

BEFORE THE CORPORATION COMMISSION OF OKLAHOMA

**IN THE MATTER OF THE APPLICATION OF)
OKLAHOMA GAS AND ELECTRIC COMPANY)
FOR COMMISSION AUTHORIZATION OF A)
PLAN TO COMPLY WITH THE FEDERAL CLEAN)
AIR ACT AND COST RECOVERY; AND FOR)
APPROVAL OF THE MUSTANG MODERNIZATION)
AND COST RECOVERY)**

CAUSE NO. PUD 201400229

RESPONSIVE TESTIMONY OF STEVE W. CHRISS

ON BEHALF OF

WAL-MART STORES EAST, LP AND SAM'S EAST, INC.

Dated: December 16, 2014

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1 **Introduction**

2 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND OCCUPATION.**

3 A. My name is Steve W. Chriss. My business address is 2001 SE 10th St., Bentonville,
4 AR 72716-0550. I am employed by Wal-Mart Stores, Inc. as Senior Manager,
5 Energy Regulatory Analysis.

6 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS DOCKET?**

7 A. I am testifying on behalf of Wal-Mart Stores East, LP and Sam's East, Inc. (collectively
8 "Walmart").

9 **Q. PLEASE DESCRIBE YOUR EDUCATION AND EXPERIENCE.**

10 A. In 2001, I completed a Master of Science in Agricultural Economics at Louisiana State
11 University. From 2001 to 2003, I was an Analyst and later a Senior Analyst at the
12 Houston office of Econ One Research, Inc., a Los Angeles-based consulting firm. My
13 duties included research and analysis on domestic and international energy and
14 regulatory issues. From 2003 to 2007, I was an Economist and later a Senior Utility
15 Analyst at the Public Utility Commission of Oregon in Salem, Oregon. My duties
16 included appearing as a witness for PUC Staff in electric, natural gas, and
17 telecommunications dockets. I joined the energy department at Walmart in July
18 2007 as Manager, State Rate Proceedings, and was promoted to my current position
19 in June 2011. My Witness Qualifications Statement is included herein as Schedule
20 SWC-1.

1 Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE THE OKLAHOMA
2 CORPORATION COMMISSION ("THE COMMISSION")?

3 A. Yes. I submitted testimony in Cause Nos. PUD 200800398, PUD 201000050, PUD
4 201100087, PUD 201300201, and PUD 201300217.

5 Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE OTHER STATE
6 REGULATORY COMMISSIONS?

7 A. Yes. I have submitted testimony in over 110 proceedings before 34 other utility
8 regulatory commissions and before the Missouri House Committee on Utilities, the
9 Missouri Senate Veterans' Affairs, Emerging Issues, Pensions, and Urban Affairs
10 Committee, and the Kansas House Standing Committee on Utilities and
11 Telecommunications. My testimony has addressed topics including, but not limited
12 to, cost of service and rate design, revenue requirement, ratemaking policy,
13 qualifying facility rates, telecommunications deregulation, resource certification,
14 energy efficiency/demand side management, fuel cost adjustment mechanisms,
15 decoupling, and the collection of cash earnings on construction work in progress.

16 Q. ARE YOU SPONSORING ANY SCHEDULES WITH YOUR TESTIMONY?

17 A. Yes. I am sponsoring the following schedules:

18 **Schedule SWC-1** – Witness Qualifications Statement;

19 **Schedule SWC-2** – Reported authorized returns on equity, electric utility

20 rate cases completed, 2012 to present;

1 **Schedule SWC-3** – Proposed EGP Revenue Requirement, CWIP vs. AFUDC;

2 and

3 **Schedule SWC-4** – OIEC 1-1 Data Response Attachment.

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

5 A. The purpose of my testimony is to respond to issues related to the environmental
6 compliance plan (“ECP”) and Mustang plant modernization plan (“MMP”) filing of
7 Oklahoma Gas and Electric Company (“OG&E” or “the Company”).

8 **Q. PLEASE BRIEFLY DESCRIBE WALMART'S OPERATIONS IN OKLAHOMA.**

9 A. Walmart operates 119 retail units and employs 31,096 associates in Oklahoma. In
10 fiscal year ending 2014, Walmart purchased \$691.4 million worth of goods and
11 services from Oklahoma-based suppliers, supporting over 17,000 supplier jobs.¹

12 **Q. PLEASE BRIEFLY DESCRIBE WALMART'S OPERATIONS WITHIN OG&E'S SERVICE**
13 **TERRITORY.**

14 A. Walmart has approximately 52 stores and related facilities, and a distribution center
15 that take service from the Company.

16

17 **Summary of Recommendations**

18 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS TO THE COMMISSION.**

19 A. My recommendations to the Commission are as follows:

¹ <http://corporate.walmart.com/our-story/locations/united-states#/united-states/oklahoma>

- 1 1) The Commission should remove all cost recovery considerations and
2 determinations from the instant cause and move them to OG&E's next
3 general rate case. The rest of my recommendations in this testimony, as
4 summarized below, shall apply only if the Commission determines that the
5 instant cause is the appropriate forum for cost recovery considerations and
6 determinations.
- 7 2) The Commission should reject the use of construction work in progress
8 ("CWIP") regulatory treatment, in which ratepayers are ratepayers for assets
9 that are not yet providing electric service, for any approved ECP and/or MMP
10 costs that the Commission determines should be recovered per a mechanism
11 approved in this cause.
- 12 3) If the Commission determines generally that it will address cost recovery in
13 this cause, it should exclude any approved MMP costs from the proposed
14 Environmental and Generation Plan ("EGP") rider and move cost recovery for
15 those costs to future OG&E general rate cases.
- 16 4) If the Commission approves the Company's proposed EGP rider in this cause,
17 it should require Commission approval of annual EGP revenue requirements.
- 18 5) If the Commission approves the Company's proposed EGP rider in this cause,
19 it should approve the Company's proposal to allocate EGP costs using the
20 production demand allocator and reject the Company's proposal to charge
21 the EGP rider to demand-metered classes on a \$/kWh energy charge.

1 Instead, the Commission should require the Company to charge the EGP rider
2 to demand-metered classes on a \$/kW demand charge.

3 6) Walmart does not propose any specific modifications to the Company's ECP
4 to incorporate renewable resources in to the plan. However, Walmart
5 encourages the Commission to consider proposals by other parties, if
6 presented, that will economically bring wind resources to bear as part of an
7 approved environmental compliance plan in this docket.

8 7) The Commission should require OG&E to work with interested stakeholders
9 to develop additional renewable energy tariff options based on the
10 Company's underlying cost of service to be presented in the Company's next
11 general rate case.

12 The fact that an issue is not addressed herein or in related filings should not be
13 construed as an endorsement of any filed position.

14

15 **Cost Recovery**

16 **Q. WHAT IS YOUR UNDERSTANDING OF THE COMPANY'S REQUESTS FOR APPROVAL**
17 **IN THIS PROCEEDING?**

18 A. My understanding is that the Company requests approval of the following in this
19 proceeding:

20 1) The Company's proposed ECP under 17 O.S. §286(B);

21 2) The Company's proposed MMP under 17 O.S. §286(C);

- 1 3) The proposed EGP rider to recover proposed ECP and MMP costs;
- 2 4) Proposed regulatory assets for certain stranded assets and for certain
- 3 operation and maintenance costs;
- 4 5) The proposed inclusion of air quality control systems ("AQCS") consumables
- 5 in the fuel adjustment clause ("FAC"); and
- 6 6) Proposed emission control technology and Mustang plant depreciation rates.
- 7 *See* Application, page 3, and Direct Testimony of Donald R. Rowlett, page 2,
- 8 line 7 to line 15.

9 **Q. WHAT IS YOUR UNDERSTANDING OF THE COMPANY'S PROPOSED COST RECOVERY**

10 **METHODOLOGY FOR THE ECP AND MMP?**

11 A. My understanding is that the Company proposes to recover the costs of both the

12 ECP and MMP through the proposed EGP rider. The Company proposes that the EGP

13 rider be implemented the first billing cycle of the month following the Commission's

14 final order in this proceeding and continue until all costs approved to be recovered

15 through the rider have been included in base rates. *See* Direct Testimony of Sheri

16 Richard, page 3, line 25 to 28.

17 **Q. DOES THE COMPANY PROPOSE CWIP REGULATORY TREATMENT FOR COSTS TO BE**

18 **INCLUDED IN THE PROPOSED EGP RIDER?**

19 A. Yes. OG&E states that CWIP will allow the Company to recover financing on capital

20 expenditures as they are incurred. The Company also claims that CWIP will "smooth

21 out" the cost impact on customer bills through phasing in the revenue requirement,

1 thus avoiding "rate shock" in 2019. See Direct Testimony of Donald R. Rowlett, page
2 16, line 19, to page 17, line 5.

