

**BEFORE THE
ARKANSAS PUBLIC SERVICE COMMISSION**

IN THE MATTER OF AN INTERIM RATE)	
SCHEDULE OF OKLAHOMA GAS AND)	
ELECTRIC COMPANY IMPOSING A)	
SURCHARGE TO RECOVER ALL)	
INVESTMENTS AND EXPENSES INCURRED)	
THROUGH COMPLIANCE WITH)	DOCKET NO. 15-034-U
LEGISLATIVE OR ADMINISTRATIVE RULES,,)	
REGULATIONS OR REQUIREMENTS)	
RELATING TO THE PUBLIC HEALTH,)	
SAFETY, OR THE ENVIRONMENT UNDER)	
THE FEDERAL CLEAN AIR ACT OR CERTAIN)	
OF ITS EXISTING GENERAL FACILITIES)	

DIRECT TESTIMONY

OF

MARK E. GARRETT

**ON BEHALF OF
ARKANSAS RIVER VALLEY ENERGY CONSUMERS
("ARVEC")**

August 10, 2015

**Mark Garrett
Garrett Group LLC
Oklahoma City, Oklahoma**

TABLE OF CONTENTS

Section I. Introduction and Purpose of Testimony 3

Section II. Recommendations Regarding OG&E’s Requested ECP Rider 5

A. The Commission Could Reject OG&E’s Requested ECP Rider 6

B. The Commission Should Modify OG&E’s Requested ECP Rider 10

C. OG&E’s ECP Rider should be Expanded to Include PL-TOU Class 16

**D. OG&E’s ECP Rider should be Corrected to Collect Surcharge on kW
Basis 17**

E. OG&E’s ECP Rider should be Limited to NOx Cost Recovery 18

Section III. Summary and Conclusion 21

Exhibit MG-1 Qualifications of Mark E. GarrettAttached

Exhibit MG-2 OG&E’s Response to Wal-Mart’s 1.7 - ATT 2.....Attached

Exhibit MG-3 OG&E’s Response to ARVEC’s 1-2 ATT 1.....Attached

SECTION I. INTRODUCTION AND PURPOSE OF TESTIMONY

1 **Q: PLEASE STATE YOUR NAME AND OCCUPATION.**

2 A: My name is Mark Garrett and I am the President of Garrett Group, LLC, a consulting
3 firm specializing in public utility regulation and litigation.
4

5 **Q: WOULD YOU PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND
6 AND YOUR PROFESSIONAL EXPERIENCE RELATED TO UTILITY
7 REGULATION?**

8 A: I am a licensed attorney and a certified public accountant. I work as a consultant in the
9 area of public utility regulation. I received my bachelor's degree from the University of
10 Oklahoma and completed post-graduate hours at Stephen F. Austin State University and
11 at the University of Texas at Arlington and Pan American. I received my juris doctorate
12 degree from Oklahoma City University Law School and was admitted to the Oklahoma
13 Bar in 1997. I am a Certified Public Accountant licensed in the States of Texas and
14 Oklahoma with a background in public accounting, private industry, and utility
15 regulation. In public accounting, as a staff auditor for a firm in Dallas, I primarily
16 audited financial institutions in the State of Texas. In private industry, as controller for a
17 mid-sized (\$300 million) corporation in Dallas, I managed the Company's accounting
18 function, including general ledger, accounts payable, financial reporting, audits, tax
19 returns, budgets, projections, and supervision of accounting personnel. In utility
20 regulation, I served as an auditor in the Public Utility Division of the Oklahoma
21 Corporation Commission from 1991 to 1995. In that position, I managed the audits of

1 major gas and electric utility companies in Oklahoma. Since leaving the Oklahoma
2 Commission, I have worked on various rate cases and other regulatory proceedings on
3 behalf of various customers and customer groups.

4
5 **Q: HAVE REGULATORY COMMISSIONS ACCEPTED YOUR**
6 **QUALIFICATIONS TO TESTIFY AS AN EXPERT REGARDING COST-OF-**
7 **SERVICE AND OTHER RATEMAKING ISSUES?**

8 A: Yes. I have included a more complete description of my qualifications and a list of the
9 regulatory proceedings in which I have been involved at the end of my testimony. I have
10 appeared before the Arkansas Commission on two previous occasions, once in OG&E's
11 prior rate case, Docket No. 10-067-U, and in Entergy Arkansas's last rate case, Docket
12 No. 13-028-U and my qualifications were accepted in both of those proceedings.

13
14 **Q: ON WHOSE BEHALF DO YOU TESTIFY IN THIS PROCEEDING?**

15 A: I am testifying on behalf of Arkansas River Valley Energy Consumers ("ARVEC").
16 ARVEC is an association consisting of a diverse group of large consumers of energy in
17 Arkansas whose objective is to ensure fair, just and reasonable utility rates for its
18 members.

19
20 **Q: WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

21 A: My testimony addresses OG&E's proposed Environmental Compliance Rider. As a
22 preliminary matter, I question whether the costs at issue in this docket qualify for

1 recovery through an interim surcharge. Given the relatively immaterial amounts at issue,
2 it appears that surcharge recovery is neither necessary nor appropriate. I submit it is
3 within the Arkansas Public Service Commission's ("Commission") discretion to require
4 that the Company recover these costs through a traditional rate case proceeding, and
5 discuss the reasons this approach is preferable to the piecemeal surcharge the Company
6 requests. In the event this Commission finds the ECP costs qualify for rider recovery, I
7 recommend an important modification and two corrections to the rider mechanism
8 proposed by OG&E. I further recommend that OG&E's proposed rider be limited to the
9 costs identified in this docket, and that rider recovery not be extended in this case to
10 cover OG&E's other regional haze compliance costs not yet incurred. Finally, I
11 recommend that OG&E's other regional haze compliance costs be addressed in a full
12 rate case review, in which offsetting rate reductions can be quantified and passed on to
13 customers.

14 **SECTION II. RECOMMENDATIONS REGARDING REQUESTED ECP RIDER**

15 **Q: HAVE YOU REVIEWED OG&E'S PROPOSED ENVIRONMENTAL**
16 **COMPLIANCE RIDER?**

17 **A:** Yes. OG&E is requesting to recover its investments and expenses made to comply with
18 the NOx emissions requirements of the Clean Air Act's ("CAA") Regional Haze rule
19 through an interim surcharge called the Environmental Compliance Plan ("ECP") rider.¹
20 The NOx emissions compliance costs include about \$42 million in rate base investment

¹ Rowlett Direct, at page 4, lines 22-26.

1 and \$1M in expenses for an annual revenue requirement of \$4.4M. Arkansas's
2 jurisdictional share of these costs is about \$486,934 per year.² OG&E seeks to allocate
3 these costs to its customer rate classes using the following allocation factors:³

4	Residential	31.7101%
5	General Service	9.3189%
6	Power and Light	58.3398%
7	Other	0.6312%

8 OG&E proposes to collect these allocated costs from customers on a kWh basis.
9

10 **Q: DO YOU RECOMMEND APPROVAL OF OG&E'S ECP RIDER?**

11 A: No. As a preliminary matter, I question whether OG&E's NOx compliance costs qualify
12 for rider treatment as there are indications that rider recovery is not warranted for these
13 costs. However, if the Commission finds rider recovery is appropriate in this docket, I
14 propose that certain important changes be made to the Company's proposed rider.
15

16 A. **THE COMMISSION COULD REJECT OG&E'S REQUESTED RIDER**

17 **Q: PLEASE EXPLAIN WHY THE COMMISSION COULD REJECT OG&E'S**
18 **REQUESTED RIDER TREATMENT FOR NOx COSTS.**

19 A: Rider recovery is not warranted in all circumstances. Regulators routinely acknowledge
20 that rider recovery should be implemented sparingly to avoid the negative effects of
21 piecemeal ratemaking. In 2015, the Arkansas General Assembly enacted Act 1000,
22 which modifies the Arkansas Code governing the regulation of public utilities by the
23 Arkansas Public Service Commission. Act 1000 provides that the Commission may

² Rowlett Direct Exhibit DRR-2.

1 reject or modify a requested surcharge recovery mechanism under certain circumstances.
2 One of the enumerated circumstances in the Act may apply here. Specifically, the
3 Commission can reject the surcharge mechanism if “the investments or expenses can
4 otherwise be recovered in a prompt and timely manner.” This provision is codified at
5 Section 23-4-507(a) (8):

6 (a) After its investigation and hearing thereon, the Arkansas Public
7 Service Commission may modify or disapprove all or any portion of the
8 surcharge upon a finding that:

9 (8) The investments or expenses can otherwise be recovered in a
10 prompt and timely manner;

11 **Q: IN YOUR OPINION, COULD THE COMMISSION REJECT OG&E’S**
12 **REQUESTED RIDER UNDER § 23-4-507(a) (8)?**

13 A: Yes. OG&E’s investments and expenses associated with NOx compliance can be
14 recovered through a rate case proceeding in a prompt and timely manner. OG&E’s NOx
15 compliance costs mostly occur in 2015 and 2016 and the revenue requirement
16 completely stabilizes by 2017. OG&E could file a rate case in 2016 to recover these
17 costs going forward. The chart below shows the investment and expenses for OG&E’s
18 NOx costs for the years 2015-2019.⁴

³ See DRR-1 attached to Mr. Rowlett’s Direct Testimony.

⁴ See attached response to Walmart 1.7_Att2 (Exhibit MG-2)

	4/2015	2016	2017	2018	2019
Investment	\$33,990,824	\$76,096,062	\$ 99,397,161	\$99,397,161	\$99,397,161
Return	\$ 3,459,620	\$ 6,031,001	\$ 7,565,350	\$ 7,727,560	\$ 7,560,097
Depreciation	\$ 568,759	\$ 1,279,427	\$ 1,834,284	\$ 2,042,232	\$ 2,042,232
Property Tax	\$ 428,523	\$ 680,460	\$ 877,147	\$ 998,972	\$ 998,972
Rev. Req.	\$ 4,456,903	\$ 7,940,889	\$10,276,981	\$10,763,764	\$10,996,301
AR Rev. Req.	\$ 489,934	\$ 872,918	\$ 1,129,713	\$ 1,183,228	\$ 1,164,820

1 Based on the above data, the level of costs for NOx compliance is not material to
2 OG&E's overall earnings. The Company acknowledges that its rider recovery request in
3 this docket is "less than 0.2% of the Company's total company annual revenues."⁵
4 Under general ratemaking standards, such an immaterial expenditure would not typically
5 qualify for rider recovery treatment. In other words, if OG&E recovered these costs
6 through a rate case filed in 2016 rather than through its proposed rider mechanism, the
7 Company would suffer no material adverse financial impact to its overall earnings. As a
8 result, the Commission could reject OG&E's requested rider treatment in favor of
9 traditional rate case treatment for these costs. This benefits both the customers and the
10 Company by ensuring that OG&E's *overall* rates are just and reasonable. Such
11 assurance is not available when rates are adjusted in the piecemeal manner OG&E
12 recommends here. It is important to note that OG&E provides no compelling reason that
13 it needs rider recovery of these costs.

