLES?**

7 **A.** The resulting bill impact on residential customers in 2022 would be \$2.28 per
8 customer per month after the 3 percent limitation is applied to the Shared Cost of
9 Service Reconciliation.⁸ The resulting bill impact for small power customers
10 would be \$1.38 per customer per month.⁹

11

12 **Q. IS PNM ASKING THE COMMISSION TO APPROVE A \$2.28 RATE**
13 **INCREASE FOR RESIDENTIAL CUSTOMERS AND A \$1.38 RATE**
14 **INCREASE FOR SMALL POWER CUSTOMERS IN 2022?**

15 **A.** No. Although these illustrative examples estimate that there could be
16 approximately \$14.95 million dollars in under-collections for residential and
17 approximately \$907,000 for small power, they are based on “normal” conditions.

18 To be sure, it is difficult to predict what the resulting bill impacts of decoupling

⁵ See PNM Exhibit SC-3, Page 2 of 6, Line 14, Column N.

⁶ See PNM Exhibit SC-3, Page 2 of 6, Line 14, Column L.

⁷ See PNM Exhibit SC-3, Page 3 of 6, Line 14, Column I.

⁸ See PNM Exhibit SC-3, Page 2 of 6, Line 14, Column P. These illustrative examples of bill impacts do not include the carrying charges proposed in my testimony.

⁹ See PNM Exhibit SC-3, Page 3 of 6, Line 14, Column P. These illustrative examples of bill impacts do not include the carrying charges proposed in my testimony.

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1 might be in 2022 considering the potential impact of COVID-19 on the economy
2 and customer usage patterns in 2021. While impacts from COVID-19 are hard to
3 predict and are constantly changing, PNM estimated in April 2020 that potential
4 impacts to load resulted in an increase in residential load of approximately 5 percent
5 and a decline in commercial load of approximately 15 percent.

6
7 **Q. HOW DOES PNM PROPOSE TO RECOVER THE REGULATORY ASSET**
8 **DISCUSSED IN PNM WITNESS FENTON’S TESTIMONY?**

9 **A.** PNM proposes to recover the regulatory asset discussed in PNM Witness Fenton’s
10 testimony through the Shared Cost of Service rider over the first year that
11 decoupling charges (or credits) are reflected on customer bills. PNM Exhibit SC-
12 3, page 6 of 6, calculates the amount of the regulatory asset that would be allocated
13 to each customer class under the illustrative example for 2021. If the regulatory
14 asset is approved the allocation to residential customers in 2022 would be an
15 additional \$0.05 per month; however, there would be no resulting bill impact on
16 residential customers in 2022 due to the application of the 3 percent limitation. As
17 discussed above, any amount above the 3 percent limitation would be carried over
18 in the Shared Cost of Service Deferral Account for recovery in a future year. For
19 small power customers, the bill impact in 2022 would be an additional \$0.05 per
20 month, for a total of \$1.43 per customer per month.

21

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1 **Q. HAVE YOU QUANTIFIED WHAT THE ANNUAL RECONCILIATIONS**
2 **WOULD HAVE BEEN IF THE SHARED COST OF SERVICE RIDER HAD**
3 **BEEN IN PLACE OVER THE PAST SEVERAL YEARS?**

4 **A.** Yes. PNM has calculated these amounts for illustration purposes only. PNM Table
5 SC-1 shows the annual deferral amounts for 2017-2019 that would have resulted
6 for the residential and small power customer classes had decoupling been in place
7 during this entire period. For monthly reconciliation amounts, please refer to PNM
8 Exhibit SC-3, Pages 4 and 5.

9 **PNM Table SC-1**

| Shared Cost of Service Reconciliation | | | |
|---------------------------------------|---------------|---------------|-------------|
| | 2017 | 2018 | 2019 |
| Residential | \$7,488,266 | \$2,522,429 | \$5,051,250 |
| Small Power | (\$1,397,223) | (\$2,655,190) | (\$87,189) |

10

11 **Q. WHAT ARE YOUR OBSERVATIONS ABOUT THESE EXAMPLES?**

12 **A.** These examples demonstrate that the deferral amounts can vary from year to year.
13 The variation in deferral amounts can be influenced by a range of factors such as
14 actual weather, achieved energy efficiency, actual distributed generation and the
15 economy. I would also note that credits would have been due to small power
16 customers based on the annual decoupling reconciliations in 2017 through 2019.
17 This underscores the symmetrical design of the decoupling mechanism.

18

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1 **Q. ONCE IMPLEMENTED, HOW WILL PNM TRACK DECOUPLING**
2 **DEFERRALS?**

3 **A.** PNM will calculate the over- or under-collection each month and record that in the
4 Shared Cost of Service Deferral Account. At the end of the calendar year, PNM
5 will divide the amount in this account (up to the 3 percent limitation) by the
6 forecasted annual number of customers for each customer class. This will
7 determine the Shared Cost of Service Charge for the upcoming year. PNM will
8 submit a compliance filing including supporting testimony and an Advice Notice
9 with the proposed charge no later than October 15 of each year. Included in the
10 filing will be the monthly calculation for the first nine months of the year, the
11 forecasted calculation for the fourth quarter of the year, the forecasted number of
12 customers in the following year, and the derivation of the Shared Cost of Service
13 Charge.

14
15 After the effective date of Advice Notice, PNM will start collecting or crediting (as
16 the case may be) the deferred balances of the Shared Cost of Service Deferral
17 Account resulting from the previous year effective January 1. A per-customer
18 charge (or credit) will be assessed to customers through the end of the subsequent
19 12-month period (*i.e.*, end of December), and the Shared Cost of Service Charge
20 will be reset in the following year. This reset will account for the total collection
21 of prior deferred revenue or the distribution of credits owed to customers.

22

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1 **Q. WILL THE BALANCES OF THE SHARED COST OF SERVICE**
2 **DEFERRAL ACCOUNT BE SUBJECT TO A CARRYING CHARGE?**

3 **A.** Yes, a carrying charge will be applied to deferrals, whether the deferrals reflect an
4 over- or under-collection of allowed revenues. The carrying charge will be set at
5 the Customer Deposit Interest Rate shown on the Commission web site. The rate
6 for 2020 is 1.67 percent.

7

8 **Q. WHEN WOULD DECOUPLING TAKE EFFECT UNDER PNM'S**
9 **PROPOSAL?**

10 **A.** PNM proposes to begin calculating the monthly fixed cost reconciliation in January
11 2021, following Commission approval of the mechanism. Decoupling deferrals
12 will be accumulated from January through December. However, customers would
13 not actually see a change to their bill until January 2022.

14

15 **Q. WHAT WILL BE INCLUDED IN THE ANNUAL FILING THAT**
16 **DOCUMENTS THE SHARED COST OF SERVICE RIDER RATE**
17 **CHANGES?**

18 **A.** The annual compliance filing with supporting testimony will include the following:
19 • Calculations of the decoupling deferral amounts and resulting rate changes, as
20 described above;
21 • The total amount of under- or over-collection of allowed revenue by customer
22 class;

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- 1 • Total collection of prior deferred revenue or the distribution of credits owed to
2 customers; and
- 3 • The number of customer complaints regarding the rider.
- 4

5 **Q. DOES PNM PROPOSE TO SUBMIT ANY OTHER REPORTS**
6 **REGARDING THE DECOUPLING MECHANISM?**

7 **A.** Yes. PNM proposes to file with the Commission a mid-year informational report
8 by the end of July each year that will include the monthly reconciliation amount
9 and balance in the deferral account as of the end of June. PNM believes that the
10 submission of a mid-year update serves customer interests, as the Commission and
11 other stakeholders will be able to track the trajectory of decoupling in a given year.