3 **Q. DO YOU HAVE CONCERNS WITH THE COMPANY'S PROPOSALS?**

4 A. Yes. As I will discuss in this testimony, I have concerns regarding the following:

- 5 1) Proposed EGP and FAC rider recovery of costs without first subjecting the
6 Company's overall costs and rates to a general rate review;
- 7 2) The proposed use of CWIP regulatory treatment;
- 8 3) The inclusion of the MMP in the proposed EGP rider;
- 9 4) Technical facets of the proposed EGP rider; and
- 10 5) The need for new approaches to reduce the Company's environmental
11 footprint through greater customer access to renewable energy.

12

13 **Rate Case Review**

14 **Q. WHAT DO YOU BELIEVE IS THE APPROPRIATE FORUM FOR CONSIDERATION OF**
15 **COST RECOVERY FOR ANY PLANS APPROVED IN THIS DOCKET?**

16 A. I believe the appropriate forum for consideration of cost recovery for any plans
17 approved in this docket is a general rate case, as all costs, benefits, and risks - both
18 those related to any approved plans as well as those interrelated with, or related to
19 the Company's overall business - can be systematically considered. In particular,
20 because both the proposed ECP and MMP revolve around the addition of or
21 modifications to generation plant, there are other relevant factors that are

1 considered as part of a general rate case that the Company has not proposed for
2 consideration in this docket.

3 **Q. PLEASE EXPLAIN.**

4 A. For example, in a general rate case, the operating income underlying Commission-
5 approved rate levels is set through a comprehensive examination of the Company's
6 test year rate base, rate of return, and capital structure. In contrast, only specific
7 portions of the Company's rate base, and no part of the Company's rate of return or
8 capital structure, are proposed for consideration in this docket, even though all are
9 implicated by the Company's proposals, such as the use of the Company's rate of
10 return in CWIP or Allowance for Funds Used During Construction ("AFUDC")
11 calculations.

12 Additionally, factors such as the proposed use of CWIP regulatory treatment
13 and trued-up rider recovery reduce the Company's business risk and, as part of a
14 general rate case, would be included in consideration of the appropriate authorized
15 ROE. No such consideration will occur in this case under OG&E's proposal.

16 **Q. WHAT IS THE COMPANY'S CURRENTLY APPROVED ROE?**

17 A. The Company's current approved ROE is 10.2 percent. See Order No. 599558, Cause
18 No. PUD 201100087, page 15.

1 **Q. IS THE COMPANY'S CURRENT ROE HIGHER THAN THE AVERAGES OF THOSE**
2 **APPROVED BY OTHER UTILITY REGULATORY COMMISSIONS?**

3 A. Yes. OG&E's currently authorized ROE, which is the ROE proposed to be used in this
4 case, is higher than the averages of ROEs approved by other state utility regulatory
5 commissions in 2012, 2013, and so far in 2014.

6 **Q. WHAT IS YOUR UNDERSTANDING OF THE RETURNS ON EQUITY APPROVED FOR**
7 **ELECTRIC UTILITIES BY STATE UTILITY COMMISSIONS NATIONWIDE IN 2012, 2013,**
8 **AND SO FAR IN 2014?**

9 A. According to data from SNL Financial², a financial news and reporting company, the
10 average of the 116 reported electric utility rate case ROEs authorized by state utility
11 commissions to investor-owned electric utilities in 2012, 2013, and so far in 2014, is
12 9.9 percent. The range of the reported authorized ROEs for the period is 8.72
13 percent to 10.95 percent, and the median authorized ROE for the same period is
14 9.88 percent.

15 The average ROE authorized has also declined from 2012 to 2014. In
16 2012, the average authorized ROE was 10.02 percent, whereas to date in 2014 it is
17 9.77 percent. *See* Schedule SWC-2, page 3.

² Regulatory Research Associates in part of SNL Financial.

1 **Q. SEVERAL OF THE REPORTED AUTHORIZED ROES ARE FOR DISTRIBUTION-ONLY**
2 **UTILITIES OR ARE ONLY FOR A UTILITY'S DISTRIBUTION SERVICE RATES. WHAT IS**
3 **THE AVERAGE AUTHORIZED ROE IN THE REPORTED GROUP FOR VERTICALLY**
4 **INTEGRATED UTILITIES SUCH AS OG&E?**

5 A. In the group reported by SNL Financial, the average authorized ROE for vertically
6 integrated utilities from 2012 to present is 10.02 percent. *Id.* However, there is a
7 declining trend for vertically integrated utilities from 2012 to present.

8 The average authorized ROE for vertically integrated utilities in 2012 was
9 10.1 percent, in 2013 it was 9.97 percent, and so far in 2014 it is 9.90 percent. It
10 should be noted that four of the five 2014 authorized ROEs in excess of 10 percent
11 were awarded in Wisconsin, which tends to skew the resulting average in favor of
12 that jurisdiction. Excluding those four dockets results in an average of 9.79 percent
13 for vertically integrated utilities in the rest of the country in 2014. *See* Schedule
14 SWC-3.

15 **Q. PLEASE EXPLAIN THE SIGNIFICANCE OF THIS DATA.**

16 A. These broader industry trends suggest that a review of the Company's ROE may be
17 due, particularly with the Company's proposed addition of approximately \$1 billion
18 in new rate base between 2015 and 2019.

19 **Q. WHAT IS YOUR RECOMMENDATION TO THE COMMISSION?**

20 A. The Commission should remove all cost recovery considerations and determinations
21 from the instant cause and move them to OG&E's next general rate case. The rest of

1 my recommendations in this testimony shall apply only if the Commission
2 determines that the instant cause is the appropriate forum for cost recovery
3 considerations and determinations.

4

5 **Construction Work in Progress**

6 **Q. IS IT YOUR UNDERSTANDING THAT THE COMPANY PROPOSES TO USE CWIP**
7 **REGULATORY TREATMENT FOR ECP AND MMP COSTS TO BE INCLUDED IN THE EGP**
8 **RIDER?**

9 A. Yes.

10 **Q. DOES 17 O.S. §286 REQUIRE THE COMMISSION TO APPROVE CWIP REGULATORY**
11 **TREATMENT?**

12 A. While I am not an attorney, my understanding of 17 O.S. §286 is that it does not
13 require the Commission to approve CWIP for costs incurred pursuant to parts (B)
14 and (C) of the statute.

15 **Q. ARE YOU CONCERNED WITH THE PROPOSED USE OF CWIP REGULATORY**
16 **TREATMENT?**

17 A. Yes. The use of CWIP regulatory treatment charges ratepayers for assets that are not
18 yet providing electric service. Under the Company's CWIP proposal, ratepayers
19 would pay for the cost of assets during a period when they are not receiving benefits
20 from those assets. This violates the matching principle (i.e. customers should bear
21 costs only when they are receiving a corresponding benefit).

1 The problem is compounded by the creation of intergenerational
2 inequities through changes in the number and mix of customers during the
3 construction process, versus when the asset is actually used and useful. For
4 example, customers may pay for the assets during construction but leave the system
5 before they are operational, receiving no benefit from the assets for which they
6 helped pay. Conversely, a new customer who connects to the system after the
7 assets are in-service will receive a financial benefit paid for by customers who were
8 on the system during the recovery of CWIP.

9 The matching principle seeks to recover the capital costs associated with
10 a particular asset from customers receiving electric service from that asset. While
11 the recovery of CWIP violates this principle, the use of AFUDC methodology
12 promotes the matching principle. Under the AFUDC methodology, capital costs
13 accrue during the construction period and are collected from customers when the
14 asset becomes operational.

15 **Q. ARE THERE OTHER CONCERNS WITH THE USE OF CWIP REGULATORY TREATMENT**
16 **THE COMMISSION SHOULD CONSIDER?**

17 **A.** Yes. First, including CWIP regulatory treatment shifts the risks to ratepayers that are
18 traditionally assumed by utility investors, and for which investors are compensated
19 through the rate of return elements once the plant is in service. CWIP regulatory
20 treatment instead places the risks squarely on the shoulders of ratepayers with no
21 offer of compensation for the use of their money.

1 Additionally, should the Company encounter problems during construction of
2 the plant resulting in stoppage of the construction, non-completion of the project
3 and/or substantial delay in the completion of the project, consumers have no
4 recourse for recovering the money they have paid through the use of CWIP
5 regulatory treatment.

6 Together, these factors reduce the Company's business risk, all other things
7 being equal, and provide additional reasons for determining the appropriate ROE in
8 a general rate case rather than continuing the current ROE as OG&E proposes.