14
15 **Q: HAS THE OKLAHOMA CORPORATION COMMISSION APPROVED OG&E'S**
16 **REQUEST FOR RIDER RECOVERY OF ENVIRONMENTAL COMPLIANCE**

⁵ Rowlett Direct Testimony, p. 8.

1 **COSTS?**

2 A: No. In OG&E’s pending environmental compliance case before the Oklahoma
3 Commission, (Cause No. PUD 201400229), OG&E sought rider recovery of its
4 Regional Haze compliance costs. However, parties to the case, (other than the OG&E
5 Shareholders Association), recommended rate case recovery rather than rider treatment.⁶
6 After a hearing on the merits, the Administrative Law Judge (“ALJ”) did not recommend
7 rider recovery, and instead recommended that rate recovery of OG&E’s environmental
8 compliance costs occur in the context of OG&E’s next rate case. The Oklahoma
9 Commission has not yet issued a final order in that case. However, and in the meantime,
10 OG&E has filed its notice of intent to file a rate case no later than November 30, 2015.
11 The bottom line is if the ALJ’s recommendation is upheld by the Oklahoma
12 Commission, Oklahoma ratepayers will not be forced to pay federally mandated
13 environmental compliance costs pursuant to a rider without the benefit of a
14 comprehensive rate case review. I recommend that Arkansas ratepayers be provided the
15 same protections as the ALJ has recommended for Oklahoma ratepayers, with respect to
16 the costs in this docket.

17

18 **Q: DOES OKLAHOMA, LIKE ARKANSAS, HAVE A STATUTE THAT ALLOWS**
19 **FOR RIDER TREATMENT FOR ENVIRONMENTAL MANDATES?**

20 A: Yes, both Oklahoma and Arkansas have statutes that allow for rider recovery of costs a
21 utility incurs to comply with federal or state environmental mandates. However, it

⁶ The parties supporting rate case recovery include OIEC, Walmart, PUD Staff, the Attorney General, Quality of Service Coalition, and the Oklahoma Hospital Association.

1 should be recognized that although rider recovery is permitted by such statutes, it is not
2 mandatory. Instead, the statutory provisions in both states provide a great deal of
3 latitude when it comes to the Commissions' rate setting authority.

4
5 **Q: ARE THERE OTHER REASONS, FROM A RATEMAKING PERSPECTIVE,**
6 **WHY THE COMMISSION SHOULD PREFER THAT COST RECOVERY OF**
7 **NO_x COMPLIANCE COSTS OCCUR IN A RATE CASE RATHER THAN**
8 **THROUGH A RIDER?**

9 A: Yes. Rider recovery should be reserved for significant costs that would adversely
10 impact the earnings of the utility without rider treatment. Although Act 1000 does not
11 specifically require that the costs be *substantial*, materiality is still relevant to the
12 analysis. Under the statutory framework, the Commission may reject the surcharge
13 mechanism if "the investments or expenses can otherwise be recovered in a prompt and
14 timely manner." Thus, if the environmental compliance costs at issue were material to
15 the Company's bottom line, a rate case approach might not provide sufficiently prompt
16 and timely recovery. However, because the costs at issue here are less than 0.2% of the
17 Company's total annual revenues, it seems unlikely that traditional rate case recovery is
18 insufficiently prompt and timely to meet the Company's financial needs.

19
20 B. **THE COMMISSION SHOULD MODIFY OG&E'S REQUESTED RIDER**

21 **Q: PLEASE EXPLAIN WHY THE COMMISSION SHOULD MODIFY OG&E'S**
22 **REQUESTED RIDER.**

1 A: Under Act 1000, the Commission may modify a requested surcharge recovery
2 mechanism if “the allocation of the surcharge among the customers of the public utility
3 is unreasonable.” This criterion is set forth at Arkansas Code § 23-4-507(a) (9):

4 (a) After its investigation and hearing thereon, the Arkansas Public
5 Service Commission may modify or disapprove all or any portion of the
6 surcharge upon a finding that:

7 (9) The allocation of the surcharge among the customers of the
8 public utility is unreasonable;

9 **Q: DO YOU BELIEVE OG&E’s PROPOSED ALLOCATION OF THE**
10 **SURCHARGE AMONG ITS CUSTOMERS IS UNREASONABLE?**

11 A: Yes. In its requested rider, OG&E uses the Average and Peak allocation methodology
12 filed in its last APSC rate case, Docket No. 10-067-U.⁷ I believe that the use of this
13 method for allocation of the surcharge among OG&E’s customer classes is unreasonable
14 in light of the production cost allocation methodology prescribed in Act 725. Act 725
15 states that, if the Commission finds that it will be beneficial to economic development or
16 the promotion of employment opportunities, the Commission **shall** allocate production
17 demand costs to the customer classes using a 4CP Average and Excess methodology.
18 Once it is shown that implementation of a 4CP Average and Excess methodology will be
19 beneficial to economic development or that such methodology will promote employment
20 opportunities, the Commission must require that the Company use the 4CP Average and
21 Excess methodology for recovery of the environmental compliance costs as required by
22 ACT 725.

23

1 **Q: DO YOU BELIEVE THAT ARKANSAS CODE §23-4-422, THE COST**
2 **ALLOCATION SECTION OF ACT 725, ONLY APPLIES IN A GENERAL RATE**
3 **CASE PROCEEDING?**

4 A: No. The *cost allocation* section of the code is set forth in §23-4-422. This section is not
5 limited to general rate case applications as are some of the other sections. For example,
6 §23-4-410, which addresses new requirements for return on equity, is specifically, and
7 understandably, limited to applications “for a general change in rates.” On the other
8 hand, §23-4-422 contains no such limiting language. From a comprehensive review of
9 Act 725, it is clear that the General Assembly chose to limit only certain provisions as
10 applicable in general rate case proceedings, and chose to omit this limiting language
11 from other provisions. In my view, based upon the language of the statute, §23-4-422 is
12 not limited to general rate case proceedings, and instead is applicable in any proceeding
13 where the Commission is “determining the rates for utility service and the cost
14 allocations among all of a public utility’s classes of customers,” such as this one.

15
16 **Q: DOES ACT 1000 REQUIRE THAT THE SURCHARGE COSTS BE**
17 **ALLOCATED TO OG&E’S CUSTOMER CLASSES AS THEY WOULD HAVE**
18 **BEEN ALLOCATED IN THE COMPANY’S LAST RATE CASE?**

19 A: No. Act 1000 prescribes that the amount of the surcharge be calculated to produce
20 annual revenues equal to the revenue requirement that the utility would have received if
21 the costs had been included in the utility’s last rate case. Specifically, Section 4 of Act
22 1000 amended Arkansas Code § 23-4-503 to read as follows:

⁷ The filed methodology was not actually used in the final allocation of OG&E’s production costs in that case.

1 **23-4-503. Calculation of amount of interim surcharge.**

2 The amount of the interim surcharge to be added to the public utility's
3 rates shall be calculated so as to produce annual revenues equal to the
4 additional annualized revenue requirement to which the public utility
5 would be entitled had the investments and expenses described in § 23-4-
6 501 been included in the public utility's most recent rate determination by
7 the Arkansas Public Service Commission.

8 § 23-4-503 merely requires that the utility receive as much revenue through the
9 surcharge as it would have received if the costs had been included in the utility's last rate
10 case. In other words, the revenue requirement for the surcharge (Plant Costs less
11 Accumulated Depreciation less Accumulated Deferred Income Tax times Allowed Rate
12 of Return plus Depreciation Expense plus Property Taxes equals revenue requirement)
13 should be calculated as if these costs had been included in the last rate case. That would
14 be the \$489,934 amount calculated in Exhibit DRR-2 of Mr. Rowlett's Direct
15 Testimony. § 23-4-503, however, does not prescribe how the \$489,934 amount should
16 be allocated to and collected from the customer classes.

17
18 **Q: DO YOU BELIEVE THAT THE ALLOCATIONS USED IN OG&E'S LAST**
19 **RATE CASE PROVIDE A REASONABLE ALLOCATION OF THESE COSTS**
20 **NOW?**

21 A: No. I believe the Arkansas General Assembly prescribed what it believes to be a
22 reasonable allocation methodology for production plant costs in Act 725 as further
23 discussed below. Therefore, going forward, OG&E's production plant costs should be
24 allocated to its customer classes using a 4CP Average and Excess methodology.

1 Q: IS THERE LANGUAGE IN ACT 725 THAT INDICATES THE ALLOCATION
2 METHODOLOGY PRESCRIBED IN THE ACT SHOULD BE APPLIED IN THIS
3 CASE?

4 A: Yes. In Act 725 § 4, the Emergency Clause, the members of the Assembly stated:

5 . . . that there is a need to address the allocation of costs and design of
6 rates; that there is a need to maintain stable rates and to mitigate the
7 magnitude of future rate changes; and that affordable electricity and
8 natural gas encourage economic activity within the state and benefit the
9 state's industries to increase the number of available jobs and to attract
10 new businesses and industries to the state. Therefore, an emergency is
11 declared to exist, and this act being immediately necessary for the
12 preservation of the public peace, health, and safety shall become effective
13 on: (1) The date of its approval by the Governor

14 The Emergency Clause indicates the urgency the Assembly found to exist concerning the
15 implementation of Act 725, specifically citing the need to address cost allocation and
16 rate design.

17
18 Q: DID THE GENERAL ASSEMBLY RECOGNIZE A CORRELATION BETWEEN
19 AFFORDABLE ELECTRIC RATES AND ECONOMIC DEVELOPMENT?

20 A: Yes. In Act 725 § 4, specifically states:

21 . . . that there is a need to address the allocation of costs and design of rates; that there is
22 a need to maintain stable rates and to mitigate the magnitude of future rate changes; and
23 ***that affordable electricity and natural gas encourage economic activity within the state***
24 ***and benefit the state's industries to increase the number of available jobs and to attract***
25 ***new businesses and industries to the state.*** Therefore, an emergency is declared to
26 exist, and this act being immediately necessary for the preservation of the public peace,
27 health, and safety shall become effective on: (1) The date of its approval by the
28 Governor

1 **Q: DO YOU BELIEVE USING A 4CP AVERAGE AND EXCESS PRODUCTION**
2 **COST ALLOCATION WILL BE BENEFICIAL TO ECONOMIC**
3 **DEVELOPMENT OR WILL PROMOTE EMPLOYMENT OPPORTUNITIES IN**
4 **ARKANSAS AND WILL RESULT IN JUST AND REASONABLE RATES AS**
5 **CONTEMPLATED BY ACT 725?**

6 A: Yes. A 4CP A&E allocation of these costs will result in a lower cost allocation to the
7 large commercial and industrial classes. From an accounting perspective, there is no
8 question that controlling and reducing the costs of electric power encourages economic
9 activity and enables industry to allocate resources to job creation and growth. Every
10 dollar not spent on electricity costs is a dollar available for capital expansion. Every
11 dollar not spent on electricity costs is a dollar available for payroll costs. Every dollar
12 not spent on electricity costs is a dollar available to grow the business and create more
13 jobs.