12

13 **Q. WILL PNM ENGAGE IN CUSTOMER OUTREACH REGARDING THE**
14 **IMPLEMENTATION OF DECOUPLING?**

15 **A.** Yes. PNM understands that decoupling is a complex topic for customers to
16 understand and that the adoption of decoupling will result in a change to customers’
17 bills. Accordingly, PNM intends to engage in customer communications that
18 explains what decoupling is and how it will affect customers.

19

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1 **Q. HOW LONG WILL THE PROPOSED DECOUPLING MECHANISM BE IN**
2 **PLACE?**

3 **A.** Decoupling is being proposed as a permanent rate mechanism, with the FCC and
4 FCE being reset in future general rate cases as discussed above. At those times,
5 all stakeholders will have the opportunity to review the performance of the
6 mechanism and make relevant proposals as they deem necessary.

7

8

III. SUPPORT FOR DECOUPLING

9 **Q. WHY IS PNM PROPOSING A DECOUPLING MECHANISM AT THIS**
10 **TIME?**

11 **A.** As discussed by PNM Witness Fenton, this decoupling proposal is aligned with the
12 legislature's intent in the recently-amended Efficient Use of Energy Act that
13 identified a revenue per customer methodology. As shown in PNM Figure SC-1
14 above, residential and small power fixed monthly charges recover about 12% and
15 10% of PNM's fixed costs, respectively. As such, when customers use less energy,
16 PNM's revenues decrease by more than its avoided costs. In other words, lower
17 sales reduce PNM's revenues by the full amount of the volumetric rate, but only
18 reduce its costs primarily by the amount of avoided fuel costs. Any reduction in
19 the average use per customer ("UPC") will therefore have a negative impact on the
20 Company's ability to recover its fixed costs.

21

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1 **Q. WHAT ARE THE DRIVERS OF THE HISTORICAL DECLINE IN**
2 **AVERAGE USE PER CUSTOMER IN THE RESIDENTIAL CUSTOMER**
3 **CLASS?**

4 **A.** The primary drivers of the historical decline in average UPC are energy efficiency
5 improvements and the increased penetration of distributed generation. For the
6 residential class, energy efficiency and load management improvements are in large
7 part attributable to PNM-sponsored programs that are offered to achieve the savings
8 goals mandated by the Efficient Use of Energy Act (“EUEA”). Average UPC is
9 also falling as a result of the increased penetration of distributed generation, most
10 notably rooftop solar. On PNM’s distribution system, the number of residential
11 solar photovoltaic interconnections increased from 765 in 2013 to 16,184 in 2019.¹⁰
12

13 **Q. HAS PNM SATISFIED THE EFFICIENT USE OF ENERGY ACT’S**
14 **POLICY OBJECTIVE AND MANDATES REGARDING ENERGY**
15 **EFFICIENCY SAVINGS?**

16 **A.** Yes. The Efficient Use of Energy Act describes energy savings requirements in
17 terms of cumulative energy savings. The Act required that PNM achieve
18 cumulative savings of at least 411 GWh in 2014, equivalent to five percent (5%) of
19 PNM's retail sales in 2005, which PNM met. In 2020 PNM is required to achieve
20 cumulative savings of 658 GWh, or 8% of 2005 retail sales and has exceeded that

¹⁰ The cumulative capacity of residential solar interconnections increased from 17.38 MW_{dc} in 2013 to 134.12 MW_{dc} in 2019 and 12.86 MW_{ac} in 2013 to 107.59 MW_{ac} in 2019.

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1 goal. PNM Table SC-2, below, shows actual annual and cumulative energy savings
2 achieved through calendar year 2019, as verified by the Commission’s independent
3 measurement and verification provider.

PNM Table SC-2

| Year | Annual Savings (GWH) | Cumulative Savings (GWH) |
|------|----------------------|--------------------------|
| 2008 | 35.2 | 35 |
| 2009 | 39.9 | 75 |
| 2010 | 58.8 | 134 |
| 2011 | 57.6 | 192 |
| 2012 | 79.3 | 271 |
| 2013 | 75.6 | 346 |
| 2014 | 74.8 | 421 |
| 2015 | 79.3 | 501 |
| 2016 | 82.0 | 583 |
| 2017 | 74.4 | 622 |
| 2018 | 70.8 | 653 |
| 2019 | 78.2 | 672 |

5
6 **Q. CAN YOU EXPLAIN HOW ENERGY EFFICIENCY PROGRAMS**
7 **RESULT IN A DISINCENTIVE FOR PNM?**

8 **A.** Fixed costs account for the majority of PNM’s, or any other utility’s, cost structure,
9 yet they are collected for the most part through PNM’s volumetric rate. Reductions
10 to sales that result from energy efficiency and load management programs reduce
11 PNM’s revenue by the full amount of the volumetric rate. However, PNM’s only
12 immediate cost savings associated with energy efficiency are avoided fuel costs.
13 The lost fixed costs are not offset by reduced energy sales and are not otherwise
14 recovered through any other mechanism. This under-recovery of fixed costs due to

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1 the implementation of energy efficiency is PNM’s regulatory disincentive to offer
2 and promote energy efficiency for its customers. This disincentive is consistently
3 identified and described in energy efficiency literature.¹¹

4
5 **Q. WILL THE PROPOSED DECOUPLING MECHANISM AFFECT THE**
6 **CUSTOMER-LEVEL INCENTIVE TO ENGAGE IN CONSERVATION**
7 **AND ENERGY EFFICIENCY?**

8 **A.** No. For example, a customer who is evaluating whether to conserve electricity can
9 expect an immediate benefit that is the same that the customer would have obtained
10 absent decoupling. That is, the customer can expect a bill reduction in the amount
11 of the full volumetric rate, including all riders and fees, multiplied by the amount
12 of saved energy (i.e., kWh). The portion of this bill reduction that is associated
13 with fixed-cost recovery is then subject to decoupling and for the utility to recover.
14 Because each customer uses a very small percentage of the total class-level usage,
15 a conserving customer pays back a minimal amount of the customer’s own lost

¹¹ See, e.g., Annie Gilleo, Marty Kushler, Maggie Molina and Dan York, *Valuing Efficiency: A Review of Lost Revenue Adjustment Mechanisms*, AMERICAN COUNCIL FOR AN ENERGY-EFFICIENT ECONOMY, at v (“The traditional utility business model is based on a throughput incentive, whereby utilities earn more profits by selling electricity. Investments in energy efficiency drive down energy use and therefore utility revenues. However, efficiency does not reduce the short-term, fixed costs of providing service.”) (June 2015), available at <https://www.aceee.org/research-report/u1503>. Robert King, Doug Lewin, Dr. Steve Isser and Jess Totten, *Efficiency and Ratemaking: Aligning the Interest of Utilities and their Customers*, THE SOUTH-CENTRAL PARTNERSHIP FOR ENERGY EFFICIENCY AS A RESOURCE (SPEER), at 4 (“Absent some innovative rate approach, adopting an energy efficiency program results in increased costs and reductions in customers’ demand and, accordingly, adverse financial consequences for a utility. There are three aspects of energy efficiency programs that have ratemaking implications: (1) the utility incurs costs to conduct the program; (2) the utility loses revenue as a result of reductions in sales due to improved energy efficiency; and, (3) in general, utilities have no financial incentive to develop the expertise to manage a program to encourage customers to improve their energy efficiency.”) (Mar. 2016), available at <https://eepartnership.org/wp-content/uploads/2016/03/SPEER-Efficiency-and-Ratemaking-report-2.pdf>.