9 **Q. DO YOU BELIEVE THE COMPANY'S "SMOOTH OUT" OR "RATE SHOCK" CLAIMS**
10 **WARRANT THE USE OF CWIP REGULATORY TREATMENT?**

11 A. No. An examination of the annual revenue requirements of the proposed EGP rider
12 shows that, under CWIP regulatory treatment, customers will pay significantly more
13 from 2015 through 2018 for a very small benefit in to be received 2019.

14 **Q. PLEASE EXPLAIN.**

15 A. I examined the analysis underlying Company Schedule SDR-4 and the Company's
16 comparison of CWIP regulatory treatment versus AFUDC regulatory treatment. This
17 information was provided by the Company in response to OIEC 1-1. See Schedule
18 SWC-4. Table 1 below shows a comparison of the Company's estimates of the annual
19 revenue requirements for the EGP rider, from 2015 through 2019, under both
20 scenarios.

21

1

Table 1. Proposed EGP Rider Annual Revenue Requirements, CWIP Regulatory Treatment Versus AFUDC Regulatory Treatment.

Year	EGP CWIP	EGP AFUDC	Increase/(Decrease) Due to CWIP Regulatory Treatment
2015	\$13,753,772	\$5,982,689	\$7,771,083
2016	\$36,252,205	\$16,450,943	\$19,801,262
2017	\$62,332,192	\$19,136,949	\$43,195,243
2018	\$127,707,534	\$89,806,947	\$37,900,586
2019	\$192,217,376	\$198,315,724	(\$6,098,348)
Total Incremental Impact of CWIP Regulatory Treatment, 2015-2018			\$108,668,175
Source: Schedule SWC-3			

2

3 **Q. DOES THE ANALYSIS SHOW THAT THE USE OF CWIP REGULATORY TREATMENT**
4 **WOULD INCREASE THE COST TO CUSTOMERS FROM 2015 THROUGH 2018, AS**
5 **COMPARED TO AFUDC TREATMENT?**

6 **A.** Yes. As shown in Table 1, for 2015 through 2018, the use of CWIP regulatory
7 treatment would actually increase the cost to customers versus AFUDC treatment.
8 The smallest increase versus AFUDC of \$7.77 million would occur in 2015 and the
9 largest increase versus AFUDC of \$43.2 million would occur in 2017. In total,
10 customers would pay approximately \$108 million more due to CWIP regulatory
11 treatment between 2015 and 2018 versus AFUDC treatment.

12 **Q. ARE THE INCREASES FOR CWIP REGULATORY TREATMENT VERSUS AFUDC**
13 **TREATMENT SIGNIFICANT?**

14 **A.** Yes. To put these values into perspective, the revenue requirement increases
15 authorized in the Company's last three general rate cases were \$4.3 million in PUD
16 201100087, \$48.3 million in PUD 200800398, and \$42.3 million in PUD 200500151.

1 See Order No. 599558, Cause No. PUD 201100087, page 15, Order No. 569281,
2 Cause No. PUD 200800398, page 23, and Order No. 516261, Cause No. PUD
3 200500151, Section A.

4 In its consideration of the issues in this proceeding, the Commission should
5 be cognizant that the style of the proceeding, the underlying accounting treatments,
6 and the requested method of cost recovery do not diminish the potential rate
7 impacts to customers versus a general rate case.

8 **Q. DOES CWIP REGULATORY TREATMENT PROVIDE FOR A LOWER REVENUE**
9 **REQUIREMENT IN 2019?**

10 A. Yes, but the reduction in 2019 is extremely small when compared with the CWIP
11 regulatory treatment rate impacts from 2015 to 2018 and with the total overall
12 Company revenue requirement in 2019. Under CWIP regulatory treatment,
13 customers will pay approximately \$108 million from 2015 to 2018 to save
14 approximately \$6 million in 2019. See Table 1. The reduction of \$6 million
15 constitutes only approximately three-tenths of one percent when viewed in the
16 context of the estimated 2019 total Company revenue requirements under both
17 scenarios. See Schedule SWC-3. While subsequent years will continue to have some
18 revenue reduction built in due to the use of CWIP regulatory treatment, it will take
19 years for the Company's customer base to be paid back for the increased rates paid
20 in 2015 through 2018.

1 **Q. DOES CWIP REGULATORY TREATMENT PREVENT "RATE SHOCK" IN 2019?**

2 A. No. Using the Company's estimated revenue requirements, rates will either be \$192
3 million higher in 2019 under CWIP regulatory treatment or \$198 million higher in
4 2019 under AFUDC treatment. See Table 1. Either way, rates will be significantly
5 higher in 2019, regardless of what increase is required to move from 2018 rate
6 levels. However, as I discuss above, under AFUDC treatment, customers will not be
7 required to pay approximately \$108 million prior to 2019.

8 **Q. DOES THE COMPANY RECOGNIZE THAT TRADITIONAL REGULATORY TREATMENT,**
9 **IN WHICH AFUDC IS ACCRUED, IS ALSO ACCEPTABLE?**

10 A. Yes. *Id.*, page 17, line 14 to line 17.

11 **Q. WHAT IS YOUR RECOMMENDATION TO THE COMMISSION ON THIS ISSUE?**

12 A. The Commission should reject the use of CWIP regulatory treatment for approved
13 ECP and/or MMP costs that the Commission determines should be recovered per a
14 mechanism approved in this cause.

15

16 **Mustang Modernization Proposal**

17 **Q. WHAT IS YOUR UNDERSTANDING OF THE COMPANY'S MMP?**

18 A. My understanding is that the Company proposes the MMP to replace the retiring
19 existing Mustang generation units with natural gas-fired combustion turbines at the
20 existing plant site.

1 Q. TO YOUR KNOWLEDGE IS THE MMP PART OF THE COMPANY'S PROPOSED
2 ENVIRONMENTAL COMPLIANCE REQUIREMENTS?

3 A. No. My understanding is that the MMP is being proposed "in addition to the
4 environmental compliance plan." See Application, page 3.

5 Q. IS IT YOUR UNDERSTANDING THAT THE COMPANY PROPOSES TO RECOVER MMP
6 COSTS THROUGH THE PROPOSED EGP RIDER?

7 A. Yes. See Direct Testimony of Sheri Richard, page 1, line 21 to line 24.

8 Q. IF THE COMMISSION DETERMINES THAT ECP COSTS SHOULD BE RECOVERED
9 THROUGH THE PROPOSED EGP RIDER, SHOULD IT MAKE A SIMILAR
10 DETERMINATION FOR MMP COSTS?

11 A. No, for two reasons. First, OG&E's proposed MMP is not part of the Company's
12 environmental compliance requirements and should not be collected in the same
13 rider mechanism as the Company's environmental compliance costs. The inclusion of
14 a broad swath of unrelated costs in a single rider reduces pricing transparency and
15 limits customer understanding of the rates they are paying. Additionally, the
16 Commission should not encourage the practice of collecting costs through riders
17 that would otherwise be collected through base rates.

18 Q. WHAT IS THE SECOND REASON?

19 A. While I am not an attorney, it is not clear if 17 O.S. §286(C) allows rider recovery of
20 costs pre-approved through that section as compared to the more specific language

1 around cost recovery in 17 O.S. §286(B). Walmart reserves the right to submit legal
2 briefing on this point at the appropriate time.

3 **Q. WHAT IS YOUR RECOMMENDATION TO THE COMMISSION?**

4 A. If the Commission determines generally that it will address cost recovery in this
5 docket, it should exclude any approved MMP costs from the proposed EGP rider and
6 move cost recovery for those costs to future OG&E general rate cases.

7

8 **Environmental and Generation Plan Rider**

9 **Q. WHAT IS YOUR UNDERSTANDING OF THE COMPANY'S PROPOSED EGP RIDER?**

10 A. My understanding is that the Company proposes the EGP rider to collect rate base
11 and expense costs for both the proposed ECP and MMP. The Company proposes to
12 set the revenue requirement via a report submitted annually to the Commission
13 Staff, which would include projected expenditures and trued up prior period over- or
14 under-collections. The Company proposes that the new EGP rates become effective
15 the first billing cycle of the month following the annual report. *See Direct Testimony*
16 *of Sheri Richard, page 3, line 6 to line 10.*

17 Once the revenue requirement is set, the Company proposes to allocate the
18 revenue requirement using the most recently approved production demand
19 allocation factor and charge the EGP to each class on a \$/kWh energy charge. The
20 Company proposes to limit the annual increases in the EGP factors to 3.5 percent.
21 *See Exhibit SDR-2, page 1 to page 3.*

1 **Q. DO YOU HAVE CONCERNS WITH THE COMPANY'S PROPOSED EGP RIDER?**

2 A. Yes. First, I am concerned generally regarding what appears to be the timeframe
3 allowed for review of costs to be included in the proposed EGP rider. It appears from
4 the Company's testimony that the review period could be as short as a few weeks,
5 depending on when during the month the Company files its annual report. The
6 Company's testimony also does not include mention of Commission approval of
7 those costs. See Direct Testimony of Sheri Richard, page 3, line 6 to line 10.

