

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF THE APPLICATION OF)
PUBLIC SERVICE COMPANY OF NEW MEXICO)
FOR APPROVAL OF ELECTRIC ENERGY)
EFFICIENCY PROGRAMS AND PROGRAM)
COST TARIFF RIDER PURSUANT TO THE)
NEW MEXICO PUBLIC UTILITY AND)
EFFICIENT USE OF ENERGY ACTS)
)
PUBLIC SERVICE COMPANY OF)
NEW MEXICO,)
)
Applicant.)
_____)

Case No. 14-00____-UT

**DIRECT TESTIMONY
OF
STELLA CHAN**

October 6, 2014

**DIRECT TESTIMONY OF
STELLA CHAN
CASE NO. 14-00_____-UT**

1 **Q. PLEASE STATE YOUR NAME, TITLE AND BUSINESS ADDRESS.**

2 **A.** My name is Stella Chan. I am the Director of Pricing and Load Research at Public
3 Service Company of New Mexico (“PNM”) where I am responsible for Pricing, Load
4 Research, and Load Forecasting. My business address is PNM Headquarters Building,
5 414 Silver Ave. SW, Mail Stop 1105, Albuquerque New Mexico, 87102.

6

7 **Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND**
8 **PROFESSIONAL QUALIFICATIONS.**

9 **A.** I have been in my present position at PNM since July 2013. I have worked in the energy
10 industry for over twenty-five years in a variety of management, pricing, rate design and
11 analytic positions at Colorado Springs Utilities, Entergy, Enron, Duke Energy, and El
12 Paso Energy. I received a BBA in Finance as well as an MBA with a concentration in
13 Finance from the University of Houston. PNM Exhibit SC-1 provides a description of my
14 experience and educational background.

15

16 **Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE THE NEW**
17 **MEXICO PUBLIC REGULATION COMMISSION (“NMPRC” OR**
18 **“COMMISSION”?**

19 **A.** Yes. On September 27, 2013, I filed testimony in support of PNM Advice Notice No.
20 478 which requested changes to PNM’s Rate 20 – Integrated System Streetlighting and
21 Floodlighting Service. On November 15, 2013, I filed testimony in support of PNM
22 Advice Notice Nos. 480 and 65 which requested consolidation of PNM’s North and

**DIRECT TESTIMONY OF
STELLA CHAN
CASE NO. 14-00_____-UT**

1 South Rules, updates to various PNM service rules, and changes to PNM's Rule 15 - Line
2 Extension Policy. More recently I provided testimony supporting PNM's Advice Notice
3 No. 493 which requested a modification to the qualifying criteria for Rate 5B - Large
4 Service and provided testimony supporting Advice Notice No. 495 requesting
5 Commission's approval of Underground Rider No. 39 for the City of Rio Rancho.
6 Lastly, I provided testimony supporting the Renewable Energy Rider No. 36 that PNM
7 proposed to implement pursuant to Advice Notice No. 496.

8
9 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS CASE?**

10 **A.** The purpose of this testimony is

- 11 i. To provide information that supports PNM's Advice Notice No. 501 and the 13th
12 Revised EE Rider No. 16 ("Revised Rider"), filed concurrently herewith, through
13 which PNM proposes to adjust its Energy Efficiency ("EE") Rate Rider No. 16
14 ("EE Rider" or "Rider") in accordance with the Efficient Use of Energy Act 62-
15 17-4 NMSA¹ ("EUEA"). The Revised Rider is designed to recover cost
16 associated with PNM's 2014 Energy Efficiency and Load Management Program
17 Plan ("2014 Plan") and PNM's proposed profit incentive, which are discussed by
18 other PNM witnesses.
- 19 ii. To describe the calculation of PNM's proposed Profit Incentive as described in
20 the testimony of PNM witness Gerard Ortiz.
- 21

¹ NMSA 1978 §§ 62-17-1 to 11 (2005, as amended through 2013).

**DIRECT TESTIMONY OF
STELLA CHAN
CASE NO. 14-00____-UT**

1 **Q. HAVE YOU PREPARED ANY EXHIBITS?**

2 **A.**Yes. Attached to my testimony are:

3 PNM Exhibit SC-1: Statement of Qualifications

4 PNM Exhibit SC-2: Derivation of EE Rider Elements

5 PNM Exhibit SC-3: A red-lined copy of the proposed Energy Efficiency Tariff

6 Rider No. 16 attached for convenient reference.

7 PNM Exhibit SC-4: Calculation of PNM's Profit Incentive for 2014 Plan.

8

9 **I. DERIVATION OF THE REVISED RIDER PROPOSED FOR THE 2014 PLAN**

10

11 **Q. PLEASE DESCRIBE THE RATE ELEMENTS INCLUDED IN PNM'S**
12 **CURRENT RIDER NO. 16.**

13 **A.**The current EE Rider includes a Program Cost rate element that is assessed as a
14 percentage charge (2.591%) on PNM customers' monthly bills and was designed to
15 recover approximately \$22,493,227 in program costs on an annual basis. In addition, the
16 current EE Rider has an element to recover a Profit Incentive (0.196% of bills), which
17 was designed to recover an estimated additional amount of \$1,700,703. These two
18 elements became effective on November 25, 2013 based on the EE plan approved by the
19 Commission in Case No. 12-00317-UT. Therefore, the total EE Rider rate, inclusive of
20 these rate elements, is currently 2.787% of customers' bills before taxes and franchise
21 fees.²

² This EE Rider Rate does not include the reconciliation elements approved by the NMPRC in Case No. 14-00111-UT, which are expected to expire in December 2014.

**DIRECT TESTIMONY OF
STELLA CHAN
CASE NO. 14-00_____-UT**

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Q. PLEASE DESCRIBE THE EE RIDER REVISIONS PROPOSED IN THIS FILING.

A. In accordance with the amendments made to the EUEA in 2013, PNM has been directed to fund EE programs at three percent (3%) of customer bills or \$75,000 per customer per calendar year, whichever is less, for customer classes with the opportunity to participate. Thus, PNM is requesting the Commission’s approval of its Revised Rider, one element of which is designed to recover the proposed program budget at the level required by the EUEA. A second element of the Revised Rider is designed to recover the proposed profit incentive. Finally, PNM proposes to modify language of the APPLICATION section of the tariff to indicate that the \$75,000 cap applies to program costs, in accordance with the 2013 modifications to the EUEA. These revisions are reflected in a red-lined version of the tariff, attached to my testimony as PNM Exhibit SC-3.