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1 revenues. Therefore, a customer’s decision to conserve should not be affected by
2 the presence of decoupling because the customer cannot conserve enough energy
3 to affect significantly the overall rate the customer pays.

4

5 **Q. HOW DOES THE INCREASING PENETRATION OF DISTRIBUTED**
6 **GENERATION DIMINISH THE OPPORTUNITY FOR FIXED COST**
7 **RECOVERY?**

8 **A.** Consider the rooftop solar example. Net metering rules specify that for every kWh
9 produced by customer-sited generation, the customer receives a credit equal to a
10 kWh per kWh offset. This means that if a residential customer installs sufficient
11 rooftop solar to offset all of the customer’s energy usage, for example, that
12 customer will be contributing nothing to the Company’s fixed costs for distribution,
13 transmission and generation, beyond the costs recouped through the fixed customer
14 charge. However, because solar is intermittent, customers utilizing rooftop solar
15 still depend on PNM’s infrastructure, even though they may not be contributing to
16 the cost of that infrastructure. Although decoupling does not fully resolve this
17 issue, it will move the rate design forward by making PNM more agnostic to the
18 continued adoption of rooftop solar from an economic perspective.

19

**DIRECT TESTIMONY
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1 **Q. WILL THE PROPOSED DECOUPLING MECHANISM AFFECT THE**
2 **CUSTOMER-LEVEL INCENTIVE TO INSTALL DISTRIBUTED**
3 **GENERATION, SUCH AS ROOFTOP SOLAR?**

4 **A.** As I understand it, many customers install rooftop solar for environmental and
5 economic reasons. Decoupling should not alter customers' concerns regarding the
6 environment. Moreover, PNM's proposed limitation for the Shared Cost of Service
7 is 3 percent. Accordingly, the potential impact of the Shared Cost of Service
8 Charge should not significantly impact the payback period for a rooftop solar
9 installation and adversely affect customers' incentives to install distributed
10 generation.

11

12 **b. Small Power Use per Customer**

13 **Q. PLEASE DISCUSS PNM'S HISTORICAL USE PER CUSTOMER TRENDS**
14 **FOR THE SMALL POWER CUSTOMER CLASS.**

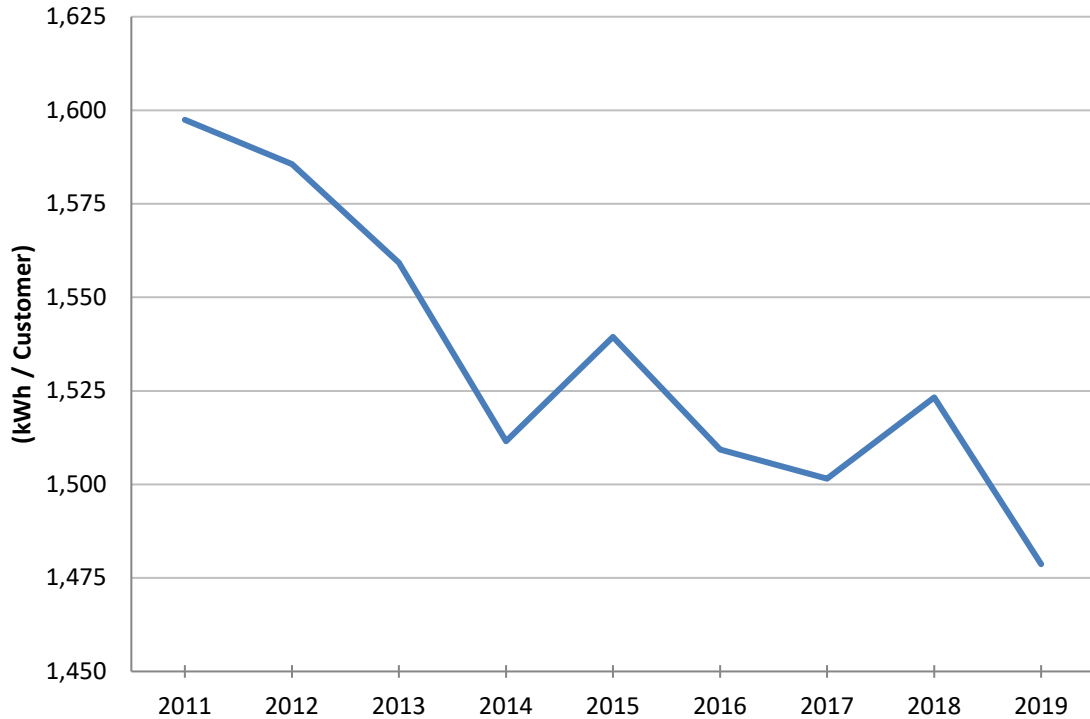
15 **A.** Similar to the general trend in the residential customer class, the average annual
16 UPC for the small power customer class has declined over time. For example, in
17 2011 the average UPC (actual) for small power customers was 1,597 kWh and
18 declined to 1,479 kWh in 2019, a 7 percent decrease. The following chart illustrates
19 how PNM's average UPC for small power customers has fallen since 2011.

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1

PNM Figure SC-3

Small Power Usage per Customer - Actual



2

3

4 **Q. WHY IS THE SMALL POWER CLASS INCLUDED IN THE**
5 **DECOUPLING MECHANISM?**

6 **A.** As explained above, the rate design for the residential and small customer classes
7 are substantially similar under the Company’s current rate structure. As such, the
8 impacts on PNM’s fixed cost recovery from energy efficiency and distributed
9 generation are the same for the two classes. By adopting decoupling for the
10 residential customer class but not the small power customer class the Commission
11 would address PNM’s fixed cost recovery problem and its “throughput incentive”

**DIRECT TESTIMONY
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1 in a piecemeal and asymmetric fashion. Under these circumstances, PNM could
2 have an incentive to place greater emphasis on its energy efficiency and distributed
3 generation programs for the residential class, reducing opportunities for small
4 power customers.

5

6

IV. CONCLUSION

7

Q. DO YOU HAVE ANY CONCLUDING OBSERVATIONS?

8

A. Yes. I recommend that the Commission adopt PNM's proposal to implement a
9 decoupling mechanism for its residential and small power service customers. From
10 the Company's perspective, decoupling will help ensure that PNM recovers the
11 fixed costs to serve its customers in the residential and small power rate classes, no
12 more and no less.

13

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

14

A. Yes it does.

GCG#526896

Educational Background and Relevant Employment Experience

PNM Exhibit SC-1

Is contained in the following 3 pages.