8 **Q. DOES THIS APPEAR TO BE CONSISTENT WITH 17 O.S. §286(B)?**

9 A. No. While I am not an attorney, 17 O.S. §286(B) states:

10 "However, the reasonableness of the costs to be recovered by the utility shall
11 be subject to Commission review and approval."

12 As such, my reading suggests that Commission approval should be required as part
13 of the annual review process. Walmart reserves the right to submit legal briefing on
14 this point at the appropriate time.

15 **Q. WHAT IS YOUR RECOMMENDATION TO THE COMMISSION ON THIS ISSUE?**

16 A. If the Commission approves the Company's proposed EGP rider in this cause, it
17 should also require Commission approval of annual EGP revenue requirements.

18 **Q. WHAT IS YOUR NEXT CONCERN WITH THE COMPANY'S PROPOSED EGP RIDER?**

19 A. My next concern is the Company's proposal to allocate EGP costs based on the
20 production demand allocator, but to charge those costs to customers on a \$/kWh
21 energy charge. The bulk of the costs proposed to be included in the EGP rider are

1 related to generation assets and, as such, are properly allocated on the basis of the
2 production demand allocator and charged to demand-metered classes through a
3 \$/kW demand charge rather than a \$/kWh energy charge.

4 **Q. IF EGP RIDER COSTS ARE ALLOCATED ON THE PRODUCTION DEMAND ALLOCATOR,**
5 **IS THE RECOVERY OF THOSE COSTS THROUGH AN ENERGY CHARGE CONSISTENT**
6 **WITH THAT ALLOCATION?**

7 A. No. EGP rider costs should be recovered in a manner that reflects how they are
8 allocated, i.e., costs allocated on the basis of demand should also be recovered on
9 the basis of demand. Recovering demand-related costs through an energy charge
10 violates cost causation principles. Those principles hold that, to the extent possible,
11 costs should be allocated to, and recovered from customers on the same basis (i.e.,
12 demand-related costs should be recovered through demand charges and energy-
13 related costs should be recovered through energy charges).

14 **Q. DOES THE RECOVERY OF DEMAND-RELATED COSTS THROUGH AN ENERGY CHARGE**
15 **DISADVANTAGE HIGHER LOAD FACTOR CUSTOMERS?**

16 A. Yes. The shift of demand-related costs from per kW demand charges to per kWh
17 energy charges results in a shift in demand cost responsibility from lower load factor
18 customers to higher load factor customers. This results in a misallocation of cost
19 responsibility as higher load factor customers overpay for the demand-related costs
20 incurred by the Company to serve them.

1 **Q. CAN YOU PROVIDE A GENERAL ILLUSTRATION OF A SHIFT IN DEMAND COST**
2 **RESPONSIBILITY?**

3 A. Yes. To provide my illustration, I assume the following:

4 a) A utility has only two customers (Customer 1 and Customer 2), with
5 individual monthly peak demands of 20 kW for a total monthly system load
6 of 40 kW.

7 b) The annual revenue requirement or cost to the utility associated with the
8 investment for the 40 kW infrastructure is \$2,000, and the entire cost will be
9 collected each year, so each customer has caused the utility to incur \$1,000
10 of demand-related or fixed costs.

11 c) Customer 1 has a monthly demand of 20 kW and a load factor of 60 percent
12 and thus consumes 105,120 kWh/year (20 kW * 0.6 * 8760).

13 d) Customer 2 has a monthly demand of 20 kW and load factor of 30 percent
14 and thus consumes 52,560 kWh/year (20kW * 0.3 * 8760).

15 **Q. IF THE DEMAND-RELATED COSTS WERE CHARGED ON A PER KW OR DEMAND**
16 **BASIS, WHAT WOULD THE PER KW CHARGE BE?**

17 A. The charge would be \$4.17 per kW-month ($\$2,000 / 40 \text{ kW} / 12 \text{ months}$). Each
18 customer would then pay \$1,000 for the demand-related cost they impose on the
19 system ($20 \text{ kW} * \$4.17/\text{kW} * 12$).

1 **Q. IF THE DEMAND-RELATED COSTS WERE CHARGED ON A PER KWH OR ENERGY**
2 **BASIS, WHAT WOULD THE PER KWH CHARGE BE?**

3 A. If the utility were to charge the demand-related costs on a per kWh basis, the energy
4 charge would be 1.27 cents/kWh (or \$0.0127/kWh). This is calculated as follows:
5 \$2,000 / 157,680 kWh, using total company sales (i.e., the sum of the two
6 customers' annual kWh usage) as the denominator.

7 **Q. WHAT WOULD EACH CUSTOMER PAY UNDER THE PER KWH CHARGE?**

8 A. Customer 1, who caused the utility to incur \$1,000 in demand-related costs, with a
9 load factor of 60 percent and an annual usage of 105,120 kWh, would pay \$1,333
10 (\$0.0127/kWh * 105,120 kWh). Customer 2, who also caused the utility to incur
11 \$1,000 in demand-related costs, with a load factor of 30 percent and an annual
12 usage of 52,560 kWh, would pay \$667 (\$0.0127/kWh * 52,560).

13 **Q. IS THIS AN EQUITABLE RESULT?**

14 A. No. Even though each customer caused the utility to incur \$1,000 in demand-related
15 costs, the utility will be over-recovering from one customer and under-recovering
16 from the other. Under the per kWh scenario, the utility would over-recover from
17 Customer 1, the higher load factor customer, by \$333 (i.e. \$1,333 in revenues minus
18 \$1,000 in costs), and under-recover from Customer 2, the lower load factor
19 customer, by \$333 (i.e. \$667 in revenues minus \$1,000 in costs).

1 **Q. WHAT IS YOUR RECOMMENDATION TO THE COMMISSION ON THIS ISSUE?**

2 A. If the Commission approves the Company's proposed EGP rider in this cause, it
3 should approve the Company's proposal to allocate EGP costs using the production
4 demand allocator, but should reject the Company's proposal to charge the EGP rider
5 to demand-metered classes on a \$/kWh energy charge. Instead, the Commission
6 should require the Company to charge the EGP rider to demand-metered classes on
7 a \$/kW demand charge.

8

9 **Renewable Energy**

10 **Q. DID OG&E INCLUDE WIND RESOURCES OR OTHER RENEWABLE RESOURCES IN ITS**
11 **ECP?**

12 A. No. However, the Company does state that they are always looking at wind energy
13 as a way to create customer savings. See Direct Testimony of Donald R. Rowlett,
14 page 12, line 4 to line 5.

15 **Q. DOES WALMART PROPOSE ANY SPECIFIC MODIFICATIONS TO THE COMPANY'S**
16 **PROPOSED ECP TO INCORPORATE WIND RESOURCES INTO THE PLAN?**

17 A. No. However, Walmart encourages the Commission to consider proposals by other
18 parties, if presented, that will economically bring wind resources to bear as part of
19 an approved environmental compliance plan in this docket. Additionally, as I will
20 discuss below, the Commission should require OG&E to work with interested
21 stakeholders to develop new renewable tariff programs to allow customers greater

1 access to renewable energy and reduce the Company's environmental footprint in
2 the future.

3 **Q. DOES OG&E CURRENTLY OFFER PROGRAMS THAT ALLOW OR POTENTIALLY ALLOW**
4 **CUSTOMERS TO ACCESS RENEWABLE ENERGY OR RENEWABLE ATTRIBUTES?**

5 A. Yes. On examination of the Company's tariff offerings³, my understanding is that the
6 Company currently offers the following programs that allow or potentially allow
7 customers to access renewable energy or renewable attributes:

8 1) Customer Contract Rider⁴, in which a customer with a connected load of at
9 least 250 kW can apply to have its electric supply provided by an alternative
10 supplier that is not rate-regulated by the Commission or from cogeneration
11 or self-generation. Under the tariff, eligibility for the program is determined
12 by the Company on a case-by-case basis and resulting agreements are
13 subject to Commission approval.

14 2) Green Power Wind Rider⁵, in which a customer can subscribe to a portion of
15 the Company's Sooner Purchase Power. The purchase can be made in blocks
16 of 100 kWh, with a maximum for larger customers of 160 blocks per month,
17 or 16,000 kWh.