Q. PLEASE EXPLAIN THE DERIVATION OF THE RATE ELEMENT TO RECOVER PROGRAM COSTS IN THE 2014 PLAN.

A. PNM has estimated an annual program funding for the 2014 Plan of \$25,842,415, which was derived by multiplying projected retail revenue in calendar year 2015 by three percent (3%), adjusted for the \$75,000 customer cap. PNM used the revenue projection for 2015 because that is the calendar year when the 2014 Plan is expected to be approved and implemented. The Revised Rider increases the Program Cost rate element from the

**DIRECT TESTIMONY OF
STELLA CHAN
CASE NO. 14-00_____-UT**

1 current 2.591% to the level prescribed by the EUEA³. PNM Exhibit SC-2 page 1 shows
2 the derivation of the Program Cost element and allocation of the 2014 Plan program cost
3 recovery to customer classes.
4

5 **Q. PLEASE EXPLAIN THE DERIVATION OF THE RATE ELEMENT TO**
6 **RECOVER THE PROPOSED PROFIT INCENTIVE.**

7 **A.** As stated earlier, the current Profit Incentive rate element is based on the Commission's
8 November 6, 2013 Final Order in Case No. 12-00317-UT which approved a profit
9 incentive of approximately 7.6% of programs costs, resulting in an estimated annual
10 Profit Incentive of \$1,700,703.
11

12 In this filing, PNM is proposing a Profit Incentive of \$2,067,436 for the first twelve
13 months following implementation of the 2014 Plan. The calculation of this amount is
14 addressed in Section II of my testimony. PNM proposes to recover this amount by
15 applying a rate element of 0.231% to customers' bills. The derivation of the Profit
16 Incentive element of the Revised Rider and its allocation to customer classes is shown in
17 PNM Exhibit SC-2, at page 2. Per the EUEA, at 62-17-4(I) and 62-17-6(A), Profit
18 Incentives are over and above the 3% annual program budget prescribed by the EUEA.
19

³Due to the limitations with the design of the portfolio of programs, PNM's 2014 Plan has been set with a target budget of \$25,805,151 which is approximately \$37,000 dollars or 0.14% less than the targeted funding of 3% of revenues, adjusted for the \$75,000 per customer limit.

**DIRECT TESTIMONY OF
STELLA CHAN
CASE NO. 14-00____-UT**

Q. WHAT IS THE TOTAL REVISED RIDER RATE THAT WILL BE APPLIED TO CUSTOMERS' BILLS WITH THE NEW RATE ELEMENTS REQUESTED IN THIS CASE?

A. The Revised Rider rate requested to be approved in this case is 3.231% of customers' bills before taxes and franchise fees. Table 1 below compares the existing and proposed EE Rider rate elements.

Table 1. Energy Efficiency 2014 Plan Rider No. 16- Rate Elements				
<u>Rate Rider Element</u>	<u>Current Amount</u>	<u>Current Rate Rider Element</u>	<u>Proposed Amount</u>	<u>Proposed Rate Rider Element</u>
Approved Program Plan Costs (12-00317-UT)	\$ 22,493,227	2.591%		
Approved Plan Profit Incentive (12-00317-UT)	\$ 1,700,703	0.196%		
<i>Total (Current)</i>	<i>\$ 24,193,930</i>	<i>2.787%</i>		
Proposed 2014 Plan Program Costs			\$ 25,842,415	3.000%
Proposed 2014 Plan Profit Incentive			\$ 2,067,436	0.231%
<i>Total (Proposed)</i>			<i>\$ 27,909,851</i>	<i>3.231%</i>

Note: Rate elements do not include reconciliation amounts

Q. DOES THE REVISED RIDER INCLUDE RECONCILIATION OF COSTS FROM THE PREVIOUS CALENDAR YEAR?

A. No. PNM will file its Annual Report for 2014 on April 1, 2015, and will reconcile any over- or under-collected amounts for calendar year 2014, and true-up the rate elements

**DIRECT TESTIMONY OF
STELLA CHAN
CASE NO. 14-00_____-UT**

1 discussed above. At this time PNM does not know what the results of the reconciliation
2 will be, and therefore will address the issue of any needed reconciliation in the 2015
3 Annual Report. Also, collection of the existing reconciliation amounts from calendar year
4 2013 is expected to be completed at the end of calendar year 2014, so they were also
5 excluded from the calculation of the proposed Revised Rider rate.
6

7 **Q. HOW DOES PNM PROPOSE TO RECONCILE PROGRAM COSTS?**

8 **A.** For purposes of reconciling Program Costs, PNM will true-up actual expenditures to
9 actual revenue recovery for the previous calendar year in the annual report due on April 1
10 of each year. PNM will submit documentation that will allow the Commission to evaluate
11 program costs and revenues and compare those to the projections incorporated in this
12 case.
13

14 **Q. DOES PNM PROPOSE TO APPLY A CHARGE TO OVER- AND UNDER-**
15 **COLLECTIONS?**

16 **A.** Yes, as previously approved by the Commission, PNM proposes to assess a symmetrical
17 carrying charge to any under or over collections under the Revised Rider. PNM proposes
18 to utilize the customer deposit interest rate set by the Commission in the corresponding
19 calendar year (currently 1.72% per annum). This is a significantly lower rate than the
20 previously approved carrying charge of 11.66% which was based on the average
21 weighted cost of capital resulting from PNM's last litigated rate case.
22

**DIRECT TESTIMONY OF
STELLA CHAN
CASE NO. 14-00_____-UT**

Q. WHY IS PNM PROPOSING TO USE THE CUSTOMER DEPOSIT RATE FOR PURPOSES OF CALCULATING CARRYING COSTS?

A. The Customer Deposit rate more accurately tracks the cost of short term borrowing resulting from the mismatch between the expenditure of energy efficiency program costs and recovery of the costs through the Rider. This proposal is also consistent with the level of carrying costs approved for other utilities in the state of New Mexico for the reconciliation of energy efficiency program costs.