STELLA CHAN: EDUCATIONAL AND PROFESSIONAL SUMMARY

Name: Stella Chan

Address: Public Service Company of New Mexico
Main Offices
Albuquerque, New Mexico 87158-1105

Position: Director, Pricing and Load Research

Education: University of Houston, Houston, Texas

- MBA with concentration in Finance
- BBA with major in Finance

Language Skills:

Fluent in English, Mandarin Chinese and Cantonese

Employment: Public Service Company of New Mexico, Albuquerque, New Mexico:
Director, Pricing & Load Research: 2013 to present

Colorado Springs Utilities, Colorado Springs, Colorado
Manager, Pricing & Forecasting, Planning and Finance Division:
2003-2013

University of Houston, Houston, Texas, New Mexico:
Adjunct Faculty – Finance Department: 2003

Independent Consultant: 2002 to 2003

- Challenger Development, L.C.
- Boyce Power System

Energy Wholesale Operations, Houston, Texas
Director, Government and Regulatory Affairs: 2001

Enron Corporation, Houston, Texas
Director, Government Affairs: 2000-2001
General Manager, Operations, SK-Enron, Seoul, South Korea: 1999-2000
Director, Regulatory Affairs, Enron International: 1997-1999
Manager, Rates and Tariffs, Enron Energy Services: 1997

El Paso Energy, Houston, Texas
Staff Analyst, Research and Competitive Analysis: 1996-1997
Consultant, Business Development: 1995-1996

Employment (Continued):

Duke Energy (formerly Texas Eastern), Houston, Texas
 Project Leader, Strategic Planning: 1994-1005
 Project Leader, Market Planning and Analysis: 1992-1994

El Paso Energy (formerly Tenneco Gas), Houston, Texas
 Senior Analyst, Cost Allocation and Rate Design: 1990-1992
 Analyst, Special Projects: 1987-1989

Community Activities (Colorado Springs, Colorado):

Board Chair, Urban Peak Colorado Springs
 Treasurer, Urban Peak Colorado Spring
 Board Member, CASA (Court Appointed Special Advocate), Pikes Peak Region
 Steering Committee, Community Focus Fund, Colorado Springs Utilities

Testimony Filed Before the New Mexico Public Regulation Commission:

| <u>Case Number</u> | <u>Proceeding/Subject Matter</u> |
|---------------------------|--|
| Un-Docketed | Advice Notice No. 478, relating to the revision of PNM Rate No. 20- Integrated System Streetlighting and Floodlighting Service, September 27, 2013 |
| Un-Docketed | Advice Notice Nos. 480 and 65, regarding consolidation of PNM's North and South Rules, updates to service rules, and changes to Rule 15 - Line Extension Policy, November 15, 2013 |
| 14-00118-UT | Matter of PNM's Advice Notice 493, relating to modification to the qualifying criteria for service under Rate No. 5B-Large Service to Customers, April 22, 2014 |
| 14-00150-UT | Matter of PNM's Application for Approval of the City of Rio Rancho Underground Project Rider Pursuant to Advice Notice No. 495, May 25, 2014 |
| 14-00158-UT | PNM's Renewable Energy Portfolio Procurement Plan for 2015 and Proposed 2015 Rider No. 36 Rate, June 2, 2014 |
| 14-00310-UT | PNM's Application for Approval of 2014 Electric Energy Efficiency and Load Management Program Plan and Revision to Tariff Rider No. 16, October 6, 2014 |
| 14-00332-UT | Application of PNM for Revision of its Retail Electric Rates Pursuant to Advice Notice No. 507 |
| 14-00337-UT | Application of PNM for Approval of the City of Albuquerque 2014 Underground Project Rider pursuant to Advice Notice No. 502 |
| 15-00166-UT | In the Matter of Public Service Company of New Mexico's Renewable Energy Portfolio Procurement Plan for 2016 and Proposed 2016 Rider Rate Under Rate Rider No. 36 |

| | |
|-------------|--|
| 15-00261-UT | In the Matter of the Application of Public Service Company of New Mexico for Revision of its Retail Electric Rates Pursuant to Advice Notice No. 513 |
| 16-00276-UT | In the Matter of the Application of Public Service Company of New Mexico for Revision of Its Retail Electric Rates Pursuant to Advice Notice No. 533 |
| 19-00158-UT | In the Matter of Public Service Company of New Mexico's Application for Approval of PNM Solar Direct Voluntary Renewable Energy Program, Power Purchase Agreement, and Advice Notice Nos 560 and 561 |

GCG#526898

Original Rider No. 52 (Shared Cost of Service)

PNM Exhibit SC-2

Is contained in the following 2 pages.

PUBLIC SERVICE COMPANY OF NEW MEXICO

ORIGINAL RIDER NO. 52

SHARED COST OF SERVICE

APPLICABILITY: The Shared Cost of Service (“SCS”) rider will apply to the following rate schedules within PNM’s service territory: Rate 1A – Residential Service; Rate 1B – Residential Service Time-of-Use; Rate 2A – Small Power Service; and Rate 2B – Small Power Service Time-of-Use.

DESCRIPTION: This rider establishes the SCS Deferral Accounts that permits the Company to recover the difference between the authorized fixed cost revenue derived from the authorized fixed cost per customer (“FCC”) established by the New Mexico Public Regulation Commission (“NMPRC”) in Case No. 15-00261-UT and the actual fixed cost revenue generated by the authorized fixed cost per kWh (“FCE”) recovered through rates. An over-collection occurs when monthly actual fixed cost revenue collected through rates exceed the authorized fixed cost revenue. An under-collection occurs when the authorized fixed cost revenue exceeds the monthly actual fixed cost revenue collected through rates.

SHARED COST OF SERVICE CHARGE (“SCS CHARGE”): The monthly SCS Charge is the annual ending balance in the SCS Deferral Accounts divided by the forecast annual number of customers for the combined Rate Schedules 1A and 1B and combined Rate Schedules 2A and 2B. In the event of an annual over-collection, the monthly SCS Charge will be negative or a credit. In the event of an annual under-collection, the monthly SCS Charge will be a charge.

1A – Residential Service, and
1B – Residential Service Time-of-Use \$0.00 per customer / bill
2A – Small Power Service, and
2B – Small Power Service Time-of-Use \$0.00 per customer / bill

CALCULATION OF MONTHLY SCS RECONCILIATION: Every month the Company will determine the actual number of customers served and will multiply that by the FCC to calculate the authorized fixed cost revenue. Next the Company will calculate the actual monthly revenue from energy sales by multiplying the actual energy sales by the FCE. The difference between the two will be recorded in the SCS Deferral Account.

Monthly Shared Cost of Service reconciliation = authorized fixed cost revenue – actual fixed cost revenue

3% ANNUAL SCS CHARGE LIMITATION: The annual SCS reconciliation amount may not exceed 3% of the forecast period’s revenue, before applicable taxes and fees, for combined rate schedules 1A and 1B and combined rate schedules 2A and 2B. If the annual SCS reconciliation amount exceeds 3%, the excess will be deferred to the following year’s annual reset. There is no limitation to any potential negative charge or credit amount.

ANNUAL SCS RECONCILIATION RESET TIMELINE: The annual reset is the process by which PNM will file to adjust the SCS Charge for the upcoming adjustment period. The annual reset will be filed with the Commission by October 15 to go into effect for the period January 1 – December 31 the following year.

Advice Notice No. 568

Mark Fenton
Executive Director, Regulatory Policy and Case Management
GCG# 526897

PUBLIC SERVICE COMPANY OF NEW MEXICO

ORIGINAL RIDER NO. 52

SHARED COST OF SERVICE

RULES AND REGULATIONS: In addition to the SCS Charge described in this rider, all specifics of service and monthly charges for electric service under the customer's regular rate schedule apply. Where they are not inconsistent with this rider, the Company's Rules and Regulations are a part of this rider as if fully written herein.

DURATION OF THE RIDER: This rider shall be in effect until replaced or canceled by the NMPRC.