14
15 **Q: DO OTHER EXPERTS AGREE WITH YOU?**

16 A: Yes. In Entergy Arkansas's recently filed rate case, Docket No. 15-015-U, Entergy
17 witness Michael Maulden testified regarding several studies that link electric costs to
18 jobs. For example, he references a report prepared in 2011 by the Center for Business
19 and Economic Research at the University of Kentucky which states: ". . . we find that the
20 industrial sector is the most sensitive to price changes in both the short and long run.
21 The residential sector is less sensitive to price changes, and is sensitive to price changes
22 only in the short run. The results suggest that the industrial and commercial sectors are

1 the quickest to alter their electricity consumption, which could negatively affect
2 economic growth and employment.”⁸ He also references a Cleveland State University
3 study that found, “[T]he price of electricity has a powerful influence on the
4 competitiveness of manufacturing. . .”⁹ Mr. Maulden recommended changing to a 4CP
5 Average and Excess methodology in the Entergy case.

6
7 **Q: ARE THERE OTHER EXAMPLES IN ARKANSAS TESTIMONY?**

8 A: Yes, s another example is in Entergy’s last rate case, Docket No. 13-028-U, wherein Dr.
9 Larry Blank, testifying for the Hospitals and Higher Education Group, recommended
10 using an Average and Excess methodology for economic development purposes.¹⁰

⁸ *The Relationship between Electricity Prices and Electricity Demand, Economic Growth, and Employment* prepared by the Center for Business and Economic Research, October 19, 2011 (“CBER”).

⁹ *Moving Ohio Manufacturing Forward: Competitive Electricity Pricing* prepared by Cleveland State University Center for Economic Development and Energy Policy Center (“Cleveland State”).

¹⁰ See Dr. Blank’s Direct Testimony in APSC Docket No. 13-028-U at page 25.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26

Q: WITH RESPECT TO THE ALLOCATION OF RIDER COSTS TO OG&E’S CUSTOMER CLASSES, WHAT METHODOLOGY DO YOU RECOMMEND?

A: I recommend that rider costs be allocated to OG&E’s customer classes using a 4CP Average and Excess allocation methodology because such an allocation would be beneficial to economic development and the promotion of employment opportunities and will result in just and reasonable rates for all customer classes.

C. OG&E’S ECP RIDER SHOULD BE EXPANDED TO INCLUDE THE PL-TOU CLASS

Q: YOU HAVE INDICATED THAT CERTAIN CORRECTIONS NEED TO BE MADE TO THE COMPANY’S PROPOSED ECP RIDER. WHAT IS THE FIRST CORRECTION THAT NEEDS TO BE MADE?

A: OG&E’s proposed rider combines the Power & Light and the Power & Light–TOU classes into one Power & Light class. In the Company’s last rate case, the Power & Light – TOU class was identified as a separate rate class. It should be treated as a separate rate class for the ECP rider as well. In fact, OG&E has indicated in its response to ARVEC Data Request 1-5(c) that it is able to and would consider allocating ECP rider costs to both Power and Light subclasses.

D. OG&E’S ECP RIDER SHOULD BE CORRECTED TO COLLECT SURCHARGE ON KW BASIS

Q: ARE THERE OTHER CORRECTIONS THAT NEED TO BE MADE TO THE COMPANY’S PROPOSED ECP RIDER?

1 A: Yes. OG&E proposes to collect the ECP rider surcharge on a kWh basis. However, this
2 is not consistent with the way these costs would be collected from customers if they had
3 been included in rates through a general rate case. Since these are demand-related costs,
4 they should be collected on a kW basis (not a kWh basis) from customer classes with
5 demand meters.

6
7 **Q: IS THIS THE WAY THESE COSTS WOULD HAVE BEEN COLLECTED IF**
8 **INCLUDED IN THE COMPANY'S LAST RATE CASE?**

9 A: Yes. For classes with demand meters these are the type of costs that would be collected
10 through a demand charge.

11
12 **Q: IS THIS THE METHODOLOGY PRESCRIBED IN ACT 725 FOR THE**
13 **COLLECTION OF THESE COSTS?**

14 A: Yes. Section 2 of Arkansas Code 23-4-422 (b) (1) prescribes that all cost related to
15 demand and capacity be allocated on a demand basis and recovered through a demand
16 rate rather than on a volumetric basis.

17
18 **E. OG&E'S ECP RIDER SHOULD BE LIMITED TO NOX COST**
19 **RECOVERY**

20
21 **Q: DO YOU HAVE CONCERNS THAT OG&E MAY SEEK TO EXTEND THIS**
22 **RIDER MECHANISM TO OTHER COSTS?**

23 A: Yes. As I have discussed, the Company has not demonstrated any legitimate financial
24 need for rider recovery of the costs identified in this docket. As such, the Company's

1 decision to seek rider recovery here appears to be a preliminary step, perhaps to establish
2 a precedent or otherwise pave the way for further expansion of the ECP rider in the
3 future to include its remaining Regional Haze compliance costs. Therefore, I
4 recommend that, if the Commission decides to allow rider recovery in this docket, such
5 approval should be explicitly limited to recover only the investments and expenses
6 identified by OG&E in this application to comply with the NOx emissions requirements
7 of the Clean Air Act's ("CAA") Regional Haze rule. The rider should not be later
8 extended to recover the additional costs OG&E will ultimately incur to fully comply
9 with the CAA Regional Haze rule. These additional future investments and expenses
10 will include substantial costs to scrub two coal units at OG&E's Sooner plant and
11 convert two coal units at OG&E's Muskogee plant to natural gas.

12
13 **Q: WHAT WILL OG&E'S TOTAL REVENUE REQUIREMENT INCREASE BE**
14 **TO COMPLY WITH THE CAA REGIONAL HAZE RULES?**

15 A: OG&E's total revenue requirement increase to comply with the CAA regional haze rules
16 is expected to reach \$281.1M by 2020.¹¹ Arkansas's share of that increase will be about
17 \$31M/year, which is more than fifty (50) times greater than the revenue requirement
18 increase identified in this application to comply with the NOx emissions requirements.
19 This will result in an approximate 15% overall rate increase for OG&E ratepayers.¹² In
20 my opinion, it would be completely inappropriate to pass through a 15% rate increase
21 through piecemeal rider ratemaking. Instead, the Commission should address

¹¹ See attached OG&E's response to ARVEC 1-2_Att1 (Exhibit MG-3).

1 environmental cost recovery in the context of a comprehensive rate case, so that
2 potential offsets can be identified to mitigate rate increases for customers.

3
4 **Q: PLEASE DISCUSS YOUR CONCERNS REGARDING THE TREATMENT OF**
5 **OG&E'S REMAINING ECP COSTS.**

6 **A:** Compliance with the EPA's regulations could result in significant rate increases. As
7 stated earlier, OG&E's total revenue requirement is expected to increase by \$281.1M to
8 comply with the CAA regional haze rules, resulting in a \$31M per year 15% overall rate
9 increase for Arkansas ratepayers. This is a significant increase that should not be passed
10 on to consumers through piecemeal ratemaking.

11 Although surcharge or rider recovery may be permitted within the statutory
12 scheme, it is not mandatory. The Commission has significant latitude to determine
13 whether a particular cost recovery method is advisable under the circumstances, and
14 more importantly, whether overall rates are *just and reasonable*. In light of the
15 significant cost increases on the horizon, the Commission should look for ways to
16 mitigate cost increases for ratepayers.

17 The Commission's duty to balance the interests of the utility with the interests of
18 the ratepayers cannot be accomplished in a vacuum, in which the Commission makes
19 isolated decisions about rate increases for the utility without taking into consideration
20 other potential rate decreases that may be available to mitigate the impact on ratepayers.

21 In my opinion, the Commission cannot know whether the overall rates it authorizes are

¹² The overall revenue requirement increase in Oklahoma was calculated to be 15.7% in Cause No. PUD 2014-00229. (See Mark Garrett's Responsive Testimony in 201400229, Table 3 at Page 14)

1 in fact *just and reasonable rates* – in other words, constitutionally valid rates – if it sets
2 those rates in a piecemeal fashion as the Company recommends here.

3
4 **Q: IS YOUR RECOMMENDATION CONSISTENT WITH ACT 1000?**

5 A: Yes. Act 1000 provides a mechanism for *prompt and timely* recovery of environmental
6 costs. The Commission can still authorize rider recovery of these costs as they are
7 incurred, but insist that the recovery mechanism *start* in a rate case proceeding, or, in the
8 alternative, the Commission could approve the ECP rider requested here but condition its
9 approval on the timely filing of a rate case. Either approach would provide the utility
10 with prompt and timely recovery of its environmental expenditures and ratepayers with
11 the protections of a comprehensive rate case review.

12
13 **SECTION III. SUMMARY OF RECOMMENDATIONS**

14 **Q: PLEASE PROVIDE A SUMMARY OF YOUR RECOMMENDATIONS**
15 **REGARDING OG&E’S REQUESTED ECP RIDER.**

16 A: In this testimony I make the following recommendations:

- 17 1. The Commission could reject the proposed ECP rider under Arkansas
18 Code § 23-4-507(a) (8) which allows the Commission to reject the rider if
19 “the investments or expenses can otherwise be recovered in a prompt and
20 timely manner.” OG&E’s NOx costs are sufficiently immaterial that they
21 could be recovered in a rate case in a prompt and timely manner.
- 22 2. The Commission should modify OG&E’s ECP rider pursuant to § 23-4-
23 507(a) (9) which allows the Commission to modify the rider if “the
24 allocation of the surcharge among the customers of the public utility is
25 unreasonable.” OG&E’s Peak and Average method is unreasonable in
26 light of the allocation methodology prescribed in Act 725 under §23-4-
27 422 which states that, if the Commission finds that it will be beneficial to

1 economic development or the promotion of employment opportunities,
2 the Commission **shall** allocate production demand costs to the customer
3 classes using a 4CP A&E method. §23-4-422 is not limited to general
4 rate case applications as are some sections of the Act. Further the
5 Emergency Clause of the Act makes it clear that the new prescribed
6 allocation method should be applied as soon as possible. I give several
7 examples in my testimony for authority that lower industrial electric rates
8 benefit economic development and promote employment opportunities,
9 one of which is language taken from Act 725 itself. I explain that ACT
10 1000 does not dictate that the rider costs must be allocated and collected
11 in the same manner as they would have been in the utility's last rate case.
12 It only dictates that the *revenue requirement* for the costs must be
13 calculated in the same manner.