³ At the following website: https://oge.com/wps/portal/oge/my-account/billing-payments/oklahoma-rate-tariffs/!ut/p/a1/04_Sj9CPyKssy0xPLMnMz0vMAfGizOltjAycDTxNjLz8DUMNDRydDUL8DlyCDA3CjiAKIpEVuHsbuRo4eru4BJoGuBh6mptRpt_JhDj9BjiAowFe_UEm6PZjKiBgf7h-FKoSLCGAVwHli2AF-PxAyBcFuaGhoREGmZ7piooA_iKVmg!!/dl5/d5/L2dJQSEvUUt3QS80SmlFL1o2XzgyMEMwSTQySjhUNjIwQUNGVUhMUEUwT1Uw/

⁴ At the following website: <https://oge.com/wps/wcm/connect/ad32f6c0-4171-43d1-9cb2-aaa652372587/50.00+CCT.pdf?MOD=AJPERES&CACHEID=ad32f6c0-4171-43d1-9cb2-aaa652372587>

⁵ At the following website: <https://oge.com/wps/wcm/connect/3128d626-01fc-469d-b24f-99592ed4f856/50.30+GPWR.pdf?MOD=AJPERES&CACHEID=3128d626-01fc-469d-b24f-99592ed4f856>

1 3) Renewable Energy Program⁶, in which a customer can purchase renewable
2 energy credits through the Company.

3 **Q. HAS WALMART ESTABLISHED CORPORATE RENEWABLE ENERGY GOALS?**

4 A. Yes. Walmart has established aggressive and significant renewable energy goals,
5 including: (1) to be supplied 100 percent by renewable energy⁷ and (2) to drive, by
6 2020, the annual production or procurement of seven billion kWh of renewable
7 energy across the globe.⁸ Walmart recognizes that Oklahoma has tremendous wind
8 energy potential, and strongly encourages the Commission to consider ways for
9 customers like Walmart to take advantage of that potential.

10 **Q. ARE THERE FACETS OF THE CURRENTLY AVAILABLE PROGRAMS THAT COULD**
11 **IMPACT ACCEPTANCE AND USAGE OF THOSE PROGRAMS BY A CUSTOMER SUCH**
12 **AS WALMART?**

13 A. Yes. For example, the Green Power Wind Rider has several facets that could impact
14 its acceptance and usage. First, the program only allows a very limited amount of
15 energy to be purchased for any one account. Second, at \$0.039/kWh with only an
16 offset to the FAC but no other variable generation costs, the cost is prohibitive.
17 Finally, the cost per kWh includes advertising and educational expenses.

⁶ At the following website: <https://oge.com/wps/wcm/connect/a68203ec-9106-4371-923d-71a6687746f5/51.90+REP.pdf?MOD=AJPERES&CACHEID=a68203ec-9106-4371-923d-71a6687746f5>

⁷ <http://corporate.walmart.com/global-responsibility/environmental-sustainability>

⁸ <http://www.walmartgreenroom.com/2013/04/walmarts-next-big-step-on-renewable-energy-and-energy-efficiency/>

1 For the Renewable Energy Program, the facets that could impact acceptance
2 and usage are that large customers such as Walmart already have access to
3 renewable energy credit markets or prefer not to meet corporate goals solely by
4 purchasing renewable energy credits to.

5 **Q. COULD THE CUSTOM CONTRACT TARIFF PROVIDE OPPORTUNITY FOR CUSTOMERS**
6 **SUCH AS WALMART TO ACCESS RENEWABLE ENERGY?**

7 A. Yes. However, I am concerned that aspects of the resulting contracts, such as
8 potential cross-subsidization, could unfairly impact non-participating customers and
9 cause controversy in Commission proceedings. To the extent that these or other
10 aspects of the resulting contracts make Commission approval untenable, the Custom
11 Contract Tariff program ceases to be an effective opportunity for customers to
12 access renewable energy. Additionally, OG&E has filed for removal of the Custom
13 Contract Tariff in Cause No. PUD 201400307.

14 **Q. IS THERE ADDITIONAL OPPORTUNITY FOR CUSTOMER ACCESS TO RENEWABLE**
15 **POWER THAT IS NOT ADDRESSED BY THE COMPANY'S CURRENT OFFERINGS?**

16 A. Yes. Other states with vertically integrated utilities have begun to explore options
17 that would allow large customers, within the context of cost-based ratemaking, to
18 contract for renewable energy on a significant scale and have the utility manage the
19 delivery and reliability of the contracted energy.

1 **Q. PLEASE PROVIDE AN EXAMPLE.**

2 A. In Utah, Rocky Mountain Power has filed a proposed schedule in which the customer
3 contracts for renewable energy with one or more off-site generators. Rocky
4 Mountain Power then purchases the power from the generator on behalf of the
5 customer and delivers it to one or more customer sites. The proposed tariff is
6 unbundled, with separate charges for administrative, delivery, and backup or
7 shaping services, and all supplemental power and energy is priced at the otherwise
8 applicable tariff rates. *See generally*, Utah Docket 14-035-T02 and *see specifically* the
9 December 2, 2014 Surrebuttal Testimony of David L. Taylor and the December 2,
10 2014 Surrebuttal Testimony of Kevin C. Higgins.

11 **Q. WHAT IS YOUR RECOMMENDATION TO THE COMMISSION ON THIS ISSUE?**

12 A. The Commission should require OG&E to work with interested stakeholders to
13 develop additional renewable energy tariff options based on the Company's
14 underlying cost of service to be presented in the Company's next general rate case.

15 **Q. DOES THIS CONCLUDE YOUR RESPONSIVE TESTIMONY?**

16 A. Yes.

Steve W. Chriss

Senior Manager, Energy Regulatory Analysis

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EXPERIENCE

July 2007 – Present

Wal-Mart Stores, Inc., Bentonville, AR

Senior Manager, Energy Regulatory Analysis (June 2011 – Present)

Manager, State Rate Proceedings (July 2007 – June 2011)

June 2003 – July 2007

Public Utility Commission of Oregon, Salem, OR

Senior Utility Analyst (February 2006 – July 2007)

Economist (June 2003 – February 2006)

January 2003 - May 2003

North Harris College, Houston, TX

Adjunct Instructor, Microeconomics

June 2001 - March 2003

Econ One Research, Inc., Houston, TX

Senior Analyst (October 2002 – March 2003)

Analyst (June 2001 – October 2002)

EDUCATION

2001 **Louisiana State University**

M.S., Agricultural Economics

1997-1998 **University of Florida**

Graduate Coursework, Agricultural Education
and Communication

1997 **Texas A&M University**

B.S., Agricultural Development

B.S., Horticulture

TESTIMONY BEFORE REGULATORY COMMISSIONS

2014

Missouri Public Service Commission Case No. ER-2014-0258: In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariff to Increase its Revenues for Electric Service.

Pennsylvania Public Utility Commission Docket No. R-2014-2428742: Pennsylvania Public Utility Commission v. West Penn Power Company.

Pennsylvania Public Utility Commission Docket No. R-2014-2428743: Pennsylvania Public Utility Commission v. Pennsylvania Electric Company.

Pennsylvania Public Utility Commission Docket No. R-2014-2428744: Pennsylvania Public Utility Commission v. Pennsylvania Power Company.

Pennsylvania Public Utility Commission Docket No. R-2014-2428745: Pennsylvania Public Utility Commission v. Metropolitan Edison Company.

Washington Utilities and Transportation Commission Docket No. UE-141368: In the Matter of the Petition of Puget Sound Energy to Update Methodologies Used to Allocate Electric Cost of Service and For Electric Rate Design Purposes.

Washington Utilities and Transportation Commission Docket No. UE-140762: 2014 Pacific Power & Light Company General Rate Case.

West Virginia Public Service Commission Case No. 14-0702-E-42T: Monongahela Power Company and the Potomac Edison Company Rule 42T Tariff Filing to Increase Rates and Charges.

Ohio Public Utilities Commission Case No. 14-841-EL-SSO: In the Matter of the Application of Duke Energy Ohio for Authority to Establish a Standard Service Offer Pursuant to Section 4928.143, Revised Code, in the Form of Case No. 14-841-EL-SSO an Electric Security Plan, Accounting Modifications and Tariffs for Generation Service.

Colorado Public Utilities Commission Docket No. 14AL-0660E: Re: In the Matter of the Advice Letter No. 1672-Electric Filed by Public Service Company of Colorado to Revise its Colorado PUC No. 7-Electric Tariff to Implement a General Rate Schedule Adjustment and Other Rate Changes Effective July 18, 2014.

Maryland Case No. 9355: In the Matter of the Application of Baltimore Gas and Electric Company for Authority to Increase Existing Rates and Charges for Electric and Gas Service.