Advice Notice No. 568

Mark Fenton
Executive Director, Regulatory Policy and Case Management
GCG# 526897

Decoupling Mechanism Workpapers

PNM Exhibit SC-3

Is contained in the following 6 pages.

**Calculation of Annual Authorized Fixed Cost Recovery Amounts
Based on NMPRC Case No. 15-00261-UT**

Authorized Fixed Cost Recovery (\$) = Customer Cost Revenue Requirements + Demand Revenue Requirements - Customer Charge Revenues

| | | | Residential | Small Power |
|----|--|--------------|-----------------------|----------------------|
| 1 | Customer Cost Revenue Requirements (\$) | Note 1 | \$ 69,560,697 | \$ 10,890,422 |
| 2 | Demand Revenue Requirements (\$) | Note 2 | \$ 247,568,833 | \$ 82,815,910 |
| 3 | 1A/2A Customers | Note 3 | 5,505,008 | 618,459 |
| 4 | 1A/2A Customer Charge (\$/customer) | Note 4 | 7.00 | 15.53 |
| 5 | 1A/2A Customer Charge Revenues (\$) | L3 x L4 | \$ 38,535,056 | \$ 9,604,668 |
| 6 | 1B/2B Customers | Note 5 | 1,512 | 12,552 |
| 7 | 1B/2B Customer Charge (\$/customer) | Note 6 | 26.10 | 15.53 |
| 8 | 1B/2B Customer Charge Revenues (\$) | L6 x L7 | \$ 39,463 | \$ 194,933 |
| 9 | Total Customer Charge Revenues (\$) | L5 + L8 | \$ 38,574,519 | \$ 9,799,601 |
| 10 | Authorized Fixed Cost Recovery (\$) | L1 + L2 - L9 | \$ 278,555,011 | \$ 83,906,730 |

FCC - Authorized Fixed Cost per Customer (\$/Customer) = Authorized Fixed Cost Recovery / Number of Customers

FCE - Authorized Fixed Cost per Energy (\$/kWh) = Authorized Fixed Cost Recovery / Energy Sales

| | | | Residential | Small Power |
|----|---|-----------|--------------------|--------------------|
| 11 | Customers | L3 + L6 | 5,506,520 | 631,011 |
| 12 | Energy Sales | Note 7 | 3,196,738,242 | 931,751,783 |
| 13 | Authorized Fixed Cost per Customer ("FCC") | L10 / L11 | \$ 50.59 | \$ 132.97 |
| 14 | Authorized Fixed Cost per kWh ("FCE") (\$/kWh) | L10 / L12 | \$0.0871373 | \$0.0900527 |

Note 1: Case No. 15-00261-UT PNM Exhibit SC-9. **Residential-** Page 4 line 16 column (D). **Small Power-** Page 4 line 16 column (E)

Note 2: Case No. 15-00261-UT PNM Exhibit SC-9. **Residential-** Page 4 line 5 column (D). **Small Power-** Page 4 line 5 column (E)

Note 3: Case No. 15-00261-UT PNM Exhibit JCA-3. **Residential-** Page 1 line 3 column (G) + line 11 Column (G). **Small Power -** Page 2 line 3 column (G) + line 11 Column (G)

Note 4: **Residential-** PNM 20th Revised Rate Rider No 1A. **Small Power-** PNM 21st Revised Rate No 2A

Note 5: Case No. 15-00261-UT PNM Exhibit JCA-3. **Residential-** Page 1 line 3 column (J) + line 11 Column (J). **Small Power -** Page 2 line 3 column (J) + line 11 Column (J)

Note 6: **Residential-** PNM 20th Revised Rate Rider No 1B. **Small Power-** PNM 21st Revised Rate No 2B

Note 7: Case No. 15-00261-UT PNM Exhibit JCA-3. **Residential-** Page 1 line 33 column (B). **Small Power-** Page 2 line 33 column (B)

Example Application of 2021 Decoupling Mechanism

Residential

| | Month A | Sales (kWh) B | Customers C | Authorized Fixed Cost per kWh D | Authorized Fixed Cost per Customer E | Authorized Fixed Cost Revenue F | Actual Fixed Cost Revenue G | Shared Cost of Service Reconciliation H |
|----|------------|------------------|----------------|--|---|---------------------------------------|-----------------------------------|--|
| | | | | | | $C \times E$ | $B \times D$ | $F - G$ |
| 1 | Jan 2021 | 315,275,560 | 478,272 | \$ 0.0871373 | \$ 50.59 | \$ 24,195,783 | \$ 27,472,261 | \$ (3,276,478) |
| 2 | Feb 2021 | 275,501,110 | 478,616 | \$ 0.0871373 | \$ 50.59 | \$ 24,213,206 | \$ 24,006,423 | \$ 206,783 |
| 3 | Mar 2021 | 233,401,020 | 478,961 | \$ 0.0871373 | \$ 50.59 | \$ 24,230,629 | \$ 20,337,935 | \$ 3,892,694 |
| 4 | Apr 2021 | 201,378,970 | 479,305 | \$ 0.0871373 | \$ 50.59 | \$ 24,248,054 | \$ 17,547,620 | \$ 6,700,434 |
| 5 | May 2021 | 192,743,950 | 479,650 | \$ 0.0871373 | \$ 50.59 | \$ 24,265,478 | \$ 16,795,187 | \$ 7,470,291 |
| 6 | Jun 2021 | 252,484,180 | 479,994 | \$ 0.0871373 | \$ 50.59 | \$ 24,282,905 | \$ 22,000,790 | \$ 2,282,115 |
| 7 | Jul 2021 | 338,667,390 | 480,339 | \$ 0.0871373 | \$ 50.59 | \$ 24,300,331 | \$ 29,510,562 | \$ (5,210,231) |
| 8 | Aug 2021 | 352,189,830 | 480,685 | \$ 0.0871373 | \$ 50.59 | \$ 24,317,832 | \$ 30,688,871 | \$ (6,371,038) |
| 9 | Sep 2021 | 307,514,130 | 481,031 | \$ 0.0871373 | \$ 50.59 | \$ 24,335,334 | \$ 26,795,951 | \$ (2,460,617) |
| 10 | Oct 2021 | 232,548,680 | 481,377 | \$ 0.0871373 | \$ 50.59 | \$ 24,352,837 | \$ 20,263,664 | \$ 4,089,173 |
| 11 | Nov 2021 | 207,436,270 | 481,722 | \$ 0.0871373 | \$ 50.59 | \$ 24,370,341 | \$ 18,075,436 | \$ 6,294,904 |
| 12 | Dec 2021 | 264,583,450 | 482,068 | \$ 0.0871373 | \$ 50.59 | \$ 24,387,845 | \$ 23,055,087 | \$ 1,332,757 |
| 13 | Total 2021 | 3,173,724,540 | 5,762,020 | | | \$ 291,500,574 | \$ 276,549,787 | \$ 14,950,787 |

| | Total 2021 Shared Cost of Service Reconciliation I | Deferral Account Starting Balance J | 2022 Residential Revenue K | Shared Cost of Service Charge Limitation L | Authorized 2021 Residential Fixed Cost Recovery M | Deferral Account Ending Balance N | 2022 Forecast Residential Customers O | 2022 Residential Shared Cost of Service Charge P |
|----|--|---|----------------------------------|---|--|---|--|---|
| | $\Sigma(H)$ | | | $K \times 3\%$ | <i>Lesser of (I+J) and L</i> | $I + J - L$ | | M / O |
| 14 | \$ 14,950,787 | \$ - | \$ 441,354,203 | \$ 13,240,626 | \$ 13,240,626 | \$ 1,710,161 | 5,811,828 | \$ 2.28 |