- 14 3. OG&E's proposed rider should be corrected because it combines the
15 Power & Light and the Power & Light-TOU classes into one Power &
16 Light class. In the Company's last rate case, the Power & Light - TOU
17 class was identified as a separate rate class. It should be treated as a
18 separate rate class for the ECP rider as well.
- 19 4. OG&E proposed rider should be corrected because it proposes to collect
20 the ECP rider surcharges on a kWh basis. This is not consistent with the
21 way these costs would be collected from customers if they had been
22 included in rates through a general rate case. Since these are demand-
23 related costs, they should be collected on a kW basis (not a kWh basis).
24 Further, Act 725 Section 2, §23-4-422 (b) (1) prescribes that all cost
25 related to demand and capacity be allocated on a demand basis and
26 recovered through a demand rate rather than on a volumetric basis. This
27 provision of the Act applies in this case.
- 28
29 5. If the Commission decides to allow rider recovery in this docket, such
30 approval should be explicitly limited to OG&E's NOx costs. The rider
31 should not be later extended to recover the additional costs OG&E will
32 ultimately incur to fully comply with the CAA Regional Haze rule.
33 OG&E's total revenue requirement is expected to increase by \$281.1M to
34 comply with the CAA regional haze rules, resulting in a \$31M per year or
35 15% overall rate increase for Arkansas ratepayers. In light of this
36 significant cost increase, the Commission should look for ways to
37 mitigate this increase. The Commission's duty to balance the interests of
38 the utility with the interests of the ratepayers cannot be accomplished in a
39 vacuum, in which the Commission makes isolated decisions about rate
40 increases for the utility without taking into consideration other potential
41 rate decreases that may be available to mitigate the impact on ratepayers.
42 In my opinion, the Commission cannot know whether the overall rates it

1 authorizes are in fact *just and reasonable rates* – in other words,
2 constitutionally valid rates – if it sets those rates in a piecemeal fashion.
3 Act 1000 is intended to provide a mechanism for *prompt and timely*
4 recovery of environmental costs. The Commission can still authorize
5 rider recovery of these costs, but insist that the recovery mechanism *start*
6 in a rate case proceeding, or, in the alternative, the Commission could
7 approve the ECP rider requested here but condition its approval on the
8 timely filing of a rate case. Either approach would provide the utility
9 with prompt and timely recovery of its environmental expenditures and
10 ratepayers with the protections of a comprehensive rate case review.

11 **Q: DOES THIS CONCLUDE YOUR TESTIMONY?**

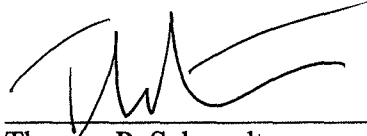
12 A: Yes. It does.

13

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

CERTIFICATE OF SERVICE

I, Thomas P. Schroedter, do hereby certify that a copy of the foregoing has been served upon all parties of record by forwarding the same by electronic mail and/or first class mail, postage prepaid, this 10th day of August 2015.



Thomas P. Schroedter

2428440.1:621046:01530

EXHIBIT MG-1

MARK E. GARRETT

CONTACT INFORMATION:

50 Penn Place, Suite 410
1900 NW Expressway
Oklahoma City, OK 73118
(405) 239-2226

EDUCATION:

Juris Doctor Degree, With Honors, Oklahoma City University Law School, 1997
Post Graduate Hours in Accounting, Finance and Economics, 1984-85:
University of Texas at Arlington; University of Texas at Pan American;
Stephen F. Austin State University
Bachelor of Arts Degree, University of Oklahoma, 1978

CREDENTIALS:

Member Oklahoma Bar Association, 1997, License No. 017629
Certified Public Accountant in Oklahoma, 1992, Certificate No. 11707-R
Certified Public Accountant in Texas, 1986, Certificate No. 48514

WORK HISTORY:

GARRETT GROUP, LLC - REGULATORY CONSULTING PRACTICE (1996 - Present)

Participates as a consultant and expert witness in electric utility, natural gas distribution company, and natural gas pipeline matters before regulatory agencies making recommendations related to cost-based rates. Reviews management decisions of regulated utility companies for reasonableness from a ratemaking perspective especially regarding the reasonableness of prices paid for natural gas supplies and transportation, coal supplies and transportation, purchased power and renewable energy projects. Participates in gas gathering, gas transportation, gas contract and royalty valuation disputes to determine pricing and damage calculations and to make recommendations concerning the reasonableness of charges to royalty and working interest owners and other interested parties. Participates in regulatory proceedings to restructure the electric and natural gas utility industries. Participates as an Instructor at NMSU Center for Public Utilities and as a Speaker at NARUC Staff Subcommittee on Accounting and Finance.

OKLAHOMA CORPORATION COMMISSION – Aide to Commissioner Bob Anthony (1995)

OKLAHOMA CORPORATION COMMISSION - Coordinator of Accounting and Financial Analysis (1991 - 1994) Planned and supervised the audits of major public utility companies doing business Oklahoma for the purpose of determining revenue requirements. Presented both oral and written testimony as an expert witness for Staff in defense of numerous accounting and financial recommendations related to cost-of-service based rates. Audit work and testimony covered all areas of rate base and operating expense. Supervised, trained and reviewed the audit work of numerous Staff CPAs and auditors. Promoted from Supervisor of Audits to Coordinator in 1992.

FREEDOM FINANCIAL CORPORATION - Controller (1987 - 1990) Responsible for all financial reporting including monthly and annual financial statements, cash flow statements, budget reports, long-term financial planning, tax planning and personnel development. Managed the General Ledger and Accounts Payable departments and supervised a staff of seven CPAs and accountants. Reviewed all subsidiary state and federal tax returns and facilitated the annual independent financial audit and all state or federal tax audits. Received promotion from Assistant Controller in September 1988.

SHELBY, RUCKSDASHEL & JONES, CPAs - Auditor (1986 - 1987) Audited the financial statements of businesses in the state of Texas, with an emphasis in financial institutions.

Previous Experience Related to Cost-of-Service, Rate Design, Pricing and Energy-Related Issues

1. **MGM Resorts, LLC, 2015 (Docket No. 15-05017)** – Participating as an expert witness on behalf of the MGM Resorts, LLC before the Nevada PUC. Sponsoring written and oral testimony in MGM’s application to purchase energy and capacity from a provider other than Nevada Power.
2. **Entergy Arkansas, 2015 (Docket No. 15-015-U)** – Participating as an expert witness on behalf of the Hospital and Higher Education Group (“HHEG”) an intervener group that includes the University of Arkansas and several hospitals before the Arkansas PSC in Entergy’s general rate case to provide testimony on various revenue requirement issues.
3. **Public Service Company of Oklahoma, 2015 (Cause No. PUD 201500208)** – Participating as an expert witness on behalf of OIEC before the OCC in AEP/PSO’s general rate case application to provide testimony on various cost-of-service issues and on the utility’s overall revenue requirement and rate design proposals.
4. **Nevada Power Company, 2014 (Docket No. 14-05003)** – Participated as an expert witness on behalf of the Southern Nevada Hotel Group (“SNHG”)¹ before the Nevada PUC. Sponsored written and oral testimony in NPC environmental compliance case, called the Emissions Reduction and Capacity Replacement case. The Commission adopted our recommendation to eliminate the \$438M Moapa solar project from the compliance plan.
5. **Nevada Power Company, 2014 (Docket No. 14-05004)** – Participated as an expert witness on behalf of the Southern Nevada Hotel Group before the Nevada PUC to sponsor written and oral testimony in both the revenue requirement phase and the rate design phase of the proceedings to establish prospective cost-of-service based rates for the power company.
6. **Oklahoma Gas and Electric Co., 2014 (Cause No. PUD 201400229)** – Participating as an expert witness on behalf of Oklahoma Industrial Energy Consumers (“OIEC”)² in OG&E’s Environmental Compliance and Mustang Modernization Plan before the Oklahoma Corporation Commission to provide testimony addressing the economics and rate impacts of the plan.
7. **Sourcegas Arkansas, Inc., 2014 (Docket No. 13-079-U)** Participated as an expert witness on behalf of the Hospital and Higher Education Group (“HHEG”), an intervener group that includes the University of Arkansas and several hospitals before the Arkansas PSC in SGA’s general rate case to provide testimony on various revenue requirement issues.
8. **Anchorage Municipal Light and Power, 2014 (Docket No. U-13-184)** – Participating as an expert witness before the Alaska Regulatory Utility Commission on behalf of Providence Health and Services to provide testimony on various revenue requirement and cost of service issues.
9. **Public Service Company of Oklahoma, 2014 (Cause No. PUD 201300217)** – Participating as an expert witness on behalf of OIEC before the OCC in AEP/PSO’s general rate case application to provide testimony on various cost-of-service issues and on the utility’s overall revenue requirement and rate design proposals.
10. **Entergy Texas Inc., 2013 (PUC Docket No. 41791)** – Participating as an expert witness on behalf of

¹ The Southern Nevada Hotel Group is comprised of Boyd Gaming, Caesars Entertainment, MGM Resorts, Station Casinos, Venetian Casino Resort, and Wynn Las Vegas.

² OIEC is an association of approximately 25 large commercial and industrial customers in Oklahoma.

the Cities³ in ETI's general rate case to provide testimony on various cost of service issues and on the utility's overall revenue requirement.