Mississippi Public Service Commission Docket No. 2014-UN-132: In Re: Notice of Intent of Entergy Mississippi, Inc. to Modernize Rates to Support Economic Development, Power Procurement, and Continued Investment.

Nevada Public Utilities Commission Docket No. 14-05004: Application of Nevada Power Company d/b/a NV Energy for Authority to Increase its Annual Revenue Requirement for General Rates Charged to All Classes of Electric Customers and for Relief Properly Related Thereto.

Utah Public Service Commission Docket No. 14-035-T02: In the Matter of Rocky Mountain Power's Proposed Electric Service Schedule No. 32, Service From Renewable Energy Facilities.

Florida Public Service Commission Docket No. 140002-EG: In Re: Energy Conservation Cost Recovery Clause.

Wisconsin Docket No. 6690-UR-123: Application of Wisconsin Public Service Corporation for Authority to Adjust Electric and Natural Gas Rates.

Connecticut Docket No. 14-05-06: Application of the Connecticut Light and Power Company to Amend its Rate Schedules.

Virginia Corporation Commission Case No. PUE-2014-00026: Application of Appalachian Power Company for a 2014 Biennial Review for the Provision of Generation, Distribution and Transmission Services Pursuant to § 56-585.1 A of the Code of Virginia.

Virginia Corporation Commission Case No. PUE-2014-00033: Application of Virginia Electric and Power Company to Revise its Fuel Factor Pursuant to Va. Code § 56-249.6.

Arizona Corporation Commission Docket No. E-01345A-11-0224 (Four Corners Phase): In the Matter of Arizona Public Service Company for a Hearing to Determine the Fair Value of Utility Property of the

Company for Ratemaking Purposes, to Fix and Just and Reasonable Rate of Return Thereon, to Approve Rate Schedules Designed to Develop Such Return.

Minnesota Public Utilities Commission Docket No. E-002/GR-13-868: In the Matter of the Application of Northern States Power Company, for Authority to Increase Rates for Electric Service in Minnesota.

Utah Public Service Commission Docket No. 13-035-184: In the Matter of the Application of Rocky Mountain Power for Authority to Increase its Retail Electric Utility Service Rates in Utah and for Approval of its Proposed Electric Service Schedules and Electric Service Regulations.

Missouri Public Service Commission Case No. EC-2014-0224: In the Matter of Noranda Aluminum, Inc.'s Request for Revisions to Union Electric Company d/b/a Ameren Missouri's Large Transmission Service Tariff to Decrease its Rate for Electric Service.

Oklahoma Corporation Commission Cause No. PUD 201300217: Application of Public Service Company of Oklahoma to be in Compliance with Order No. 591185 Issued in Cause No. PUD 201100106 Which Requires a Base Rate Case to be Filed by PSO and the Resulting Adjustment in its Rates and Charges and Terms and Conditions of Service for Electric Service in the State of Oklahoma.

Public Utilities Commission of Ohio Case No. 13-2386-EL-SSO: In the Matter of the Application of Ohio Power Company for Authority to Establish a Standard Service Offer Pursuant to §4928.143, Ohio Rev. Code, in the Form of an Electric Security Plan.

2013

Oklahoma Corporation Commission Cause No. PUD 201300201: Application of Public Service Company of Oklahoma for Commission Authorization of a Standby and Supplemental Service Rate Schedule.

Georgia Public Service Commission Docket No. 36989: Georgia Power's 2013 Rate Case.

Florida Public Service Commission Docket No. 130140-El: Petition for Rate Increase by Gulf Power Company.

Public Utility Commission of Oregon Docket No. UE 267: In the Matter of PACIFICORP, dba PACIFIC POWER, Transition Adjustment, Five-Year Cost of Service Opt-Out.

Illinois Commerce Commission Docket No. 13-0387: Commonwealth Edison Company Tariff Filing to Present the Illinois Commerce Commission with an Opportunity to Consider Revenue Neutral Tariff Changes Related to Rate Design Authorized by Subsection 16-108.5 of the Public Utilities Act.

Iowa Utilities Board Docket No. RPU-2013-0004: In Re: MidAmerican Energy Company.

South Dakota Public Utilities Commission Docket No. EL12-061: In the Matter of the Application of Black Hills Power, Inc. for Authority to Increase its Electric Rates. (filed with confidential stipulation)

Kansas Corporation Commission Docket No. 13-WSEE-629-RTS: In the Matter of the Applications of Westar Energy, Inc. and Kansas Gas and Electric Company for Approval to Make Certain Changes in their Charges for Electric Service.

Public Utility Commission of Oregon Docket No. UE 263: In the Matter of PACIFICORP, dba PACIFIC POWER, Request for a General Rate Revision.

Arkansas Public Service Commission Docket No. 13-028-U: In the Matter of the Application of Entergy Arkansas, Inc. for Approval of Changes in Rates for Retail Electric Service.

Virginia State Corporation Commission Docket No. PUE-2013-00020: Application of Virginia Electric and Power Company for a 2013 Biennial Review of the Rates, Terms, and Conditions for the Provision of Generation, Distribution, and Transmission Services Pursuant to § 56-585.1 A of the Code of Virginia.

Florida Public Service Commission Docket No. 130040-El: Petition for Rate Increase by Tampa Electric Company.

South Carolina Public Service Commission Docket No. 2013-59-E: Application of Duke Energy Carolinas, LLC, for Authority to Adjust and Increase Its Electric Rates and Charges.

Public Utility Commission of Oregon Docket No. UE 262: In the Matter of PORTLAND GENERAL ELECTRIC COMPANY, Request for a General Rate Revision.

New Jersey Board of Public Utilities Docket No. ER12111052: In the Matter of the Verified Petition of Jersey Central Power & Light Company For Review and Approval of Increases in and Other Adjustments to Its Rates and Charges For Electric Service, and For Approval of Other Proposed Tariff Revisions in Connection Therewith; and for Approval of an Accelerated Reliability Enhancement Program ("2012 Base Rate Filing")

North Carolina Utilities Commission Docket No. E-7, Sub 1026: In the Matter of the Application of Duke Energy Carolinas, LLC for Adjustment of Rates and Charges Applicable to Electric Service in North Carolina.

Public Utility Commission of Oregon Docket No. UE 264: PACIFICORP, dba PACIFIC POWER, 2014 Transition Adjustment Mechanism.

Public Utilities Commission of California Docket No. 12-12-002: Application of Pacific Gas and Electric Company for 2013 Rate Design Window Proceeding.

Public Utilities Commission of Ohio Docket Nos. 12-426-EL-SSO, 12-427-EL-ATA, 12-428-EL-AAM, 12-429-EL-WVR, and 12-672-EL-RDR: In the Matter of the Application of the Dayton Power and Light Company Approval of its Market Offer.

Minnesota Public Utilities Commission Docket No. E-002/GR-12-961: In the Matter of the Application of Northern States Power Company for Authority to Increase Rates for Electric Service in Minnesota.

North Carolina Utilities Commission Docket E-2, Sub 1023: In the Matter of Application of Progress Energy Carolinas, Inc. For Adjustment of Rates and Charges Applicable to Electric Service in North Carolina.

2012

Public Utility Commission of Texas Docket No. 40443: Application of Southwestern Electric Power Company for Authority to Change Rates and Reconcile Fuel Costs.

South Carolina Public Service Commission Docket No. 2012-218-E: Application of South Carolina Electric & Gas Company for Increases and Adjustments in Electric Rate Schedules and Tariffs and Request for Mid-Period Reduction in Base Rates for Fuel.

Kansas Corporation Commission Docket No. 12-KCPE-764-RTS: In the Matter of the Application of Kansas City Power & Light Company to Make Certain Changes in its Charges for Electric Service.

Kansas Corporation Commission Docket No. 12-GIMX-337-GIV: In the Matter of a General Investigation of Energy-Efficiency Policies for Utility Sponsored Energy Efficiency Programs.

Florida Public Service Commission Docket No. 120015-El: In Re: Petition for Rate Increase by Florida Power & Light Company.

California Public Utilities Commission Docket No. A.11-10-002: Application of San Diego Gas & Electric Company (U 902 E) for Authority to Update Marginal Costs, Cost Allocation, and Electric Rate Design.

Utah Public Service Commission Docket No. 11-035-200: In the Matter of the Application of Rocky Mountain Power for Authority to Increase its Retail Electric Utility Service Rates in Utah and for Approval of its Proposed Electric Service Schedules and Electric Service Regulations.

Virginia State Corporation Commission Case No. PUE-2012-00051: Application of Appalachian Power Company to Revise its Fuel Factor Pursuant to § 56-249.6 of the Code of Virginia.