Example Application of 2021 Decoupling Mechanism

Small Power

| | Month A | Sales (kWh) B | Customers C | Authorized | Authorized | Authorized Fixed | Actual Fixed Cost | Shared Cost of |
|----|-----------------------|-----------------------|-----------------|----------------------------|---------------------------------|-------------------------|----------------------|--------------------------------|
| | | | | Fixed Cost per kWh D | Fixed Cost per Customer E | Cost Revenue F | Revenue G | Service Reconciliation H |
| | | | | | | <i>C x E</i> | <i>B x D</i> | <i>F - G</i> |
| 1 | Jan 2021 | 78,353,220 | 53,909 | \$ 0.0900527 | \$ 132.97 | \$ 7,168,261 | \$ 7,055,919 | \$ 112,342 |
| 2 | Feb 2021 | 75,708,810 | 53,946 | \$ 0.0900527 | \$ 132.97 | \$ 7,173,244 | \$ 6,817,783 | \$ 355,461 |
| 3 | Mar 2021 | 72,003,640 | 53,984 | \$ 0.0900527 | \$ 132.97 | \$ 7,178,225 | \$ 6,484,122 | \$ 694,102 |
| 4 | Apr 2021 | 69,428,780 | 54,021 | \$ 0.0900527 | \$ 132.97 | \$ 7,183,206 | \$ 6,252,249 | \$ 930,957 |
| 5 | May 2021 | 69,911,340 | 54,059 | \$ 0.0900527 | \$ 132.97 | \$ 7,188,187 | \$ 6,295,705 | \$ 892,482 |
| 6 | Jun 2021 | 80,185,920 | 54,096 | \$ 0.0900527 | \$ 132.97 | \$ 7,193,166 | \$ 7,220,959 | \$ (27,792) |
| 7 | Jul 2021 | 93,667,080 | 54,134 | \$ 0.0900527 | \$ 132.97 | \$ 7,198,146 | \$ 8,434,973 | \$ (1,236,827) |
| 8 | Aug 2021 | 97,014,650 | 54,172 | \$ 0.0900527 | \$ 132.97 | \$ 7,203,190 | \$ 8,736,431 | \$ (1,533,241) |
| 9 | Sep 2021 | 90,404,530 | 54,209 | \$ 0.0900527 | \$ 132.97 | \$ 7,208,233 | \$ 8,141,172 | \$ (932,939) |
| 10 | Oct 2021 | 79,479,980 | 54,247 | \$ 0.0900527 | \$ 132.97 | \$ 7,213,275 | \$ 7,157,387 | \$ 55,889 |
| 11 | Nov 2021 | 70,164,900 | 54,285 | \$ 0.0900527 | \$ 132.97 | \$ 7,218,318 | \$ 6,318,539 | \$ 899,779 |
| 12 | Dec 2021 | 72,476,640 | 54,323 | \$ 0.0900527 | \$ 132.97 | \$ 7,223,359 | \$ 6,526,717 | \$ 696,641 |
| 13 | Total 2021 | 948,799,490 | 649,386 | | | \$ 86,348,809 | \$ 85,441,956 | \$ 906,853 |
| | Total 2021 | Shared Cost of | Deferral | 2022 Small | Shared Cost of | Authorized | 2022 Forecast | 2022 Small Power |
| | Service | Account | Starting | Power Revenue | Service Charge | 2021 Small | Small Power | Shared Cost of |
| | Reconciliation | Balance | Balance | Limitation | Limitation | Power Fixed | Customers | Service Charge |
| | I | J | K | L | M | Cost Recovery | N | P |
| | $\Sigma(H)$ | | | <i>K x 3%</i> | <i>Lesser of (I+J) and L</i> | Deferral Account | O | M/O |
| | | | | | | Ending Balance | | |
| 14 | \$ 906,853 | \$ - | \$ 132,928,339 | \$ 3,987,850 | \$ 906,853 | \$ - | 654,810 | \$ 1.38 |