Q. HAVE YOU ASSESSED THE IMPACT OF THE REVISED RIDER ON CUSTOMER BILLS AT A VARIETY OF KWH USAGES?

A. Yes. PNM Exhibit SC-2, at page 3, shows the impact of the Revised Rider rate at the average usage of each rate class subject to the rider. The average residential bill impact is an increase of approximately \$0.41/month over what customers pay today. PNM Exhibit SC-2, at page 5 shows the impact of the Revised Rider over a variety of usage levels for the Residential and Small Power Classes. These classes comprise over 99% of all PNM customers that are subject to the Rider. For residential customers, the impact ranges from an increase of approximately \$0.03 to \$1.53 per month depending upon kWh use. For Small Power customers, the impact ranges from approximately \$0.05 to \$11.65 per month depending upon kWh use.

II. CALCULATION OF THE PROPOSED PROFIT INCENTIVE FOR THE 2014 PLAN

**DIRECT TESTIMONY OF
STELLA CHAN
CASE NO. 14-00_____-UT**

Q. WHAT MECHANISM IS PNM PROPOSING FOR THE CALCULATION OF THE PROFIT INCENTIVE IN THIS 2014 PLAN?

A. As explained by PNM's witness Gerard Ortiz, PNM is proposing the use of a Shared Savings on Net Benefits approach. PNM requests that the Commission authorize a profit incentive equal to 10% of the net present value of the Net Economic Benefits generated by the 2014 Plan. The anticipated net benefits for the first year of the 2014 Plan are estimated at \$20,674,362 (please refer to PNM Exhibit SC-4, column c) using the Utility Cost Test ("UCT"). Thus, PNM proposes to multiply the net benefit amounts described above by 10% to derive the annual profit incentive. Consequently, the resulting Profit Incentive totals \$2,067,436 for the first year projected in this 2014 Plan. PNM Exhibit SC-4 shows the derivation of the Profit Incentive requested by PNM in this case.

Q. WHAT MECHANISM IS PNM PROPOSING FOR THE CALCULATION OF THE PROFIT INCENTIVE BEYOND THE FIRST YEAR OF THE 2014 PLAN?

A. PNM proposes that the methodology described above for the calculation of the Profit Incentive remain in effect until a new energy efficiency plan is filed and approved by the Commission.

Q. IF THE COMMISSION WERE TO APPROVE THE SHARED SAVINGS MECHANISM PROPOSED BY PNM, HOW WILL PNM PERFORM THE RECONCILIATION/TRUE-UP OF THE PROFIT INCENTIVES BASED ON ACTUAL PLAN PERFORMANCE?

**DIRECT TESTIMONY OF
STELLA CHAN
CASE NO. 14-00_____-UT**

1 **A.** In its annual report, PNM will calculate the net present value of the net benefits resulting
2 from the implementation of the 2014 Plan during the previous calendar year based on the
3 Measurement and Verification (“M&V”) report and the UCT. PNM will then calculate
4 10% of the net present value of the net benefits and compare this calculated amount to the
5 actual revenue recovered through the profit incentive rate element. PNM will refund or
6 charge the difference in a subsequent period. The reconciliation process will require
7 proration, as per the methodology described in the Term Sheet agreed to between Staff
8 and PNM in Case No. 11-00123-UT, for calendar year 2015 because the 2014 Plan,
9 including the profit incentive, will be in effect for only part of the year.

10
11 **Q.** **DOES THIS CONCLUDE YOUR TESTIMONY?**

12 **A.** Yes, it does.
13
14
15

GCG # 518674

PNM EXHIBIT SC-1

Consisting of 4 pages

Stella Chan

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Albuquerque, NM 87158

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Mobile: (832) 646-3584

E-mail: stella.chan@pnmresources.com

PROFESSIONAL SUMMARY

Multi-skilled energy industry senior manager with experience in pricing, financial planning and analysis, operations, strategic planning, mergers & acquisitions, project valuations, sales forecasting and government and regulatory affairs. Strengths are a proactive, reliable approach to thinking inside or outside the problem-solving box, ability to get things done on time and enjoy doing it. Possess unique skills in flexing management/team building style; working productively in a fast-paced environment; and developing solid relationships inside and outside an organization.

EXPERIENCE

PNM RESOURCES, Albuquerque, New Mexico

2013 - Present

Director, Pricing & Load Research

- Manage and oversee retail cost of service studies for New Mexico and Texas regulated operations.
- Provide expert testimony in support of cost of service studies and rate design before New Mexico and Texas regulators and the Federal Energy Regulatory Commission (FERC).
- Direct New Mexico and Texas regulated operations sales forecast and load research activities.
- Oversee development of individual customer bill analyses and alternative rate design for large customers.
- Assist in problem solving for customers at retail and wholesale levels.
- Represent PNM Resources in regulatory proceedings and negotiations.

COLORADO SPRINGS UTILITIES, Colorado Springs, Colorado

2003 - 2013

Manager, Pricing & Forecasting, Planning and Finance Division

- Managed sales and load forecasting for electric, gas, water and wastewater.
- Developed pricing strategies for electric, gas, water, wastewater, streetlighting utility services, non-regulated products and services, and economic development projects.
- Directed rate options strategy to meet Economic Development objectives.
- Managed and audited customer contracts to ensure compliance.
- Regularly presented to the Colorado Springs City Council/Utilities Board on pricing, financial and sales forecast related issues.
- Directed long term financial forecast for the organization including funding, financing and expenditure recommendations.
- Managed the budget process for expenditure over \$1 billion.

UNIVERSITY OF HOUSTON, Houston, Texas

2003

Adjunct Faculty – Finance Department

- Taught senior level Corporate Finance and International Financial Management courses.

INDEPENDENT CONSULTANT

2002 – 2003

Challenger Development, L.C., Houston, Texas; Boyce Power System, Houston, Texas

- Assisted clients on energy related mergers and acquisitions, projects and business strategies development.

ENTERGY WHOLESALE OPERATIONS, Houston, Texas**2001****Director, Government and Regulatory Affairs**

- Identified and mitigated a \$26 million regulatory risk. Quantified company's exposure under an unfavorable generator imbalance transmission tariff, effectively communicated the extent of the risk to management, galvanized and coordinated Project Development, Asset Management and Legal to propose revised language to the tariff to be presented to all parties during settlement negotiations with the FERC.
- Developed regulatory risk matrix for due diligence in wind acquisition. As a member of development team, conducted due diligence according to the matrix and developed mitigation measures for successful acquisition of an Iowa wind project.