Public Utilities Commission of Ohio Case Nos. 11-346-EL-SSO, 11-348-EL-SSO, 11-349-EL-AAM, and 11-350-EL-AAM: In the Matter of the Application of Columbus Southern Power Company and Ohio Power Company for Authority to Establish a Standard Service Offer Pursuant to Section 4928.143, Revised Code, in the Form on an Electric Security Plan and In the Matter of the Application of Columbus Southern Power Company and Ohio Power Company for Approval of Certain Accounting Authority.

New Jersey Board of Public Utilities Docket No. ER11080469: In the Matter of the Petition of Atlantic City Electric for Approval of Amendments to Its Tariff to Provide for an Increase in Rates and Charges for Electric Service Pursuant to N.J.S.A. 48:2-21 and N.J.S.A. 48:2-21.1 and For Other Appropriate Relief.

Public Utility Commission of Texas Docket No. 39896: Application of Entergy Texas, Inc. for Authority to Change Rates and Reconcile Fuel Costs.

Missouri Public Service Commission Case No. EO-2012-0009: In the Matter of KCP&L Greater Missouri Operations Notice of Intent to File an Application for Authority to Establish a Demand-Side Programs Investment Mechanism.

Colorado Public Utilities Commission Docket No. 11AL-947E: In the Matter of Advice Letter No. 1597-Electric Filed by Public Service Company of Colorado to Revise its Colorado PUC No. 7-Electric Tariff to Implement a General Rate Schedule Adjustment and Other Changes Effective December 23, 2011.

Illinois Commerce Commission Docket No. 11-0721: Commonwealth Edison Company Tariffs and Charges Submitted Pursuant to Section 16-108.5 of the Public Utilities Act.

Public Utility Commission of Texas Docket No. 38951: Application of Entergy Texas, Inc. for Approval of Competitive Generation Service tariff (Issues Severed from Docket No. 37744).

California Public Utilities Commission Docket No. A.11-06-007: Southern California Edison's General Rate Case, Phase 2.

2011

Arizona Corporation Commission Docket No. E-01345A-11-0224: In the Matter of Arizona Public Service Company for a Hearing to Determine the Fair Value of Utility Property of the Company for Ratemaking Purposes, to Fix and Just and Reasonable Rate of Return Thereon, to Approve Rate Schedules Designed to Develop Such Return.

Oklahoma Corporation Commission Cause No. PUD 201100087: In the Matter of the Application of Oklahoma Gas and Electric Company for an Order of the Commission Authorizing Applicant to Modify its Rates, Charges, and Tariffs for Retail Electric Service in Oklahoma.

South Carolina Public Service Commission Docket No. 2011-271-E: Application of Duke Energy Carolinas, LLC for Authority to Adjust and Increase its Electric Rates and Charges.

Pennsylvania Public Utility Commission Docket No. P-2011-2256365: Petition of PPL Electric Utilities Corporation for Approval to Implement Reconciliation Rider for Default Supply Service.

North Carolina Utilities Commission Docket No. E-7, Sub 989: In the Matter of Application of Duke Energy Carolinas, LLC for Adjustment of Rates and Charges Applicable to Electric Service in North Carolina.

Florida Public Service Commission Docket No. 110138: In Re: Petition for Increase in Rates by Gulf Power Company.

Public Utilities Commission of Nevada Docket No. 11-06006: In the Matter of the Application of Nevada Power Company, filed pursuant to NRS 704.110(3) for authority to increase its annual revenue requirement for general rates charged to all classes of customers to recover the costs of constructing the Harry Allen Combined Cycle plant and other generating, transmission, and distribution plant additions, to reflect changes in the cost of capital, depreciation rates and cost of service, and for relief properly related thereto.

North Carolina Utilities Commission Docket Nos. E-2, Sub 998 and E-7, Sub 986: In the Matter of the Application of Duke Energy Corporation and Progress Energy, Inc., to Engage in a Business Combination Transaction and to Address Regulatory Conditions and Codes of Conduct.

Public Utilities Commission of Ohio Case Nos. 11-346-EL-SSO, 11-348-EL-SSO, 11-349-EL-AAM, and 11-350-EL-AAM: In the Matter of the Application of Columbus Southern Power Company and Ohio Power Company for Authority to Establish a Standard Service Offer Pursuant to Section 4928.143, Revised Code, in the Form on an Electric Security Plan and In the Matter of the Application of Columbus Southern Power Company and Ohio Power Company for Approval of Certain Accounting Authority.

Virginia State Corporation Commission Case No. PUE-2011-00037: In the Matter of Appalachian Power Company for a 2011 Biennial Review of the Rates, Terms, and Conditions for the Provision of Generation, Distribution, and Transmission Services Pursuant to § 56-585.1 A of the Code of Virginia.

Illinois Commerce Commission Docket No. 11-0279 and 11-0282 (cons.): Ameren Illinois Company Proposed General Increase in Electric Delivery Service and Ameren Illinois Company Proposed General Increase in Gas Delivery Service.

Virginia State Corporation Commission Case No. PUE-2011-00045: Application of Virginia Electric and Power Company to Revise its Fuel Factor Pursuant to § 56-249.6 of the Code of Virginia.

Utah Public Service Commission Docket No. 10-035-124: In the Matter of the Application of Rocky Mountain Power for Authority to Increase its Retail Electric Utility Service Rates in Utah and for Approval of its Proposed Electric Service Schedules and Electric Service Regulations.

Maryland Public Utilities Commission Case No. 9249: In the Matter of the Application of Delmarva Power & Light for an Increase in its Retail Rates for the Distribution of Electric Energy.

Minnesota Public Utilities Commission Docket No. E002/GR-10-971: In the Matter of the Application of Northern States Power Company d/b/a Xcel Energy for Authority to Increase Rates for Electric Service in Minnesota.

Michigan Public Service Commission Case No. U-16472: In the Matter of the Detroit Edison Company for Authority to Increase its Rates, Amend its Rate Schedules and Rules Governing the Distribution and Supply of Electric Energy, and for Miscellaneous Accounting Authority.

2010

Public Utilities Commission of Ohio Docket No. 10-2586-EL-SSO: In the Matter of the Application of Duke Energy Ohio for Approval of a Market Rate Offer to Conduct a Competitive Bidding Process for Standard Service Offer Electric Generation Supply, Accounting Modifications, and Tariffs for Generation Service.

Colorado Public Utilities Commission Docket No. 10A-554EG: In the Matter of the Application of Public Service Company of Colorado for Approval of a Number of Strategic Issues Relating to its DSM Plan, Including Long-Term Electric Energy Savings Goals, and Incentives.

Public Service Commission of West Virginia Case No. 10-0699-E-42T: Appalachian Power Company and Wheeling Power Company Rule 42T Application to Increase Electric Rates.

Oklahoma Corporation Commission Cause No. PUD 201000050: Application of Public Service Company of Oklahoma, an Oklahoma Corporation, for an Adjustment in its Rates and Charges and Terms and Conditions of Service for Electric Service in the State of Oklahoma.

Georgia Public Service Commission Docket No. 31958-U: In Re: Georgia Power Company's 2010 Rate Case.

Washington Utilities and Transportation Commission Docket No. UE-100749: 2010 Pacific Power & Light Company General Rate Case.

Colorado Public Utilities Commission Docket No. 10M-254E: In the Matter of Commission Consideration of Black Hills Energy's Plan in Compliance with House Bill 10-1365, "Clean Air-Clean Jobs Act."

Colorado Public Utilities Commission Docket No. 10M-245E: In the Matter of Commission Consideration of Public Service Company of Colorado Plan in Compliance with House Bill 10-1365, "Clean Air-Clean Jobs Act."

Public Service Commission of Utah Docket No. 09-035-15 *Phase II*: In the Matter of the Application of Rocky Mountain Power for Approval of its Proposed Energy Cost Adjustment Mechanism.

Public Utility Commission of Oregon Docket No. UE 217: In the Matter of PACIFICORP, dba PACIFIC POWER Request for a General Rate Revision.

Mississippi Public Service Commission Docket No. 2010-AD-57: In Re: Proposal of the Mississippi Public Service Commission to Possibly Amend Certain Rules of Practice and Procedure.

Indiana Utility Regulatory Commission Cause No. 43374: Verified Petition of Duke Energy Indiana, Inc. Requesting the Indiana Utility Regulatory Commission to Approve an Alternative Regulatory Plan Pursuant to Ind. Code § 8-1-2.5-1, *ET SEQ.*, for the Offering of Energy Efficiency Conservation, Demand Response, and Demand-Side Management Programs and Associated Rate Treatment Including Incentives Pursuant to a Revised Standard Contract Rider No. 66 in Accordance with Ind. Code §§ 8-1-2.5-1 *ET SEQ.* and 8-1-2-42 (a); Authority to Defer Program Costs Associated with its Energy Efficiency Portfolio of Programs; Authority to Implement New and Enhanced Energy Efficiency Programs, Including the Powershare®

Program in its Energy Efficiency Portfolio of Programs; and Approval of a Modification of the Fuel Adjustment Clause Earnings and Expense Tests.