Calculation of Historical Monthly Fixed Cost Reconciliation

Residential

| Month | Sales (kWh) | Customers | Authorized Fixed Cost per kWh | Authorized Fixed Cost per Customer | Authorized Fixed Cost Revenue | Actual Fixed Cost Revenue | Shared Cost of Service Reconciliation |
|-------------------|----------------------|------------------|-------------------------------------|--|-------------------------------------|------------------------------|---|
| A | B | C | D | E | F | G | H |
| | | | | | $C \times E$ | $B \times D$ | $F - G$ |
| Jan 2017 | 307,089,735 | 463,219 | \$ 0.0871373 | \$ 50.59 | \$ 23,434,249 | \$ 26,758,970 | \$ (3,324,721) |
| Feb 2017 | 267,798,393 | 463,402 | \$ 0.0871373 | \$ 50.59 | \$ 23,443,507 | \$ 23,335,229 | \$ 108,278 |
| Mar 2017 | 235,419,943 | 463,646 | \$ 0.0871373 | \$ 50.59 | \$ 23,455,851 | \$ 20,513,858 | \$ 2,941,993 |
| Apr 2017 | 194,001,689 | 463,695 | \$ 0.0871373 | \$ 50.59 | \$ 23,458,330 | \$ 16,904,783 | \$ 6,553,547 |
| May 2017 | 206,183,019 | 464,081 | \$ 0.0871373 | \$ 50.59 | \$ 23,477,858 | \$ 17,966,232 | \$ 5,511,626 |
| Jun 2017 | 248,940,591 | 464,259 | \$ 0.0871373 | \$ 50.59 | \$ 23,486,863 | \$ 21,692,011 | \$ 1,794,852 |
| Jul 2017 | 346,476,783 | 464,424 | \$ 0.0871373 | \$ 50.59 | \$ 23,495,210 | \$ 30,191,051 | \$ (6,695,841) |
| Aug 2017 | 336,947,822 | 464,583 | \$ 0.0871373 | \$ 50.59 | \$ 23,503,254 | \$ 29,360,723 | \$ (5,857,469) |
| Sep 2017 | 306,283,233 | 464,926 | \$ 0.0871373 | \$ 50.59 | \$ 23,520,606 | \$ 26,688,694 | \$ (3,168,088) |
| Oct 2017 | 237,297,290 | 465,065 | \$ 0.0871373 | \$ 50.59 | \$ 23,527,638 | \$ 20,677,445 | \$ 2,850,193 |
| Nov 2017 | 210,142,321 | 465,386 | \$ 0.0871373 | \$ 50.59 | \$ 23,543,878 | \$ 18,311,234 | \$ 5,232,643 |
| Dec 2017 | 252,832,686 | 465,950 | \$ 0.0871373 | \$ 50.59 | \$ 23,572,411 | \$ 22,031,158 | \$ 1,541,253 |
| 2017 Total | 3,149,413,505 | 5,572,636 | | | \$ 281,919,655 | \$ 274,431,389 | \$ 7,488,266 |
| Jan 2018 | 298,351,352 | 466,357 | \$ 0.0871373 | \$ 50.59 | \$ 23,593,001 | \$ 25,997,531 | \$ (2,404,531) |
| Feb 2018 | 263,619,772 | 466,807 | \$ 0.0871373 | \$ 50.59 | \$ 23,615,766 | \$ 22,971,115 | \$ 644,651 |
| Mar 2018 | 237,903,781 | 467,073 | \$ 0.0871373 | \$ 50.59 | \$ 23,629,223 | \$ 20,730,293 | \$ 2,898,930 |
| Apr 2018 | 201,367,930 | 467,344 | \$ 0.0871373 | \$ 50.59 | \$ 23,642,933 | \$ 17,546,658 | \$ 6,096,275 |
| May 2018 | 202,281,925 | 467,632 | \$ 0.0871373 | \$ 50.59 | \$ 23,657,503 | \$ 17,626,301 | \$ 6,031,202 |
| Jun 2018 | 282,584,894 | 468,082 | \$ 0.0871373 | \$ 50.59 | \$ 23,680,268 | \$ 24,623,685 | \$ (943,416) |
| Jul 2018 | 348,838,698 | 468,438 | \$ 0.0871373 | \$ 50.59 | \$ 23,698,278 | \$ 30,396,862 | \$ (6,698,584) |
| Aug 2018 | 362,834,212 | 468,748 | \$ 0.0871373 | \$ 50.59 | \$ 23,713,961 | \$ 31,616,394 | \$ (7,902,432) |
| Sep 2018 | 306,817,504 | 469,121 | \$ 0.0871373 | \$ 50.59 | \$ 23,732,831 | \$ 26,735,249 | \$ (3,002,418) |
| Oct 2018 | 236,012,449 | 469,484 | \$ 0.0871373 | \$ 50.59 | \$ 23,751,196 | \$ 20,565,488 | \$ 3,185,708 |
| Nov 2018 | 222,096,208 | 469,812 | \$ 0.0871373 | \$ 50.59 | \$ 23,767,789 | \$ 19,352,864 | \$ 4,414,925 |
| Dec 2018 | 270,663,599 | 470,192 | \$ 0.0871373 | \$ 50.59 | \$ 23,787,013 | \$ 23,584,895 | \$ 202,118 |
| 2018 Total | 3,233,372,324 | 5,619,090 | | | \$ 284,269,763 | \$ 281,747,334 | \$ 2,522,429 |
| Jan 2019 | 327,035,325 | 470,570 | \$ 0.0871373 | \$ 50.59 | \$ 23,806,136 | \$ 28,496,975 | \$ (4,690,839) |
| Feb 2019 | 284,342,108 | 470,802 | \$ 0.0871373 | \$ 50.59 | \$ 23,817,873 | \$ 24,776,804 | \$ (958,930) |
| Mar 2019 | 250,311,486 | 471,151 | \$ 0.0871373 | \$ 50.59 | \$ 23,835,529 | \$ 21,811,467 | \$ 2,024,062 |
| Apr 2019 | 208,530,140 | 471,114 | \$ 0.0871373 | \$ 50.59 | \$ 23,833,657 | \$ 18,170,753 | \$ 5,662,904 |
| May 2019 | 191,371,772 | 471,278 | \$ 0.0871373 | \$ 50.59 | \$ 23,841,954 | \$ 16,675,620 | \$ 7,166,335 |
| Jun 2019 | 223,016,506 | 471,506 | \$ 0.0871373 | \$ 50.59 | \$ 23,853,489 | \$ 19,433,056 | \$ 4,420,432 |
| Jul 2019 | 311,535,072 | 471,929 | \$ 0.0871373 | \$ 50.59 | \$ 23,874,888 | \$ 27,146,325 | \$ (3,271,437) |
| Aug 2019 | 353,914,499 | 472,280 | \$ 0.0871373 | \$ 50.59 | \$ 23,892,645 | \$ 30,839,154 | \$ (6,946,509) |
| Sep 2019 | 341,947,649 | 472,595 | \$ 0.0871373 | \$ 50.59 | \$ 23,908,581 | \$ 29,796,395 | \$ (5,887,814) |
| Oct 2019 | 245,050,251 | 472,837 | \$ 0.0871373 | \$ 50.59 | \$ 23,920,824 | \$ 21,353,017 | \$ 2,567,807 |
| Nov 2019 | 223,548,838 | 473,356 | \$ 0.0871373 | \$ 50.59 | \$ 23,947,080 | \$ 19,479,442 | \$ 4,467,638 |
| Dec 2019 | 269,369,060 | 473,803 | \$ 0.0871373 | \$ 50.59 | \$ 23,969,694 | \$ 23,472,093 | \$ 497,601 |
| 2019 Total | 3,229,972,706 | 5,663,221 | | | \$ 286,502,350 | \$ 281,451,101 | \$ 5,051,250 |