ENRON CORPORATION, Houston, Texas**1997 - 2001****Director, Government Affairs, Enron Corp.****2000 - 2001**

- Collaborated with Enron Energy Services (EES) on development of retail markets in states within the FRCC, SERC and MAAC regions and Alberta, Canada by promoting electric retail restructuring before the respective states' regulatory commissions.
- Supported EES Utility Risk Management on quantifying regulatory risks and developing hedging strategies for over 10 million MWH of EES' electric positions behind 21 major utilities around the U.S.
- Advocated company positions and interests before the Public Service Commission in the New York Retail Unbundling Proceeding to mitigate over \$10 million of regulatory risk.

General Manager, Operations, SK-Enron, Seoul, South Korea**1999 - 2000**

- Expatriated to Seoul, South Korea to work in a joint venture with SK Corp. Harvested numerous benefits for the joint venture in a challenging work environment.
- Responsible for business operations of nine gas distribution subsidiaries and one LPG wholesaler with total assets of approximately \$1.6 billion. Established office, recruited, hired, and trained Korean nationals for the joint venture holding company.
- Reduced operating costs by \$5 million annually by consolidating the meter, bill, collect, finance, and accounting functions of the nine gas distribution subsidiaries.
- Responsible for government and regulatory affairs. In a short period of time, built effective relationships in the various Ministries of South Korea.
- Gained an additional \$23 million cash flow in 2000 for parent companies as a direct result of successful lobbying of the Ministry of Commerce, Industry and Energy to eliminate the 10% dividend limitation regulation.
- Maintained a constant margin in an adverse regulatory environment by developing regulatory strategies for rate filings and negotiations with the five local governments.
- Increased sales by 7% in the saturated markets of two subsidiaries.

Director, Regulatory Affairs, Enron International**1997 - 1999**

- Supported Enron International's development efforts by conducting regulatory due diligence as a member of commercial development teams on both an energy policy and a detailed rates and regulatory level. Recommended specific mitigation measures to counter regulatory risk. Development teams included those for Argentina, Bolivia, Brazil, China, Colombia, Japan, Panama, Singapore and South Korea. Advised Enron management on electric privatization in South Korea and Singapore, directly resulting in submittal of bid for two Korean power plants.
- On numerous occasions, represented company before foreign Energy Ministries and Regulatory Commissions on energy industry restructuring advocacy, both gas and electric.
- Major contributor to the formulation of gas restructuring regulations in Brazil and Argentina.

Manager, Rates and Tariffs, Enron Energy Services

1997

- Member of a team that designed electric utility forward rate curves to forecast unbundled delivery rates after deregulation. Forecast deregulated rates for gas utilities in New Jersey.
- Supported company positions in state gas and electric restructuring proceedings throughout the U.S. by removing barrier to entry in retail markets.
- Prepared testimony and represented company in the New Jersey electric utilities unbundling proceedings.

EL PASO ENERGY, Houston, Texas**1995 - 1997****Staff Analyst, Research and Competitive Analysis**

1996 – 1997

- Identified federal regulatory issues and gathered market intelligence related to Tennessee Gas Pipeline's competitors, targeted at maintaining competitive advantage.

Consultant, Business Development

1995 – 1996

- Conducted new pipeline projects evaluation and feasibility studies.

DUKE ENERGY (formerly TEXAS EASTERN), Houston, Texas**1992 - 1995****Project Leader, Strategic Planning**

1994 – 1995

- Led TETCO's evaluation of opportunities to promote natural gas use in electric generation. This effort resulted in specifically targeting ten power plants.
- Developed detailed profiles on company's major LDC customers to improve existing services and/or to create new services.
- Developed short and long-term strategies for transportation services.
- Provided daily and monthly price information on transportation capacity and alternate fuels to maximize interruptible transportation revenue.

Project Leader, Market Planning and Analysis

1992 – 1994

- Analyzed market information such as demand forecasts and market growth to assist Business Development to identify and develop new markets and services.

EL PASO ENERGY (formerly TENNECO GAS), Houston, Texas**1987 - 1992****Senior Analyst, Cost Allocation and Rate Design**

1990 – 1992

- Led Tennessee Gas Pipeline rate design efforts under the FERC's Order No. 636 restructuring.
- Performed cost allocation and rate design for Tennessee Gas Pipeline and performed economic, financial, and rate impact studies.
- Initialized rate design and filed the amended application to construct the \$947 million Kern River Pipeline with FERC.

Analyst, Special Projects

1987 – 1989

- Derived economic analysis for new projects and prepared transportation certificate filings submitted to FERC.

EDUCATION**University of Houston – Houston, Texas**

MBA with concentration in Finance

BBA with major in Finance

COMMUNITY ACTIVITY

Past Board Chair, **Urban Peak Colorado Springs**

Past Treasurer, **Urban Peak Colorado Springs**

Colorado Springs, Colorado

Past Board Member, **CASA (Court Appointed Special Advocate) of the Pikes Peak Region**

Colorado Springs, Colorado

Past Member, **Steering Committee, Community Focus Fund, Colorado Springs Utilities**

Colorado Springs, Colorado

LANGUAGE SKILLS

Fluent in English, Mandarin Chinese and Cantonese

TESTIMONY FILED IN FRONT OF THE NMPRC

September 27, 2013 – Direct Testimony in support of PNM Advice Notice No. 478

Requested changes to PNM's Rate 20 – Integrated System Streetlighting and Floodlighting Service.

November 15, 2013, - Direct Testimony in support of PNM Advice Notice Nos. 480 and 65.

Requested consolidation of PNM's North and South Rules, updates to various PNM service rules, and changes to PNM's Rule 15 - Line Extension Policy.

April 22, 2014 – Direct Testimony in support of PNM's Advice Notice No. 493

Requested a modification to the qualifying criteria for 5B - Large Service for Mining Customers.

May 28, 2014 – Direct Testimony in support of PNM Advice Notice No. 495

Requested approval to recover, through Rider 39, the excess costs of constructing new PNM distribution facilities underground as a result of a Rio Rancho ordinance.