11. **MidAmerican/NV Energy Merger, 2013 (Docket No. 13-07021)** – Participated as an expert witness on behalf of the Southern Nevada Hotel Group (“SNHG”) before the Nevada PUC. Sponsored testimony to address various issues raised in the proposed acquisition of NV Energy by MidAmerican Energy Holdings Company, including capital structure and acquisition premium recovery issues.
12. **Entergy Arkansas, 2013 (Docket No. 13-028-U)** – Participated as an expert witness on behalf of the Hospital and Higher Education Group (“HHEG”) an intervener group that includes the University of Arkansas and several hospitals before the Arkansas PSC in Entergy's general rate case to provide testimony on various revenue requirement issues.
13. **Sierra Pacific Power Company, 2013 (Docket No. 13-06002)** – Participated as an expert witness on behalf of the Northern Nevada Utility Customers⁴ before the Nevada PUC in SPPC's general rate case proceeding to provide testimony on various cost of service and revenue requirement issues. Sponsored written and oral testimony in the depreciation phase, the revenue requirement phase and the rate design phase of these proceedings.
14. **Gulf Power Company, 2013 (Docket No. 130140-EI)** – Participated as an expert witness on behalf of the Office of Public Counsel before the Florida Commission in Gulf Power's general rate case proceeding to provide testimony on various revenue requirement issues.
15. **Public Service Company of Oklahoma, 2013 (Cause No. PUD 201200054)** – Participating as an expert witness on behalf of the OIEC before the Oklahoma Corporation Commission (“OCC”) to provide testimony in PSO's application seeking Commission approval of its settlement agreement with EPA.
16. **Southwestern Electric Power Company, 2012 (PUC Docket No. 40443)** – Participated as an expert witness on behalf of Cities Advocating Reasonable Deregulation (“CARD Cities”) before the Texas Public Utility Commission in SWEPSCO's general rate case proceeding to provide testimony on various cost of service issues and on the utility's overall revenue requirement.
17. **Doyon Utilities, 2012 Alaska Rate Case (Docket No. TA7-717)** – Participated as an expert witness consultant on behalf of the Department of Defense to provide expert testimony in twelve rate case reviews for the utility systems of Fort Wainwright, Fort Greely and Joint Base Elmendorf-Richardson before the Regulatory Commission of Alaska.
18. **University of Oklahoma, 2012** – Participated as an expert witness on behalf of the University of Oklahoma to provide expert testimony on various revenue requirement issues in the University's general rate case with the Corix Group, which provides utility services to the University.
19. **Public Service Company of Oklahoma, 2012 (Cause No. PUD 201200079)** – Participated as an expert witness on behalf of the OIEC before the Oklahoma Corporation Commission to provide expert testimony addressing the utility's request to earn additional compensation on a 510MW purchased power agreement with Exelon

³ The Cities include Beaumont, Conroe, Groves, Houston, Huntsville, Orange, Navasota, Nederland, Pine Forest, Pinehurst, Port Arthur, Port Neches, Rose City, Shenandoah, Silsbee, Sour Lake, Vidor, and West Orange.

⁴ The Northern Nevada Utility Consumers is a group of large commercial and industrial customers in the SPPC service territory.

20. **Centerpoint Energy Texas Gas, 2012 (Docket No. GUD 10182)** – Participated as an expert witness on behalf of the Steering Committee of Cities before the Texas Railroad Commission to provide expert testimony on various revenue requirement issues.
21. **Entergy Texas Inc., 2012 (PUC Docket No. 39896)** – Participated as an expert witness on behalf of the Cities in ETI's general rate case to provide testimony on various cost of service issues and on the utility's overall revenue requirement.
22. **Oklahoma Natural Gas Company, 2012 (Cause No. PUD 2012-029)** – Participating as an expert witness on behalf of the OIEC before the OCC in ONG's Performance Based Rate ("PBR") application seeking Commission approval of a requested rate increase based upon formula results for 2011.
23. **University of Oklahoma, 2012** – Assisted the University of Oklahoma with an audit of the costs associated with its six utility operations and its contract with the Corix Group to provide utility services to the university.
24. **Oklahoma Gas and Electric Company, 2012 (Cause No. PUD 2011-186)** – Participating as an expert witness on behalf of the OIEC before the OCC in OG&E's application seeking Commission approval of a special contract with Oklahoma State University and a wind energy purchase agreement in connection therewith.
25. **Empire Electric Company, 2011, (Cause No. PUD 11-082)** – Participated as an expert witness on behalf of Enbridge before the OCC in Empire's rate case to provided testimony in both the revenue requirement and rate design phases of the proceedings to establish prospective cost-of-service based rates for the power company.
26. **Nevada Power Company, 2011, (Docket No. 11-04010)** - Participated as an expert witness on behalf of the Southern Nevada Hotel Group ("SNHG") before the Nevada PUC. Sponsored written and oral testimony to address proposed changes to the Company's customer deposit rules.
27. **Nevada Power Company, 2011, (Docket No. 11-06006)** - Participated as an expert witness on behalf of the Southern Nevada Hotel Group before the Nevada PUC. Sponsored written and oral testimony in both the revenue requirement phase and the rate design phase of the proceedings to establish prospective cost-of-service based rates for the power company.
28. **Public Service Company of Oklahoma, 2011 (Cause No. PUD 2011-106)** – Participated as an expert witness on behalf of the OIEC before the OCC in PSO's application seeking rider recovery of third party SPP transmission costs and fees.
29. **Oklahoma Gas and Electric Company, 2011 (Cause No. PUD 2011-087)** – Participating as an expert witness on behalf of OIEC before the OCC in OG&E's rate case to provided testimony in both the revenue requirement and rate design phases of the proceedings to establish prospective cost-of-service based rates for the power company.
30. **Oklahoma Gas & Electric Company, 2011 (Docket No. 10-109-U)** – Participated as an expert witness on behalf of Gerdau Macsteel before the Arkansas Public Service Commission in OG&E's application to recover Smart Grid costs to make recommendations regarding the allocation of the Smart Grid costs.
31. **Oklahoma Gas & Electric Company, 2011 (Cause No. PUD 2011-027)** – Participated as an expert witness on behalf of the OIEC before the OCC in OG&E's application seeking to include retire

medical expense in the Company's pension tracker mechanism.

32. **Public Service Company of Oklahoma, 2011 (Cause No. PUD 2010-50)** – Participated as an expert witness on behalf of OIEC before the Oklahoma Corporation Commission in AEP/PSO's application to recover ice storm O&M expenses through a regulatory asset/rider mechanism to address tax impact and return issues in the proposed rider.
33. **Public Service Company of Colorado, 2011 (Docket No. 10AL-908E)** – Participated as an expert witness on behalf of the Colorado Retail Council ("CRC") before the Colorado Public Utilities Commission providing written and live testimony to address PSCo's proposed Environmental Tariff.
34. **Oklahoma Gas & Electric Company, 2011 (Docket No. 10-067-U)** – Participated as an expert witness on behalf of the Northwest Arkansas Industrial Energy Consumers ("NWIEC")⁵ before the Arkansas Public Service Commission in OG&E's general rate case application to provide testimony on various revenue requirement, cost of service and rate design issues.
35. **Oklahoma Gas & Electric Company, 2010 (Cause No. PUD 2010-146)** – Participated as an expert witness on behalf of the OIEC before the OCC in OG&E's application seeking rider recovery of third party SPP transmission costs and SPP administration fees.
36. **Massachusetts Electric Co. & Nantucket Electric Co. d/b/a National Grid, 2010 (Docket No. DPU 10-54)** – Participated as an expert witness providing both written and live testimony before the Massachusetts Department of Public Utilities on behalf of the Associated Industries of Massachusetts ("AIM") to address the Company's proposed participation in the 438MW Cape Wind project in Nantucket Sound.
37. **Public Service Company of Oklahoma, 2010 (Cause No. PUD 2010-50)** – Participated as an expert witness on behalf of the OIEC before the OCC in AEP/PSO's general rate case application to provide testimony on various cost-of-service issues and on the utility's overall revenue requirement and rate design proposals.
38. **Texas-New Mexico Power Co., 2010 (Docket 38480)** – Participating as an expert witness on behalf of the Alliance of Texas Municipalities ("ATM") before the Texas PUC in TMNP's general rate case application to address various revenue requirement and rate design issues to establish prospective cost-of-service based rates.
39. **Southwestern Public Service Co., 2010 (PUCT Docket No. 38147)** – Participating as an expert witness on behalf of the Alliance of Xcel Municipalities ("AXM") in the SPS general rate case application to provide testimony before the Texas Public Utility Commission regarding rate base and operating expense issues and sponsor the AXM Accounting Exhibits.
40. **Oklahoma Gas & Electric Company, 2010 (Cause No. PUD 2010-37)** – Participating as an expert witness on behalf of OIEC before the OCC to address the preapproval and ratemaking treatment of OG&E's 220MW self-build wind project.
41. **Oklahoma Gas & Electric Company, 2010 (Cause No. PUD 2010-29)** – Participated as an expert witness on behalf of the OIEC before the OCC in OG&E's application seeking pre-approval of deployment of smart-grid technology and rider-recovery of the associated costs. Sponsored written testimony to address smart-grid deployment and time-differentiated fuel rates.

⁵ NWIEC is an association of industrial manufacturing facilities in northwest Arkansas.

42. **Public Service Company of Oklahoma, 2010 (Cause No. PUD 2010-01)** – Participated as an expert witness on behalf of the OIEC before the OCC in the Company’s proposed Green Energy Choice Tariff. Sponsored testimony to address the pricing and ratemaking treatment of the Company’s proposed wind subscription tariff.
43. **Nevada Power Company, 2010 (Docket No. 10-02009)** – Participated as an expert witness on behalf of the Southern Nevada Hotel Group (“SNHG”) before the Nevada PUC to provide testimony in NPC’s Internal Resource Plan to address the ratemaking treatment of the proposed ON Line transmission line.
44. **Entergy Texas Inc., 2010 (PUC Docket No. 37744)** – Participating as an expert witness on behalf of the Cities in ETI’s general rate case to provide testimony on various cost of service issues and on the utility’s overall revenue requirement.
45. **El Paso Electric Company, 2010 (PUC Docket No. 37690)** – Participated as an expert witness on behalf of the City of El Paso in the EPI general rate case to provide testimony on various cost of service issues and on the utility’s overall revenue requirement.
46. **Public Service Company of Oklahoma, 2009 (Cause No. 09-196)** – Participated as an expert witness on behalf of the OIEC before the OCC in PSO’s application for approval of DSM programs and cost recovery. Sponsored testimony to address program costs, lost revenue recovery, cost allocations and incentives.
47. **Oklahoma Gas and Electric Company, 2009 (Cause No. PUD 09-230 and 09-231)** – Participated as an expert witness on behalf of OIEC before the OCC in OG&E’s application to add wind resources from two purchased power contracts. Sponsored written testimony to address the proper ratemaking treatment of the contract costs and the renewable energy certificates.
48. **Oklahoma Gas and Electric Company, 2009 (Cause No. PUD 08-398)** – Participated as an expert witness on behalf of OIEC before the OCC in OG&E’s rate case. Provided testimony in both the revenue requirement and rate design phases of the proceedings to establish prospective cost-of-service based rates for the power company.
49. **Nevada Power Company, 2009, (Docket No. 08-12002)** - Participated as an expert witness on behalf of the Southern Nevada Hotel Group before the Nevada PUC. Sponsored written and oral testimony in both the revenue requirement phase and the rate design phase of the proceedings to establish prospective cost-of-service based rates for the power company.
50. **Public Service Company of Oklahoma, 2009 (Cause No. 09-031)** – Participated as an expert witness on behalf of OIEC before the OCC in PSO’s application to add wind resources from two purchased power contracts. Sponsored written testimony to address the proper ratemaking treatment of the contract costs and the renewable energy certificates.
51. **Oklahoma Natural Gas Co., 2009 (Cause No. PUD 08-348)** – Participated as an expert witness on witness on behalf of the OIEC before the OCC in ONG’s application to establish a Performance Based Rate tariff. Sponsored both written and oral testimony to address the merits of the utility’s proposed PBR.
52. **Rocky Mountain Power, 2009 (Docket No. 08-035-38)** – Participated as an expert witness on behalf of the Division of Public Utilities (Staff) in PacifiCorp’s general rate case to provide testimony on various revenue requirement issues.