Calculation of Historical Monthly Fixed Cost Reconciliation

Small Power

| Month | Sales (kWh) | Customers | Authorized | Authorized | Authorized Fixed | Actual Fixed | Shared Cost of |
|-------------------|--------------------|----------------|--------------------|-------------------------|----------------------|----------------------|------------------------|
| | | | Fixed Cost per kWh | Fixed Cost per Customer | Cost Revenue | Cost Revenue | Service Reconciliation |
| A | B | C | D | E | F | G | H |
| | | | | | C x E | B x D | F - G |
| Jan 2017 | 79,569,188 | 52,457 | \$ 0.0900527 | \$ 132.97 | \$ 6,975,207 | \$ 7,165,420 | \$ (190,213) |
| Feb 2017 | 74,746,001 | 52,419 | \$ 0.0900527 | \$ 132.97 | \$ 6,970,154 | \$ 6,731,079 | \$ 239,075 |
| Mar 2017 | 72,471,452 | 52,348 | \$ 0.0900527 | \$ 132.97 | \$ 6,960,714 | \$ 6,526,250 | \$ 434,464 |
| Apr 2017 | 64,824,442 | 52,415 | \$ 0.0900527 | \$ 132.97 | \$ 6,969,623 | \$ 5,837,616 | \$ 1,132,007 |
| May 2017 | 69,656,094 | 52,446 | \$ 0.0900527 | \$ 132.97 | \$ 6,973,745 | \$ 6,272,719 | \$ 701,025 |
| Jun 2017 | 77,804,427 | 52,469 | \$ 0.0900527 | \$ 132.97 | \$ 6,976,803 | \$ 7,006,499 | \$ (29,696) |
| Jul 2017 | 96,017,588 | 52,518 | \$ 0.0900527 | \$ 132.97 | \$ 6,983,318 | \$ 8,646,643 | \$ (1,663,325) |
| Aug 2017 | 95,688,755 | 52,639 | \$ 0.0900527 | \$ 132.97 | \$ 6,999,408 | \$ 8,617,031 | \$ (1,617,623) |
| Sep 2017 | 91,176,873 | 52,694 | \$ 0.0900527 | \$ 132.97 | \$ 7,006,721 | \$ 8,210,724 | \$ (1,204,002) |
| Oct 2017 | 79,878,943 | 52,739 | \$ 0.0900527 | \$ 132.97 | \$ 7,012,705 | \$ 7,193,314 | \$ (180,610) |
| Nov 2017 | 71,537,955 | 52,793 | \$ 0.0900527 | \$ 132.97 | \$ 7,019,885 | \$ 6,442,186 | \$ 577,699 |
| Dec 2017 | 73,576,360 | 52,867 | \$ 0.0900527 | \$ 132.97 | \$ 7,029,725 | \$ 6,625,750 | \$ 403,975 |
| 2017 Total | 946,948,077 | 630,804 | | | \$ 83,878,008 | \$ 85,275,231 | \$ (1,397,223) |
| Jan 2018 | 79,112,308 | 52,915 | \$ 0.0900527 | \$ 132.97 | \$ 7,036,108 | \$ 7,124,277 | \$ (88,169) |
| Feb 2018 | 76,057,437 | 52,990 | \$ 0.0900527 | \$ 132.97 | \$ 7,046,080 | \$ 6,849,178 | \$ 196,903 |
| Mar 2018 | 73,220,715 | 53,054 | \$ 0.0900527 | \$ 132.97 | \$ 7,054,590 | \$ 6,593,723 | \$ 460,867 |
| Apr 2018 | 67,582,566 | 53,071 | \$ 0.0900527 | \$ 132.97 | \$ 7,056,851 | \$ 6,085,993 | \$ 970,858 |
| May 2018 | 70,672,039 | 53,123 | \$ 0.0900527 | \$ 132.97 | \$ 7,063,765 | \$ 6,364,208 | \$ 699,557 |
| Jun 2018 | 87,059,164 | 53,220 | \$ 0.0900527 | \$ 132.97 | \$ 7,076,663 | \$ 7,839,913 | \$ (763,249) |
| Jul 2018 | 98,639,136 | 53,179 | \$ 0.0900527 | \$ 132.97 | \$ 7,071,212 | \$ 8,882,721 | \$ (1,811,509) |
| Aug 2018 | 101,503,180 | 53,184 | \$ 0.0900527 | \$ 132.97 | \$ 7,071,876 | \$ 9,140,635 | \$ (2,068,759) |
| Sep 2018 | 92,813,609 | 53,204 | \$ 0.0900527 | \$ 132.97 | \$ 7,074,536 | \$ 8,358,116 | \$ (1,283,580) |
| Oct 2018 | 78,055,647 | 53,192 | \$ 0.0900527 | \$ 132.97 | \$ 7,072,940 | \$ 7,029,122 | \$ 43,818 |
| Nov 2018 | 71,226,310 | 53,196 | \$ 0.0900527 | \$ 132.97 | \$ 7,073,472 | \$ 6,414,122 | \$ 659,351 |
| Dec 2018 | 74,915,532 | 53,208 | \$ 0.0900527 | \$ 132.97 | \$ 7,075,068 | \$ 6,746,346 | \$ 328,722 |
| 2018 Total | 970,857,643 | 637,536 | | | \$ 84,773,162 | \$ 87,428,352 | \$ (2,655,190) |
| Jan 2019 | 81,881,227 | 53,258 | \$ 0.0900527 | \$ 132.97 | \$ 7,081,716 | \$ 7,373,626 | \$ (291,909) |
| Feb 2019 | 77,699,663 | 53,232 | \$ 0.0900527 | \$ 132.97 | \$ 7,078,259 | \$ 6,997,064 | \$ 81,195 |
| Mar 2019 | 74,348,607 | 53,217 | \$ 0.0900527 | \$ 132.97 | \$ 7,076,264 | \$ 6,695,293 | \$ 380,972 |
| Apr 2019 | 68,239,392 | 53,267 | \$ 0.0900527 | \$ 132.97 | \$ 7,082,913 | \$ 6,145,141 | \$ 937,771 |
| May 2019 | 66,667,957 | 53,280 | \$ 0.0900527 | \$ 132.97 | \$ 7,084,642 | \$ 6,003,630 | \$ 1,081,012 |
| Jun 2019 | 73,758,857 | 53,318 | \$ 0.0900527 | \$ 132.97 | \$ 7,089,694 | \$ 6,642,184 | \$ 447,510 |
| Jul 2019 | 87,894,632 | 53,238 | \$ 0.0900527 | \$ 132.97 | \$ 7,079,057 | \$ 7,915,149 | \$ (836,092) |
| Aug 2019 | 96,015,595 | 53,272 | \$ 0.0900527 | \$ 132.97 | \$ 7,083,578 | \$ 8,646,464 | \$ (1,562,886) |
| Sep 2019 | 95,984,801 | 53,286 | \$ 0.0900527 | \$ 132.97 | \$ 7,085,439 | \$ 8,643,690 | \$ (1,558,251) |
| Oct 2019 | 79,491,511 | 53,328 | \$ 0.0900527 | \$ 132.97 | \$ 7,091,024 | \$ 7,158,425 | \$ (67,401) |
| Nov 2019 | 69,612,178 | 53,398 | \$ 0.0900527 | \$ 132.97 | \$ 7,100,332 | \$ 6,268,765 | \$ 831,567 |
| Dec 2019 | 73,677,585 | 53,427 | \$ 0.0900527 | \$ 132.97 | \$ 7,104,188 | \$ 6,634,865 | \$ 469,323 |
| 2019 Total | 945,272,005 | 639,521 | | | \$ 85,037,107 | \$ 85,124,296 | \$ (87,189) |

Calculation of Regulatory Assets and Monthly Customer Charges

| Line | | | | Residential | Small Power |
|------|---|--------|------------|---------------|---------------|
| 1 | Regulatory Asset (\$) | Note 1 | \$ 350,000 | | |
| 2 | Forecasted Number of Customers | Note 2 | | 5,811,828 | 654,810 |
| 3 | Allocated Regulatory Asset (\$) | Note 3 | \$ | 314,559 | \$ 35,441 |
| 4 | Monthly Customer Charge (\$/customer per month) | L3 /L2 | \$ | 0.0541 | 0.0541 |

Note 1: Regulatory Asset from PNM Witness Fenton direct testimony.

Note 2: **Residential**- Page 2 line 14 column O. **Small Power**- Page 3 line 14 column O

Note 3: Regulatory Asset allocated to Residential and Small Power based on number of customers

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF THE PETITION OF)
PUBLIC SERVICE COMPANY OF NEW)
MEXICO, PURSUANT TO THE EFFICIENT)
USE OF ENERGY ACT AND THE PUBLIC)
UTILITY ACT, FOR APPROVAL OF A RATE)
ADJUSTMENT MECHANISM TO REMOVE)
REGULATORY DISINCENTIVES AND)
ORIGINAL RIDER NO. 52,)
)
)
)
PUBLIC SERVICE COMPANY OF NEW)
MEXICO,)
)
)

CASE NO. 20-_____-UT

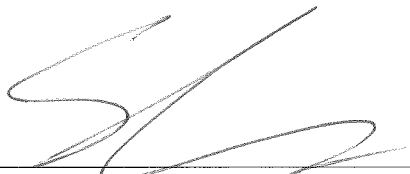
Applicant.

AFFIDAVIT

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

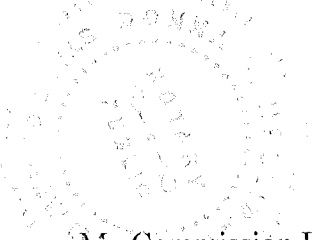
STELLA CHAN, Director, Pricing and Strategic Customer Marketing for Public Service Company of New Mexico, upon being duly sworn according to law, under oath, deposes and states: I have read the foregoing **Direct Testimony of Stella Chan** and it is true and correct based on my personal knowledge and belief.

SIGNED this 20th day of May, 2020.



STELLA CHAN

SUBSCRIBED AND SWORN to before me this 20th day of May, 2020.





NOTARY PUBLIC IN AND FOR
THE STATE OF NEW MEXICO

My Commission Expires:

1.21.2024