PNM EXHIBIT SC-2

Consisting of 5 Pages

PNM (North and South)2014 Energy Efficiency Program Cost Rider12 Month Recovery

<u>Line No.</u>						<u>Total</u>
1	2014 Plan Program Costs (1/2015-12/2015)					\$25,842,415
2						
3	Rider Rate					3.000%
4						
5	Forecasted Revenues (1/2015-12/2015)					
6	Class	Schedule	Ending Number of Cust. (12/2015)	Revenues from Non-Capped Customers	EE Cost Recovery from Capped Customers	Total EE Cost Recovery
7	<u>PNM Customer Classes</u>					
8	Residential	1A & 1B	464,484	\$410,286,801	\$0	\$12,308,604
9	Small Power	2A & 2B	53,090	\$123,156,229	\$0	\$3,694,687
10	General Power	3B & 3C	4,428	\$191,391,295	\$0	\$5,741,739
11	Large Power	4B	240	\$105,263,513	\$225,000	\$3,382,905
12	Large Service for Mining	5B	2	\$0	\$150,000	\$150,000
13	Water and Sewage Pumping	11B	157	\$13,816,011	\$0	\$414,480
14	Public Universities	15B	1	\$0	\$75,000	\$75,000
15	Large Service for Manufacturing	30B	1	\$0	\$75,000	\$75,000
16	PNM Total		522,403	\$843,913,849	\$525,000	\$25,842,415
17						
18	Notes:					
19						
20	* Cap estimated at \$75,000 per year pursuant to 62-17-6 of the Efficient Use of Energy Act					

PNM (North and South)2014 Energy Efficiency Program Cost Rider12 Month Recovery

<u>Line No.</u>					<u>Total</u>
1	2014 Plan Profit Incentive (1/2015 - 12/2015)				\$ 2,067,436
2					
3	Rider Rate				<u>0.231%</u>
4					
5	Forecasted Revenues (1/2015-12/2015)				
6	Class	Schedule	Ending Number of Cust. (12/2015)	Revenues from All Customers	Total EE Cost Recovery
7	<u>PNM Customer Classes</u>				
8	Residential	1A & 1B	464,484	\$410,286,801	\$946,455
9	Small Power	2A & 2B	53,090	\$123,156,229	\$284,098
10	General Power	3B & 3C	4,428	\$191,391,295	\$441,504
11	Large Power	4B	240	\$114,630,732	\$264,432
12	Large Service for Mining	5B	2	\$6,586,977	\$15,195
13	Water and Sewage Pumping	11B	157	\$13,816,011	\$31,871
14	Public Universities	15B	1	\$5,491,742	\$12,668
15	Large Service for Manufacturing	30B	1	\$30,870,814	\$71,213
16	PNM Total		522,403	\$896,230,602	\$2,067,436
17					
18					
19					
20					

PNM (North and South)
Energy Efficiency Rider Average Monthly Costs by Class Summary

Line No.	Class	Schedule	Ending Number of Cust. (12/2015)	Revenues (1/2015 - 12/2015)	Total 2014 EE Program Costs Allocation	Total 2014 EE Profit Incentive Allocation	Current EE Rider No. 16 Rate	Current Ave. Monthly EE Rider Charge	Proposed EE Total Rider No. 16 Rate	Proposed Ave. Monthly EE Rider Charge	Proposed Change in Ave. EE Charge
1	<u>Customer Classes</u>										
2	Residential	1A & 1B	464,484	\$410,286,801	\$12,308,604	\$946,455	2.683%	\$1.97	3.231%	\$2.38	\$0.41
3	Small Power	2A & 2B	53,090	\$123,156,229	\$3,694,687	\$284,098	2.683%	\$5.19	3.231%	\$6.25	\$1.06
4	General Power	3B & 3C	4,428	\$191,391,295	\$5,741,739	\$441,504	2.683%	\$96.64	3.231%	\$116.37	\$19.73
5	Large Power	4B	240	\$114,630,732	\$3,382,905	\$264,432	2.683%	\$1,067.90	3.231%	\$1,266.44	\$198.54
6	Large Service for Mining	5B	2	\$6,586,977	\$150,000	\$15,195	2.683%	\$6,250.00	3.231%	\$6,883.12	\$633.12
7	Water and Sewage Pumping	11B	157	\$13,816,011	\$414,480	\$31,871	2.683%	\$196.75	3.231%	\$236.92	\$40.17
8	Public Universities	15B	1	\$5,491,742	\$75,000	\$12,668	2.683%	\$6,250.00	3.231%	\$7,305.70	\$1,055.70
9	Large Service for Manufacturing	30B	1	\$30,870,814	\$75,000	\$71,213	2.683%	\$6,250.00	3.231%	\$12,184.43	\$5,934.43
10	PNM Total		522,403	\$896,230,602	\$25,842,415	\$2,067,436					

Energy Efficiency Large Customer Cap- Program Costs Rate Element

Largest Customers by Schedule: EE Charges at Proposed EE Program Rate Element of 3.000%
(At this rate, customers with annual revenues in excess of \$2,321,263 are subject to the \$75,000 annual cap limit)

Line No.	Customer	Schedule	Revenue	EE Program Costs Charges Including Cap	EE Profit Incentive Charges	EE Total Charges	
1	A	30B	\$30,870,814	\$75,000	\$71,213	\$146,213	6 Customers Reach Maximum Cap Value of \$75,000 per Year
2	B	15B	\$5,491,742	\$75,000	\$12,668	\$87,668	
3	C	5B	\$4,070,836	\$75,000	\$9,391	\$84,391	
4	D	5B	\$2,516,141	\$75,000	\$5,804	\$80,804	
5	E	4B	\$3,810,666	\$75,000	\$8,790	\$83,790	
6	F	4B	\$3,020,445	\$75,000	\$6,968	\$81,968	
7	G	4B	\$2,536,108	\$75,000	\$5,850	\$80,850	
8							
9							

10	Customers Capped	Schedule	Revenue	EE Program Costs Charges Including Cap	EE Profit Incentive Charges	EE Total Charges
11	Large Service for Manufacturing	30B	\$30,870,814	\$75,000	\$71,213	\$146,213
12	Public Universities	15B	\$5,491,742	\$75,000	\$12,668	\$87,668
13	Large Service for Mining	5B	\$6,586,977	\$150,000	\$15,195	\$165,195
14	Large Power	4B	\$9,367,219	\$225,000	\$21,608	\$246,608
15	Total		\$52,316,753	\$525,000	\$120,685	\$645,685