53. **Texas-New Mexico Power Co., 2008 (Docket 36025)** – Participating as an expert witness on behalf of the Alliance of Texas Municipalities (“ATM”) before the Texas PUC in TMNP’s general rate case application to address various revenue requirement and rate design issues to establish prospective cost-of-service based rates.
54. **Public Service Company of Oklahoma, 2008 (Cause No. 08-144)** – Participated as an expert witness on behalf of the OIEC before the OCC in PSO’s general rate case application to address revenue requirement and rate design issues to establish prospective cost-of-service based rates.
55. **Public Service Company of Oklahoma, 2008 (Cause No. 08-150)** – Participated as an expert witness on behalf of the OIEC before the OCC to address PSO’s calculation of its Fuel Clause Adjustment for 2008.
56. **Oklahoma Gas and Electric Company, 2008 (Cause No. PUD 08-059)** – Participated as an expert witness on behalf of the OIEC before the OCC in OG&E’s application seeking authorization of its Demand Side Management (“DSM”) programs and the establishment of a DSM Rider to recover program costs, lost revenues and utility incentives.
57. **Entergy Gulf States, 2008 (PUC Docket No. 34800, SOAH Docket No. 473-08-0334)** – Participated as an expert witness on behalf of the Cities in EGSI’s general rate case to provide testimony on various cost of service issues and on the utility’s overall revenue requirement.
58. **Public Service Company of Oklahoma, 2008 (Cause No. 07-465)** – Participated as an expert witness on behalf of the OIEC before the OCC in PSO’s application to recover the pre-construction costs of the cancelled Red Rock coal generation facility.
59. **Oklahoma Gas and Electric Company, 2008 (Cause No. 07-447)** – Participating as an expert witness on behalf of the OIEC before the OCC in OG&E’s application seeking authorization to recover the pre-construction costs of the cancelled Red Rock coal generation facility using proceeds from sales of excess SO₂ allowances.
60. **Rocky Mountain Power, 2008 (Docket No. 07-035-93)** – Participating as an expert witness on behalf of Division of Public Utilities (Staff) in PacifiCorp’s general rate case to provide testimony on various revenue requirement issues.
61. **Public Service Company of Oklahoma, 2008 (Cause No. PUD 07-449)** – Participated as an expert witness on behalf of the OIEC before the OCC in PSO’s application seeking authorization of its Demand Side Management (“DSM”) programs and the establishment of a DSM Rider to recover program costs, lost revenues and utility incentives.
62. **Public Service Company of Oklahoma, 2008 (Cause No. PUD 07-397)** – Participated as an expert witness on behalf of OIEC before the OCC in PSO’s application seeking authorization to defer storm damage costs in a regulatory asset account and to recover the costs using the proceeds from sales of excess SO₂ allowances.
63. **Oklahoma Gas & Electric Co., 2007 (Cause No. PUD 07-012)** – Participated as an expert witness on behalf of OIEC before the OCC in OG&E’s application seeking pre-approval to construct the Red Rock coal plant to address the Company’s proposed rider recovery mechanism.
64. **Oklahoma Natural Gas Co., 2007 (Cause No. PUD 07-335)** – Participated as an expert witness on behalf of the OIEC before the OCC in ONG’s application proposing alternative cost recovery for the Company’s ongoing capital expenditures through the proposed Capital Investment Mechanism Rider

("CIM Rider"). Sponsored testimony to address ONG's proposal.

65. **Public Service Company of Oklahoma, 2007 (Cause No. PUD 06-030)** – Participated as an expert witness on behalf of the OIEC before the OCC in PSO's application seeking a used and useful determination for its planned addition of the Red Rock coal plant to address the Company's use of debt equivalency in the competitive bidding process for new resources.
66. **Public Service Company of Oklahoma, 2006 (Cause No. PUD 06-285)** – Participated as an expert witness on behalf of the OIEC before the OCC in PSO's general rate case application to address various revenue requirement and rate design issues to establish prospective cost-of-service based rates.
67. **Nevada Power Company, 2007, (Docket No. 07-01022)** - Participated as an expert witness on behalf of the MGM MIRAGE before the Nevada PUC in Nevada Power Company's deferred energy docket to determine the level of prudent company expenditures for fuel and purchased power.
68. **Nevada Power Company, 2006, (Docket No. 06-11022)** - Participated as an expert witness on behalf of the MGM MIRAGE properties before the Nevada PUC. Sponsored written and oral testimony in both the revenue requirement phase and the rate design phase of the proceedings to establish prospective cost-of-service based rates for the power company.
69. **Southwestern Public Service Co., 2006 (PUCT Docket No. 37766)** – Participated as an expert witness on behalf of the Alliance of Xcel Municipalities ("AXM") in the SPS general rate case application. Provided testimony before the Texas Public Utility Commission regarding rate base and operating expense issues and sponsored the Accounting Exhibits on behalf of AXM.
70. **Atmos Energy Corp., Mid-Tex Division, 2006 (Texas GUD 9676)** – Participated as an expert witness in the Atmos Mid-Tex general rate case application on behalf of the Atmos Texas Municipalities ("ATM"). Provided written and oral testimony before the Railroad Commission of Texas regarding the revenue requirements of Mid-Tex including various rate base, operating expense, depreciation and tax issues. Sponsored the Accounting Exhibits for ATM.
71. **Nevada Power Company, 2006 (Docket No. 06-06007)** – Participated as an expert witness on behalf of the MGM MIRAGE in the Sinatra Substation Electric Line Extension and Service Contract case. Provided both written and oral testimony before the Nevada Public Utility Commission to provide the Commission with information as to why the application is consistent with the line extension requirements of Rule 9 and why the cost recovery proposals set forth in the application provide a least cost approach to adding necessary new capacity in the Las Vegas strip area.
72. **Public Service Co. of Oklahoma, 2006 (Cause No. PUD 05-00516)** - Participated as an expert witness on behalf of the OIEC to review PSO's application for a "used and useful" determination of its proposed peaking facility.
73. **Oklahoma Gas and Electric Co., 2006 (Cause No. PUD 06-00041)** – Participated as an expert witness on behalf of the OIEC in OG&E's application to propose an incentive sharing mechanism for SO₂ allowance proceeds.
74. **Chermac Energy Corporation, 2006 (Cause No. PUD 05-00059 and 05-00177)** – Participated as an expert witness on behalf of the OIEC in Chermac's PURPA application. Sponsored written responsive and rebuttal testimony to address various rate design issues arising under the application.
75. **Oklahoma Gas and Electric Co., 2006 (Cause No. PUD 05-00140)** – Participated as an expert

witness on behalf of the OIEC in OG&E's 2003 and 2004 Fuel Clause reviews. Sponsored written testimony to address the purchasing practices of the Company, its transactions with affiliates, and the prices paid for natural gas, coal and purchased power.

76. **Nevada Power Company, 2006, (Docket No. 06-01016)** - Participated as an expert witness on behalf of the MGM MIRAGE properties before the Nevada PUC. Sponsored written testimony in NPC's deferred energy docket to determine the level of prudent company expenditures for fuel and purchased power.
77. **Oklahoma Gas and Electric Co., 2005 (Cause No. PUD 05-151)** – Participated as an expert witness on behalf of the OIEC in OG&E's general rate case application. Sponsored both written and oral testimony before the OCC to address various revenue requirement and rate design issues for the purpose of setting prospective cost-of-service based rates.
78. **Oklahoma Natural Gas Co., 2005 (Cause No. PUD 04-610)** – Participated as an expert witness on behalf of the Attorney General of Oklahoma. Sponsored written and oral testimony to address numerous rate base, operating expense and depreciation issues for the purpose of setting prospective cost-of-service based rates.
79. **CenterPoint Energy Arkla, 2004 (Cause No. PUD 04-0187)** – Participating as an expert witness on behalf of the Attorney General of Oklahoma: Sponsored written testimony to provide the OCC with analysis from an accounting and ratemaking perspective of the Co.'s proposed change in depreciation rates from an Average Life Group to an Equal Life Group methodology. Addressed the Co.'s proposed increase in depreciation rates associated with increased negative salvage value calculations.
80. **Public Service Co. of Oklahoma, 2004 (Cause No. PUD 02-0754)** – Participated as an expert witness on behalf of the OIEC. Sponsored written testimony (1) making adjustments to PSO's requested recovery of an ICR programming error, (2) correcting errors in the allocation of trading margins on off-system sales of electricity from AEP East to West and among the AEP West utilities and (3) recommending an annual rather than a quarterly change in the FAC rates.
81. **PowerSmith Cogeneration Project, 2004 (Cause No. PUD 03-0564)** - Participated as an expert witness on behalf of the OIEC to provide the OCC with direction in setting an avoided cost for the PowerSmith Cogeneration project under PURPA requirements. Provided both written and oral testimony on the provisions of the proposed contract under PURPA:
82. **Electric Utility Rules for Affiliate Transactions, 2004 (Cause No. RM 03-0003)** – Participated as a consultant on behalf of the OIEC to draft comments to assist the OCC in developing rules for affiliate transactions. Assisted in drafting the proposed rules. Successful in having the Lower of Cost or Market rule adopted for affiliate transactions in Oklahoma.
83. **Nevada Power Company, 2003, (Docket No. 03-10001)** - Participated as an expert witness on behalf of the MGM MIRAGE properties before the Nevada PUC. Sponsored written and oral testimony in both the revenue requirement phase and the rate design phase of the proceedings to establish prospective cost-of-service based rates for the power company.
84. **Nevada Power Company, 2003, (Docket No. 03-11019)** - Participated as an expert witness on behalf of the MGM MIRAGE before the Nevada PUC in Nevada Power Company's deferred energy docket to determine the level of prudent company expenditures for fuel and purchased power.
85. **Public Service Company of Oklahoma, 2003 (Cause No. PUD 03-0076)** – Participating as an expert witness on behalf of the OIEC before the OCC in PSO's general rate case application to

address various revenue requirement and rate design issues to establish prospective cost-of-service based rates.