EE Rate By Component: Proposed EE Rate After Cap Impacts

Line No.	EE Rate Component	Proposed EE Rate After Cap Impacts
16	Program Costs	3.000%
17	Profit Incentive	0.231%
18	Total	3.231%

PNM (North and South)
2014 Plan Energy Efficiency Rider No. 16
Typical Calculation for Selected Rate Classes

PNM North Residential Schedule 1A								PNM South Residential Schedule 1A						
Line No.	kWh Use	Bill(*)	Current EE Rider Rate	Current Monthly EE Rider Charge	Proposed EE Total Rider Rate	Proposed Monthly EE Rider Charge	Proposed Change in EE Monthly EE Charge	kWh Use	Bill(*)	Current EE Rider Rate	Current Monthly EE Rider Charge	Proposed EE Total Rider Rate	Proposed Monthly EE Rider Charge	Proposed Change in EE Monthly EE Charge
1	0	\$5.00	2.683%	\$0.13	3.231%	\$0.16	\$0.03	0	\$5.00	2.683%	\$0.13	3.231%	\$0.16	\$0.03
2	50	\$10.23	2.683%	\$0.27	3.231%	\$0.33	\$0.06	50	\$10.92	2.683%	\$0.29	3.231%	\$0.35	\$0.06
3	100	\$15.45	2.683%	\$0.41	3.231%	\$0.50	\$0.08	100	\$16.84	2.683%	\$0.45	3.231%	\$0.54	\$0.09
4	150	\$20.68	2.683%	\$0.55	3.231%	\$0.67	\$0.11	150	\$22.76	2.683%	\$0.61	3.231%	\$0.74	\$0.12
5	200	\$25.91	2.683%	\$0.70	3.231%	\$0.84	\$0.14	200	\$28.68	2.683%	\$0.77	3.231%	\$0.93	\$0.16
6	250	\$31.13	2.683%	\$0.84	3.231%	\$1.01	\$0.17	250	\$34.60	2.683%	\$0.93	3.231%	\$1.12	\$0.19
7	300	\$36.36	2.683%	\$0.98	3.231%	\$1.17	\$0.20	300	\$40.52	2.683%	\$1.09	3.231%	\$1.31	\$0.22
8	400	\$46.81	2.683%	\$1.26	3.231%	\$1.51	\$0.26	400	\$52.36	2.683%	\$1.40	3.231%	\$1.69	\$0.29
9	500	\$58.89	2.683%	\$1.58	3.231%	\$1.90	\$0.32	500	\$64.38	2.683%	\$1.73	3.231%	\$2.08	\$0.35
10	600	\$72.61	2.683%	\$1.95	3.231%	\$2.35	\$0.40	600	\$76.60	2.683%	\$2.06	3.231%	\$2.47	\$0.42
11	750	\$93.18	2.683%	\$2.50	3.231%	\$3.01	\$0.51	750	\$94.92	2.683%	\$2.55	3.231%	\$3.07	\$0.52
12	800	\$100.03	2.683%	\$2.68	3.231%	\$3.23	\$0.55	800	\$101.03	2.683%	\$2.71	3.231%	\$3.26	\$0.55
13	900	\$113.74	2.683%	\$3.05	3.231%	\$3.68	\$0.62	900	\$113.24	2.683%	\$3.04	3.231%	\$3.66	\$0.62
14	1,000	\$128.70	2.683%	\$3.45	3.231%	\$4.16	\$0.71	1,000	\$125.60	2.683%	\$3.37	3.231%	\$4.06	\$0.69
15	1,200	\$158.62	2.683%	\$4.26	3.231%	\$5.13	\$0.87	1,200	\$150.32	2.683%	\$4.03	3.231%	\$4.86	\$0.82
16	1,600	\$218.46	2.683%	\$5.86	3.231%	\$7.06	\$1.20	1,600	\$199.75	2.683%	\$5.36	3.231%	\$6.45	\$1.09
17	2,000	\$278.30	2.683%	\$7.47	3.231%	\$8.99	\$1.53	2,000	\$249.19	2.683%	\$6.69	3.231%	\$8.05	\$1.37

PNM North Small Power Schedule 2A								PNM South Small Power Schedule 2A						
Line No.	kWh Use	Bill(*)	Current EE Rider Rate	Current Monthly EE Rider Charge	Proposed EE Total Rider Rate	Proposed Monthly EE Rider Charge	Proposed Change in EE Monthly EE Charge	kWh Use	Bill(*)	Current EE Rider Rate	Current Monthly EE Rider Charge	Proposed EE Total Rider Rate	Proposed Monthly EE Rider Charge	Proposed Change in EE Monthly EE Charge
18	0	\$8.46	2.683%	\$0.23	3.231%	\$0.27	\$0.05	0	\$8.46	2.683%	\$0.23	3.231%	\$0.27	\$0.05
19	500	\$71.84	2.683%	\$1.93	3.231%	\$2.32	\$0.39	500	\$79.04	2.683%	\$2.12	3.231%	\$2.55	\$0.43
20	1,000	\$135.22	2.683%	\$3.63	3.231%	\$4.37	\$0.74	1,000	\$149.62	2.683%	\$4.01	3.231%	\$4.83	\$0.82
21	1,500	\$198.60	2.683%	\$5.33	3.231%	\$6.42	\$1.09	1,500	\$220.20	2.683%	\$5.91	3.231%	\$7.11	\$1.21
22	2,000	\$261.98	2.683%	\$7.03	3.231%	\$8.46	\$1.44	2,000	\$290.78	2.683%	\$7.80	3.231%	\$9.40	\$1.59
23	3,000	\$388.74	2.683%	\$10.43	3.231%	\$12.56	\$2.13	3,000	\$431.94	2.683%	\$11.59	3.231%	\$13.96	\$2.37
24	4,000	\$515.50	2.683%	\$13.83	3.231%	\$16.66	\$2.82	4,000	\$573.09	2.683%	\$15.38	3.231%	\$18.52	\$3.14
25	5,000	\$642.26	2.683%	\$17.23	3.231%	\$20.75	\$3.52	5,000	\$714.25	2.683%	\$19.16	3.231%	\$23.08	\$3.91
26	7,000	\$895.78	2.683%	\$24.03	3.231%	\$28.94	\$4.91	7,000	\$996.57	2.683%	\$26.74	3.231%	\$32.20	\$5.46
27	9,000	\$1,149.30	2.683%	\$30.84	3.231%	\$37.13	\$6.30	9,000	\$1,278.89	2.683%	\$34.31	3.231%	\$41.32	\$7.01
28	12,000	\$1,529.58	2.683%	\$41.04	3.231%	\$49.42	\$8.38	12,000	\$1,702.36	2.683%	\$45.67	3.231%	\$55.00	\$9.33
29	15,000	\$1,909.86	2.683%	\$51.24	3.231%	\$61.71	\$10.47	15,000	\$2,125.84	2.683%	\$57.04	3.231%	\$68.69	\$11.65

Bill (*) Case 10-00086-UT Rates

PNM EXHIBIT SC-3

Consisting of 4 Pages

**PUBLIC SERVICE COMPANY OF NEW MEXICO
ELECTRIC SERVICES**

**123TH REVISED RIDER NO. 16
CANCELING 142TH REVISED RIDER NO. 16**

ENERGY EFFICIENCY RIDER

Page 1 of 4

DESCRIPTION: This Energy Efficiency Surcharge is a mechanism for recovery of costs associated with energy efficiency programs approved by the New Mexico Public Regulation Commission. The surcharge may also include the costs associated with removal of disincentives to, and a provision of incentives for, expenditures on energy efficiency and load management measures.

APPLICABILITY: This Rider shall be applicable to all PNM customers in the following Affected Customer Classes: 1A, 1B, 2A, 2B, 3B, 3C, 4B, 5B, 11B, 15B, 23, and 30B receiving electric service.

APPLICATION: The energy efficiency surcharge shall be added to each customer's bill. The surcharge shall be calculated by multiplying the total charges other than franchise fees and taxes by the surcharge rate elements approved by the Commission. The total amount of the energy efficiency program cost surcharge shall not exceed \$75,000 per year without the customer's consent.

RATES, TERMS AND PROCEDURES:

I. Purpose

This Rider establishes detailed procedures which will permit the Company to recover from its customers Rider No. 16 Amounts as determined and ordered by the Commission to be administered through this mechanism. This mechanism is specific as to Amounts pertaining to Affected Customer Classes.

II. Definitions

The following definitions shall apply to this Rider:

1. Affected Customer Classes: Customer classes subject to Rider No. 16 with an opportunity to participate in the energy efficiency programs approved by the Commission.
2. Amortization Period: The Amortization Period for program costs approved by the Commission will comply with the period specified in the respective Commission Order for each Rider No. 16 Amount.
3. Annual Projected Sales Revenues: Revenues for the Company projected for the Amortization Period, which includes Revenue, excluding franchise fees and taxes, for Affected Customer Class.
4. Billing Cycle: A period of time employed by the Company's billing system and used by the
Advice Notice No. 4905001

Gerard T. Ortiz
Vice President, PNM Regulatory Affairs

GCG#517952XXXX

**PUBLIC SERVICE COMPANY OF NEW MEXICO
ELECTRIC SERVICES**

**123TH REVISED RIDER NO. 16
CANCELING 142TH REVISED RIDER NO. 16**

ENERGY EFFICIENCY RIDER

Page 2 of 4

Company to render bills for service to customers. The Company employs twenty-one (21) billing cycles, which constitute a billing month and may or may not coincide with a calendar month.

5. M&V Report: The annual monitoring and verification report of the independent evaluator for the prior calendar year.
6. Rider No. 16 Amounts: The dollar amounts of Rider No. 16, shall be approved by the Commission, and will be collected from Electric Service Customers within the Affected Customer Classes. A separate pool of dollar amounts will be set up for each identified component of this rider identifying the dollars to be recovered compared to the actual Dollars recovered for each rider component.
7. Reconciliation Amounts: Consists of Rider No. 16 Amounts that were under-recovered/credited or over-recovered/credited during their respective amortization terms.
8. Electric Service Customer: A customer receiving electric service directly from the Company within the Company's New Mexico service territory.

III. Methodology for Developing and Administering the Rider No. 16 Amounts

1. Effective Date: The date specified by the Commission to begin billing this rate.
2. Rider No. 16 Amounts: The amounts to be collected are approved by the Commission. This mechanism is designed to accommodate only those amounts ordered for collection on a percentage of bill basis whereby the billing factors will be derived using Annual Projected Sales Revenue associated with Electric Service Customers within Affected Customer Classes adjusted for anticipated savings from the energy efficiency programs approved by the Commission.
3. Reconciliation Amounts: Reconciliation Amounts will be summed with and absorbed into existing Rider No. 16 Amounts by pool and will assume that respective amount's collection conditions and terms. This transaction will be specifically noted and identified in the next subsequent Energy Efficiency Surcharge Factor filing.

IV. Calculation of the Energy Efficiency Surcharge Factors

For purposes of determining the Energy Efficiency Surcharge Factors, each of the Rider 16 Amounts,
Advice Notice No. 4905001

x

Gerard T. Ortiz
Vice President, PNM Regulatory Affairs

GCG#517952XXXX

**PUBLIC SERVICE COMPANY OF NEW MEXICO
ELECTRIC SERVICES**

**123TH REVISED RIDER NO. 16
CANCELING 142TH REVISED RIDER NO. 16**

ENERGY EFFICIENCY RIDER

Page 3 of 4

is fully amortized (paid) over their respective periods commencing with the first Billing Cycle of the month following approval of any of the Rider 16 Amounts or any alternative effective date as determined by the Commission. The total combined Energy Efficiency Surcharge Factor is 2.6833.231%, of Affected Customer Classes bills. The total Factor is determined as follows:

- (A) Each Energy Efficiency Surcharge Factor for Customers is determined by dividing the annual recovery amounts by the combined total Annual Projected Sales Revenue for Affected Customer Classes;
- (B) Reconciliation Amounts incapable of generating a factor out to five (5) decimal places are summed with and absorbed into existing Rider No. 16 Amounts and their disposition is recognized within the existing factor.
- (C) The total combined Energy Efficiency Surcharge Factor is comprised of the following elements:

Rate Element	Amount to be Recovered	Element Rate
Program Plan Costs	\$25,842,415	3.000%
Profit Incentive	\$ 2,067,436	0.231%
2013 Reconciliation of Program Costs	(\$ 1,116,512)	(0.184%)
2013 Reconciliation of Profit Incentive	\$ 485,287	0.080%
Total	\$27,909,851	3.231%

The recovery period will be as specified in the Commission's Final Orders.