86. **Oklahoma Gas & Electric Co., 2003 (Cause No. PUD 03-0226)** – Participated as an expert witness on behalf of the OIEC. Provided both written and oral testimony before the OCC to determine the appropriate level to include in rates for natural gas transportation and storage services acquired from an affiliated company.
87. **Nevada Power Company, 2003 (Docket No. 02-5003-5007)** - Participated as an expert witness on behalf of the MGM Mirage before the Nevada PUC. Sponsored written and oral testimony to calculate the appropriate exit fee in MGM Mirage's 661 Application to leave the system.
88. **McCarthy Family Farms, 2003** – Participated as a consultant to assist McCarthy Family Farms in converting a biomass and biosolids composting process into a renewable energy power producing business in California.
89. **Bice v. Petro Hunt, 2003 (ND, Supreme Court No. 20030306)** - Participated as an expert witness in a class certification proceeding to provide cost-of-service calculations for royalty valuation deductions for natural gas gathering, dehydration, compression, treatment and processing fees in North Dakota.
90. **Nevada Power Company, 2003 (Docket No. 03-11019)** - Participated as a consulting expert on behalf of the MGM Mirage before the Nevada PUC in Nevada Power Company's deferred energy docket to determine the level of prudent company expenditures for fuel and purchased power. Provided written and oral testimony on the reasonableness of the cost allocations to the utility's various customer classes.
91. **Wind River Reservation, 2003 (Fed. Claims Ct. No. 458-79L, 459-79L)** – Participated as a consulting expert on behalf of the Shoshone and Arapaho Tribes to provide cost-of-service calculations for royalty valuation deductions for gathering, dehydration, treatment and compression of natural gas and the reasonableness of deductions for gas transportation.
92. **Oklahoma Gas & Electric Co., 2002 (Cause No. PUD 01-0455)** – Participated as an expert witness on behalf of the OIEC before the OCC. Sponsored written and oral testimony on numerous revenue requirement issues including rate base, operating expense and rate design issues to establish prospective cost-of-service based rates.
93. **Nevada Power Company, 2002 (Docket No. 02-11021)** - Participated as an expert witness on behalf of the MGM Mirage before the Nevada PUC in Nevada Power Company's deferred energy docket to determine the level of prudent company expenditures for fuel and purchased power and to make recommendations with respect to rate design.
94. **Nevada Power Company, 2002 (Docket No. 01-11029)** - Participated as a consulting expert on behalf of the MGM Mirage before the Nevada PUC in Nevada Power Company's deferred energy docket to determine the level of prudent company expenditures for fuel and purchased power included in the Company's \$928 million deferred energy balances.
95. **Nevada Power Company, 2002 (Docket No. 01-10001)** - Participated as an expert witness on behalf of the MGM Mirage before the Nevada PUC. Sponsored written and oral testimony in both the revenue requirement phase and the rate design phase of the proceedings to establish prospective cost-of-service based rates for the power company.

96. **Chesapeake v. Kinder Morgan, 2001 (CIV-00-397L)** - Participated as an expert witness on behalf of Chesapeake Energy in a gas gathering dispute. Sponsored testimony to calculate and support a reasonable rate on the gas gathering system. Performed necessary calculations to determine appropriate levels of operating expense, depreciation and cost of capital to include in a reasonable gathering charge and developed an appropriate rate design to recover these costs.
97. **Southern Union Gas Company, 2001** - Participated as a consultant to the City of El Paso in its review of SUG's gas purchasing practices, gas storage position, and potential use of financial hedging instruments and ratemaking incentives to devise strategies to help shelter customers from the risk of high commodity price spikes during the winter months.
98. **Nevada Power Company, 2001** - Participated as an expert witness on behalf of the MGM-Mirage, Park Place and Mandalay Bay Group before the Nevada Public Utility Commission to review NPC's Comprehensive Energy Plan (CEP) for the State of Nevada and make recommendations regarding the appropriate level of additional costs to include in rates for the Company's prospective power costs associated with natural gas and gas transportation, coal and coal transportation and purchased power.
99. **Bridenstine v. Kaiser-Francis Oil Co. et al., 2001 (CJ-95-54)** - Participated as an expert witness on behalf of royalty owner plaintiffs in a valuation dispute regarding gathering, dehydration, metering, compression, and marketing costs. Provided cost-of-service calculations to determine the reasonableness of the gathering rate charged to the royalty interest. Also provided calculations as to the average price available in the field based upon a study of royalty payments received on other wells in the area.
100. **Klatt v. Hunt et al., 2000 (ND)** - Participated as an expert witness and filed report in United States District Court for the District of North Dakota in a natural gas gathering contract dispute to calculate charges and allocations for processing, sour gas compression, treatment, overhead, depreciation expense, use of residue gas, purchase price allocations, and risk capital.
101. **Oklahoma Gas and Electric Co., 2000 (Cause No. PUD 00-0020)** - Participated as an expert witness on behalf of the OIEC before the OCC. Sponsored testimony on OG&E's proposed Generation Efficiency Performance Rider (GEPR). Provided a list of criteria with which to measure a utility's proposal for alternative ratemaking. Recommended modifications to the Company's proposed GEPR to bring it within the boundaries of an acceptable alternative ratemaking formula.
102. **Oklahoma Gas and Electric Co., 1999** - Participated as an expert witness on behalf of the OIEC before the OCC. Sponsored testimony on OG&E's proposed Performance Based Ratemaking (PBR) proposal including analysis of the Company's regulated return on equity, fluctuations in the capital investment and operating expense accounts of the Company and the impact that various rate base, operating expense and cost of capital adjustments would have on the Company's proposal.
103. **Nevada Power Company, 1999 (Docket No. 99-7035)** - Participated as an expert witness on behalf of the Mirage, Park Place and Mandalay Bay Group before the Nevada PUC. Sponsored written and oral testimony addressing the appropriate ratemaking treatment of the Company's deferred energy balances, prospective power costs for natural gas, coal and purchased power and deferred capacity payments for purchased power.
104. **Nevada Power Company, 1999 (Docket No. 99-4005)** - Participated as an expert witness on behalf of the Mirage, Park Place and Mandalay Bay Group before the Nevada PUC. Sponsored written and oral testimony to unbundle the utility services of the NPC and to establish the appropriate cost-of-service allocations and rate design for the utility in Nevada's new competitive electric utility industry.

105. **Nevada Power Company, 1999 (Docket No. 99-4005)** - Participated as an expert witness on behalf of the Mirage, Park Place and Mandalay Bay Group before the Nevada PUC. Sponsored written and oral testimony to establish the cost-of-service revenue requirement of the Company.
106. **Nevada Power/Sierra Pacific Merger, 1998 (Docket No. 98-7023)** - Participated as an expert witness on behalf of the Mirage and MGM Grand before the Nevada PUC. Sponsored written and oral testimony to establish (1) appropriate conditions on the merger (2) the proper sequence of regulatory events to unbundle utility services and deregulate the electric utility industry in Nevada (3) the proper accounting treatment of the acquisition premium and the gain on divestiture of generation assets. The recommendations regarding conditions on the merger, the sequence of regulatory events to unbundle and deregulate, and the accounting treatment of the acquisition premium were specifically adopted in the Commission's final order.
107. **Oklahoma Natural Gas Company, 1998 (Cause No. PUD 98-0177)** - Participated as an expert witness in ONG's unbundling proceedings before the OCC. Sponsored written and oral testimony on behalf of Transok, LLC to establish the cost of ONG's unbundled upstream gas services. Substantially all of the cost-of-service recommendations to unbundle ONG's gas services were adopted in the Commission's interim order.
108. **Public Service Company of Oklahoma, 1997 (Cause No. PUD 96-0214)** - Audited both rate base investment and operating revenue and expense to determine the Company's revenue requirement and cost-of-service. Sponsored written testimony before the OCC on behalf of the OIEC.
109. **Oklahoma Natural Gas /Western Resources Merger, 1997 (Cause No. PUD 97-0106)** - Sponsored testimony on behalf of the OIEC regarding the appropriate accounting treatment of acquisition premiums resulting from the purchase of regulated assets.
110. **Oklahoma Gas and Electric Co., 1996 (Cause No. PUD 96-0116)** - Audited both rate base investment and operating income. Sponsored testimony on behalf of the OIEC for the purpose of determining the Company's revenue requirement and cost-of-service allocations.
111. **Oklahoma Corporation Commission, 1996** - Provided technical assistance to Commissioner Anthony's office in analyzing gas contracts and related legal proceedings involving ONG and certain of its gas supply contracts. Assignment included comparison of pricing terms of subject gas contracts to portfolio of gas contracts and other data obtained through annual fuel audits analyzing ONG's gas purchasing practices.
112. **Tenkiller Water Company, 1996** - Provided technical assistance to the Attorney General of Oklahoma in his review of the Company's regulated cost-of-service for the purpose of setting prospective utility rates.
113. **Arkansas Oklahoma Gas Company, 1995 (Cause No. PUD 95-0134)** - Sponsored written and oral testimony before the OCC on behalf of the Attorney General of Oklahoma regarding the price of natural gas on AOG's system and the impact of AOG's proposed cost of gas allocations and gas transportation rates and tariffs on AOG's various customer classes.
114. **Enogex, Inc., 1995 (FERC 95-10-000)** - Analyzed Enogex's application before the FERC to increase gas transportation rates for the Oklahoma Independent Petroleum Association and made recommendations regarding revenue requirement, cost-of-service and rate design on behalf of independent producers and shippers.
115. **Oklahoma Natural Gas Company, 1995 (Cause No. PUD 94-0477)** - Analyzed a portfolio of

ONG's gas purchase contracts in the Company's Payment-In-Kind (PIC) gas purchase program and made recommendations to the OCC Staff on behalf of Terra Nitrogen, Inc. regarding the inappropriate profits made by ONG on the sale of the gas commodity through the PIC program pricing formula. Also analyzed the price of gas on ONG's system, ONG's cost-of-service based rates, and certain class cross-subsidizations in ONG's existing rate design.

116. **Arkansas Louisiana Gas Company, 1994 (Cause No. PUD 94-0354)** - Planned and supervised the rate case audit for the OCC Staff and reviewed the workpapers and testimony of the other auditors on the case. Sponsored cost-of-service testimony on cash working capital and developed policy recommendations on post test year adjustments.
117. **Empire District Electric Company, 1994 (Cause No. PUD 94-0343)** - Planned and supervised the rate case audit for the OCC Staff and reviewed the workpapers and testimony of other auditors. Sponsored cost-of-service testimony on rate base investment areas including cash working capital.
118. **Oklahoma Natural Gas Company, 1992 through 1993 (Cause No. PUD 92-1190)** - Planned and supervised the rate case audit of ONG for the OCC Staff. Reviewed all workpapers and testimony of the other auditors on the case. Sponsored written and oral testimony on numerous cost-of-service adjustments. Analyzed ONG's gas supply contracts under the Company's PIC program.
119. **Oklahoma Gas and Electric Company, 1991 through 1992 (Cause No. PUD 91-1055)** - Audited the rate base, operating revenue and operating expense accounts of OG&E on behalf of the OCC Staff. Sponsored written and oral testimony on numerous revenue requirement adjustments to establish the appropriate level of costs to include for the purpose of setting prospective rates.