V. Annual Reconciliation Filings

The Company shall file with the Commission an annual report on its energy efficiency programs. The initial report was due on April 1, 2009 and covered the period from the effective date of Rider No. 16 through December 31, 2008. Subsequent reports are due on April 1 following the end of each calendar year. That report will contain:

- 1. Energy Efficiency Surcharge Factor Report: Schedules shall contain sufficient information describing:
 - a. A Summary of the Energy Efficiency Surcharge Factors;
 - b. Calculation of each Energy Efficiency Surcharge Factor, for each package of programs and Incentive/Disincentive Adder Revenues and by each Affected Customer Class;

Advice Notice No. 4905001

Gerard T. Ortiz
Vice President, PNM Regulatory Affairs

GCG#517952XXXX

**PUBLIC SERVICE COMPANY OF NEW MEXICO
ELECTRIC SERVICES**

**123TH REVISED RIDER NO. 16
CANCELING 112TH REVISED RIDER NO. 16**

ENERGY EFFICIENCY RIDER

Page 4 of 4

- c. Calculation of the Energy Efficiency Surcharge Factor to be applied for the subsequent 12 months;
 - d. A Summary of Annual Projected Sales Revenue, less anticipated savings;
 - e. A Summary consisting of the beginning balance of each Rider No. 16 Amount, the sum total of the annual transactions, and the ending balance; and
 - f. A detail listing of expenditures and collections for each Rider No. 16 Amount, for each package of programs and Incentive/Disincentive Adder Revenues, by Affected Customer Class.
2. M&V Report: The M&V Report shall be submitted with the annual reconciliation filing as a separate document.
3. Amounts Not Generating a Factor: If the sum of all Rider No. 16 Amounts have been depleted to the extent that an annual factor cannot be calculated out to five (5) decimals, the residual amount will be held by the Company until:
 - a. Additional Rider No. 16 Amounts occur and these amounts can be combined with these existing amounts to create an annual factor; or
 - b. The disposition of this amount is determined in conjunction with a subsequent proceeding before the Commission.
4. Other Annual Reconciliation Filings Content: The Annual Reconciliation Filings shall contain sufficient information describing:
 - a. Any material change in Rider No. 16 Amounts and explanations of the sources of those changes;
 - b. Any material difference in respective annual projected kWhs and anticipated savings, and the reasons for any proposed difference; and
 - c. The addition/deletion of and to any individual Rider No. 16 Amounts due to accounting adjustments, the M&V Report or other reasons, including a true-up of the Incentive/Disincentive calculation for M & V and performance results.

Advice Notice No. 4905001

Gerard T. Ortiz
Vice President, PNM Regulatory Affairs

GCG#517952XXXX

PNM EXHIBIT SC-4

Consisting of 1 Page

PNM (North and South)2014 Energy Efficiency Plan
Derivation of the Profit Incentive

<u>Line No.</u>		NPV UCT	NPV UCT	Net Benefits	Profit Incentive
		Costs	Benefits		
		(a)	(b)	(c)=(b)-(a)	(d)=(c)*10%
1	Energy Efficiency Program				
2					
3	Commercial Comprehensive	\$ 6,892,734	\$ 19,429,357	\$ 12,536,623	\$ 1,253,662
4	Residential Comprehensive	\$ 4,622,108	\$ 8,012,509	\$ 3,390,400	\$ 339,040
5	Residential Lighting	\$ 2,170,699	\$ 5,274,462	\$ 3,103,763	\$ 310,376
6	PNM Home Works	\$ 230,673	\$ 255,283	\$ 24,611	\$ 2,461
7	Home Energy Reports	\$ 359,276	\$ 449,261	\$ 89,984	\$ 8,998
8	Low Income Refrigerator & CFL	\$ 143,433	\$ 191,406	\$ 47,973	\$ 4,797
9	Easy Savings Kit	\$ 355,083	\$ 434,771	\$ 79,688	\$ 7,969
10	Multi-Family (New)	\$ 633,438	\$ 799,923	\$ 166,485	\$ 16,649
11	PNM Power Saver	\$ 5,111,495	\$ 5,714,899	\$ 603,404	\$ 60,340
12	PNM Peak Saver	\$ 1,727,757	\$ 2,359,188	\$ 631,431	\$ 63,143
13	Market Transformation	\$ 441,923	n/a	n/a	n/a
14					
15	TOTAL	\$ 22,688,619	\$ 42,921,059	\$ 20,674,362	\$ 2,067,436

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF THE APPLICATION OF)
PUBLIC SERVICE COMPANY OF NEW MEXICO)
FOR APPROVAL OF ELECTRIC ENERGY)
EFFICIENCY PROGRAMS AND PROGRAM)
COST TARIFF RIDER PURSUANT TO THE)
NEW MEXICO PUBLIC UTILITY AND)
EFFICIENT USE OF ENERGY ACTS)

Case No. 14-00 _____-UT

PUBLIC SERVICE COMPANY OF NEW)
MEXICO,)

Applicant)
_____)

AFFIDAVIT

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

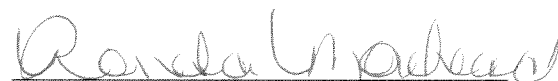
STELLA CHAN, Director of Pricing and Load Research for Public Service
Company of New Mexico, upon being duly sworn according to law, under oath, deposes and
states: I have read the foregoing **Direct Testimony of Stella Chan** and it is true and accurate
based on my own personal knowledge and belief.

SIGNED this 2nd day of October, 2014.



STELLA CHAN

SUBSCRIBED AND SWORN to before me this 2nd day of October, 2014.



NOTARY PUBLIC IN AND FOR
THE STATE OF NEW MEXICO