EXHIBIT MG-2

**OKLAHOMA GAS AND ELECTRIC COMPANY
ECP REVENUE REQUIREMENT**

<u>LINE NO.</u>	<u>DESCRIPTION</u>	<u>Filed Cost as of April</u>				
		<u>30, 2015</u>	<u>YE 2016</u>	<u>YE 2017</u>	<u>YE 2018</u>	<u>YE 2019</u>
<u>Rate Base</u>						
1	Plant in Service YE Balance	\$ 33,990,824	\$ 76,096,062	\$ 99,397,161	\$ 99,397,161	\$ 99,397,161
2	Accumulated Provision for Depreciation	\$ (661,831)	\$ (2,544,233)	\$ (4,477,878)	\$ (6,520,110)	\$ (8,562,343)
3	Net Plant In Service	\$ 33,328,993	\$ 73,551,829	\$ 94,919,283	\$ 92,877,050	\$ 90,834,818
4	Construction Work in Progress YE Balance	\$ 8,861,496	\$ 12,425,975	\$ -	\$ -	\$ -
5	Total Rate Base	\$ 42,190,489	\$ 85,977,803	\$ 94,919,283	\$ 92,877,050	\$ 90,834,818
6	Rate of Return/PIS	8.20%	8.20%	8.20%	8.20%	8.20%
7	AFUDC Return/CWIP ¹	8.20%	8.20%	8.20%	8.20%	8.20%
8	Return on Net Plant in Service	\$ 2,732,977	\$ 5,044,957	\$ 6,934,024	\$ 7,727,560	\$ 7,560,097
9	Return on Construction Work in Progress	\$ 726,643	\$ 986,045	\$ 631,526	\$ -	\$ -
10	Total Return on Rate Base	3,459,620	6,031,001	7,565,550	7,727,560	7,560,097
<u>Expenses</u>						
11	O&M Expense	\$ -	\$ -	\$ -	\$ -	\$ -
12	Depreciation Expense	\$ 568,759	\$ 1,279,427	\$ 1,834,284	\$ 2,042,232	\$ 2,042,232
13	Property Taxes at 1%	\$ 428,523	\$ 630,460	\$ 877,147	\$ 993,972	\$ 993,972
14	Total Expenses	\$ 997,283	\$ 1,909,887	\$ 2,711,431	\$ 3,036,204	\$ 3,036,204
15	Revenue Requirement @ 100%	\$ 4,456,903	\$ 7,940,889	\$ 10,276,981	\$ 10,763,764	\$ 10,596,301
16	AR Jurisdictional Allocation % ²	10.99%	10.99%	10.99%	10.99%	10.99%
17	AR Revenue Requirement	\$ 489,934	\$ 872,918	\$ 1,129,718	\$ 1,183,228	\$ 1,164,820

Notes

¹ Based on the Final Order from Docket 10-067-U, Order #6, Exhibit 1, p. 7 of 29. 5.93% grossed up for tax.

² Based on the Final Order from Docket 10-067-U, Order #6, Exhibit 1, p.4 of 29.

EXHIBIT MG-3

APSC FILED Time: 8/10/2015 11:13:31 AM: Recvd 8/10/2015 11:12:44 AM: Docket 15-034-u-Doc. 21

Arkansas Estimated Customer Impacts for Environmental Revenue Requirements - Scrub/Convert Case with fuel

	1	2	3	4	5	6
	2015	2016 ¹	2017	2018	2019	2020
Rate Base²						
1 Capital Investment (Plant & CWIP)	\$ 42,852,320	\$ 356,508,806	\$ 519,977,513	\$ 670,812,302	\$ 690,380,556	\$ 690,466,755
2 Accumulated Provision for Depreciation	\$ (661,831)	\$ (6,027,920)	\$ (11,469,159)	\$ (27,541,303)	\$ (59,431,608)	\$ (91,952,306)
3 Regulatory Assets	\$ -	\$ -	\$ -	\$ -	\$ 30,378,344	\$ 24,444,688
4 Total Rate Base	\$ 42,190,489	\$ 350,480,885	\$ 508,508,354	\$ 643,270,999	\$ 661,327,292	\$ 622,959,137
5						
6 Return on Rate Base	\$ 3,459,620	\$ 21,702,800	\$ 37,080,638	\$ 47,586,786	\$ 54,786,064	\$ 52,522,436
Expenses²						
7 O&M Expense	\$ -	\$ 845,067	\$ 860,447	\$ 5,680,333	\$ 13,366,534	\$ 13,876,897
8 Depreciation Expense	\$ 568,759	\$ 4,927,456	\$ 5,441,239	\$ 16,072,143	\$ 31,890,305	\$ 32,520,698
9 Amortization of Regulatory Assets	\$ -	\$ -	\$ -	\$ -	\$ 5,933,656	\$ 5,933,656
10 Property Taxes	\$ 428,523	\$ 1,791,915	\$ 3,565,088	\$ 5,199,775	\$ 6,708,123	\$ 6,903,806
11 Total Expenses	\$ 997,283	\$ 7,564,437	\$ 9,866,774	\$ 26,952,251	\$ 57,898,618	\$ 59,235,057
12 Revenue Requirement @ 100% ***	\$ 4,456,903	\$ 26,139,986	\$ 43,987,638	\$ 67,282,146	\$ 112,904,494	\$ 112,413,366

Allocation Methods:	AR Juris	Residential	GS	PL	Other **
Production Demand Allocator *	10.9927%	3.4569%	1.0267%	6.4361%	0.0730%
Energy Allocator *	11.4613%	3.0653%	0.9162%	7.3457%	0.1341%

* Allocators per Docket No. 10-067-U settled case *** Revenue Requirement based on semi-annual case filings.

** Other includes pumping and lighting classes.

Allocation of Revenue Requirement³

Rev Req @ Demand:	Allocator	2015	2016	2017	2018	2019	2020
Arkansas Jurisdiction	10.9927%	\$ 489,934	\$ 2,873,490	\$ 4,835,429	\$ 7,396,125	\$ 12,411,252	\$ 12,357,264
Residential	3.4569%	\$ 154,071	\$ 903,633	\$ 1,520,609	\$ 2,325,877	\$ 3,902,995	\$ 3,886,018
General Service	1.0267%	\$ 45,759	\$ 268,379	\$ 451,621	\$ 690,786	\$ 1,159,190	\$ 1,154,148
Power & Light	6.4361%	\$ 286,851	\$ 1,682,396	\$ 2,831,088	\$ 4,330,346	\$ 7,266,646	\$ 7,235,037
Other	0.0730%	\$ 3,254	\$ 19,082	\$ 32,111	\$ 49,116	\$ 82,420	\$ 82,062

Class	Average Monthly kWh	2015 ⁴	2016	2017	2018	2019	2020
Residential	1,000	\$ 0.22	\$ 1.28	\$ 2.15	\$ 3.28	\$ 5.51	\$ 5.49
General Service	1,800	\$ 0.39	\$ 2.28	\$ 3.84	\$ 5.87	\$ 9.85	\$ 9.81
Power & Light	130,000	\$ 21.19	\$ 124.28	\$ 209.13	\$ 319.88	\$ 536.79	\$ 534.45

Incremental Annual Impact - Scrub/Convert Case⁵

Class	Average Monthly Bill	Average Monthly kWh	2015 (Revised)	2016	2017	2018	2019	2020
Residential	\$ -	1,000	\$ 0.22	\$ 1.06	\$ 0.87	\$ 1.14	\$ 2.23	\$ (0.02)
General Service	\$ -	1,800	\$ 0.39	\$ 1.89	\$ 1.56	\$ 2.03	\$ 3.98	\$ (0.04)
Power & Light	\$ -	130,000	\$ 21.19	\$ 103.09	\$ 84.85	\$ 110.75	\$ 216.91	\$ (2.34)

FUEL ONLY IMPACTS BELOW

	2015	2016 ⁶	2017	2018	2019	2020
Fuel Impacts - Scrub/Convert Case	\$ -	\$ 37,096,560	\$ 42,644,200	\$ 55,843,735	\$ 160,010,601	\$ 168,695,566

Fuel Impacts @ Energy:

Arkansas Jurisdiction	11.4613%	\$ -	\$ 4,251,748	\$ 4,887,580	\$ 6,400,418	\$ 18,339,295	\$ 19,334,705
Residential	3.0653%	\$ -	\$ 1,137,121	\$ 1,307,173	\$ 1,711,778	\$ 4,904,805	\$ 5,171,025
General Service	0.9162%	\$ -	\$ 339,879	\$ 390,706	\$ 511,640	\$ 1,466,017	\$ 1,545,589
Power & Light	7.3457%	\$ -	\$ 2,725,002	\$ 3,132,515	\$ 4,102,113	\$ 11,753,899	\$ 12,391,870
Other	0.1341%	\$ -	\$ 49,746	\$ 57,186	\$ 74,886	\$ 214,574	\$ 226,221

Class	Average Monthly Fuel Impact c/kWh @ E	Average Monthly kWh	2016	2017	2018	2019	2020
Residential	1,000	\$ 1.61	\$ 1.85	\$ 2.42	\$ 6.92	\$ 7.30	
General Service	1,800	\$ 2.89	\$ 3.32	\$ 4.35	\$ 12.46	\$ 13.14	
Power & Light	130,000	\$ 201.30	\$ 231.40	\$ 303.02	\$ 868.26	\$ 915.39	

Incremental Annual Fuel Impact - Scrub/Convert Case

Class	Average Monthly Bill	Average Monthly kWh	2015	2016	2017	2018	2019	2020
Residential	\$ -	1,000	\$ -	\$ 1.61	\$ 0.24	\$ 0.57	\$ 4.51	\$ 0.38
General Service	\$ -	1,800	\$ -	\$ 2.89	\$ 0.43	\$ 1.03	\$ 8.11	\$ 0.68
Power & Light	\$ -	130,000	\$ -	\$ 201.30	\$ 30.10	\$ 71.62	\$ 565.24	\$ 47.13

Footnotes

- For supporting revenue requirement workpapers by year and by month for 2016-2020, please see attachment ARVEC 1-2 Att_2.
- Based on year-ending actual numbers. Please note that the total revenue requirement is recovered on a semi-annual basis.
- Calculated multiplying total company revenue requirement by jurisdictional allocators from cell C:32-36.
- Monthly total impact is calculated by dividing cell D:33 (Jurisdictional revenue requirement) by kWh by class (Tab "Arkansas kWh by Class", Cell B:6) and multiplying total by average monthly kWh in cell C:40. Same formula is utilized for each corresponding year.
- Incremental customer impact represents increase per year.
- Fuel cost also includes variable O&M from Air Quality Control Systems ("AQCS") associated with ACI and Scrubbers, assuming dollars are recovered through the ECR. Fuel costs are based on the IRP Information in tab "IRP Prod Scrub_Convert" on Line 48 of that tab. Fuel costs assume recovery of water and bag replacement costs through the ECP Rider.