Public Utility Commission of Texas Docket No. 37744: Application of Entergy Texas, Inc. for Authority to Change Rates and to Reconcile Fuel Costs.

South Carolina Public Service Commission Docket No. 2009-489-E: Application of South Carolina Electric & Gas Company for Adjustments and Increases in Electric Rate Schedules and Tariffs.

Kentucky Public Service Commission Case No. 2009-00459: In the Matter of General Adjustments in Electric Rates of Kentucky Power Company.

Virginia State Corporation Commission Case No. PUE-2009-00125: For acquisition of natural gas facilities Pursuant to § 56-265.4:5 B of the Virginia Code.

Arkansas Public Service Commission Docket No. 10-010-U: In the Matter of a Notice of Inquiry Into Energy Efficiency.

Connecticut Department of Public Utility Control Docket No. 09-12-05: Application of the Connecticut Light and Power Company to Amend its Rate Schedules.

Arkansas Public Service Commission Docket No. 09-084-U: In the Matter of the Application of Entergy Arkansas, Inc. For Approval of Changes in Rates for Retail Electric Service.

Missouri Public Service Commission Docket No. ER-2010-0036: In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area.

Public Service Commission of Delaware Docket No. 09-414: In the Matter of the Application of Delmarva Power & Light Company for an Increase in Electric Base Rates and Miscellaneous Tariff Charges.

2009

Virginia State Corporation Commission Case No. PUE-2009-00030: In the Matter of Appalachian Power Company for a Statutory Review of the Rates, Terms, and Conditions for the Provision of Generation, Distribution, and Transmission Services Pursuant to § 56-585.1 A of the Code of Virginia.

Public Service Commission of Utah Docket No. 09-035-15 *Phase I*: In the Matter of the Application of Rocky Mountain Power for Approval of its Proposed Energy Cost Adjustment Mechanism.

Public Service Commission of Utah Docket No. 09-035-23: In the Matter of the Application of Rocky Mountain Power for Authority To Increase its Retail Electric Utility Service Rates in Utah and for Approval of Its Proposed Electric Service Schedules and Electric Service Regulations.

Colorado Public Utilities Commission Docket No. 09AL-299E: Re: The Tariff Sheets Filed by Public Service Company of Colorado with Advice Letter No. 1535 – Electric.

Arkansas Public Service Commission Docket No. 09-008-U: In the Matter of the Application of Southwestern Electric Power Company for Approval of a General Change in Rates and Tariffs.

Oklahoma Corporation Commission Docket No. PUD 200800398: In the Matter of the Application of Oklahoma Gas and Electric Company for an Order of the Commission Authorizing Applicant to Modify its Rates, Charges, and Tariffs for Retail Electric Service in Oklahoma.

Public Utilities Commission of Nevada Docket No. 08-12002: In the Matter of the Application by Nevada Power Company d/b/a NV Energy, filed pursuant to NRS §704.110(3) and NRS §704.110(4) for authority to increase its annual revenue requirement for general rates charged to all classes of customers, begin to recover the costs of acquiring the Bighorn Power Plant, constructing the Clark Peakers, Environmental Retrofits and other generating, transmission and distribution plant additions, to reflect changes in cost of service and for relief properly related thereto.

New Mexico Public Regulation Commission Case No. 08-00024-UT: In the Matter of a Rulemaking to Revise NMPRC Rule 17.7.2 NMAC to Implement the Efficient Use of Energy Act.

Indiana Utility Regulatory Commission Cause No. 43580: Investigation by the Indiana Utility Regulatory Commission, of Smart Grid Investments and Smart Grid Information Issues Contained in 111(d) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. § 2621(d)), as Amended by the Energy Independence and Security Act of 2007.

Louisiana Public Service Commission Docket No. U-30192 *Phase II (February 2009)*: Ex Parte, Application of Entergy Louisiana, LLC for Approval to Repower Little Gypsy Unit 3 Electric Generating Facility and for Authority to Commence Construction and for Certain Cost Protection and Cost Recovery.

South Carolina Public Service Commission Docket No. 2008-251-E: In the Matter of Progress Energy Carolinas, Inc.'s Application For the Establishment of Procedures to Encourage Investment in Energy Efficient Technologies; Energy Conservation Programs; And Incentives and Cost Recovery for Such Programs.

2008

Colorado Public Utilities Commission Docket No. 08A-366EG: In the Matter of the Application of Public Service Company of Colorado for approval of its electric and natural gas demand-side management (DSM) plan for calendar years 2009 and 2010 and to change its electric and gas DSM cost adjustment rates effective January 1, 2009, and for related waivers and authorizations.

Public Service Commission of Utah Docket No. 07-035-93: In the Matter of the Application of Rocky Mountain Power for Authority to Increase its Retail Electric Utility Service Rates in Utah and for Approval of its Proposed Electric Service Schedules and Electric Service Regulations, Consisting of a General Rate Increase of Approximately \$161.2 Million Per Year, and for Approval of a New Large Load Surcharge.

Indiana Utility Regulatory Commission Cause No. 43374: Petition of Duke Energy Indiana, Inc. Requesting the Indiana Utility Regulatory Commission Approve an Alternative Regulatory Plan for the Offering of Energy Efficiency, Conservation, Demand Response, and Demand-Side Management.

Public Utilities Commission of Nevada Docket No. 07-12001: In the Matter of the Application of Sierra Pacific Power Company for authority to increase its general rates charged to all classes of electric customers to reflect an increase in annual revenue requirement and for relief properly related thereto.

Louisiana Public Service Commission Docket No. U-30192 *Phase II*: Ex Parte, Application of Entergy Louisiana, LLC for Approval to Repower Little Gypsy Unit 3 Electric Generating Facility and for Authority to Commence Construction and for Certain Cost Protection and Cost Recovery.

Colorado Public Utilities Commission Docket No. 07A-420E: In the Matter of the Application of Public Service Company of Colorado For Authority to Implement and Enhanced Demand Side Management Cost Adjustment Mechanism to Include Current Cost Recovery and Incentives.

2007

Louisiana Public Service Commission Docket No. U-30192: Ex Parte, Application of Entergy Louisiana, LLC for Approval to Repower Little Gypsy Unit 3 Electric Generating Facility and for Authority to Commence Construction and for Certain Cost Protection and Cost Recovery.

Public Utility Commission of Oregon Docket No. UG 173: In the Matter of PUBLIC UTILITY COMMISSION OF OREGON Staff Request to Open an Investigation into the Earnings of Cascade Natural Gas.

2006

Public Utility Commission of Oregon Docket No. UE 180/UE 181/UE 184: In the Matter of PORTLAND GENERAL ELECTRIC COMPANY Request for a General Rate Revision.

Public Utility Commission of Oregon Docket No. UE 179: In the Matter of PACIFICORP, dba PACIFIC POWER AND LIGHT COMPANY Request for a general rate increase in the company's Oregon annual revenues.

Public Utility Commission of Oregon Docket No. UM 1129 *Phase II*: Investigation Related to Electric Utility Purchases From Qualifying Facilities.

2005

Public Utility Commission of Oregon Docket No. UM 1129 *Phase I Compliance*: Investigation Related to Electric Utility Purchases From Qualifying Facilities.

Public Utility Commission of Oregon Docket No. UX 29: In the Matter of QWEST CORPORATION Petition to Exempt from Regulation Qwest's Switched Business Services.

2004

Public Utility Commission of Oregon Docket No. UM 1129 *Phase I*: Investigation Related to Electric Utility Purchases From Qualifying Facilities.

TESTIMONY BEFORE LEGISLATIVE BODIES

2014

Regarding Kansas House Bill 2460: Testimony Before the Kansas House Standing Committee on Utilities and Telecommunications, February 12, 2014.

2012

Regarding Missouri House Bill 1488: Testimony Before the Missouri House Committee on Utilities, February 7, 2012.

2011

Regarding Missouri Senate Bills 50, 321, 359, and 406: Testimony Before the Missouri Senate Veterans' Affairs, Emerging Issues, Pensions, and Urban Affairs Committee, March 9, 2011.

AFFIDAVITS

2011

Colorado Public Utilities Commission Docket No. 11M-951E: In the Matter of the Petition of Public Service Company of Colorado Pursuant to C.R.S. § 40-6-111(1)(d) for Interim Rate Relief Effective on or before January 21, 2012.

ENERGY INDUSTRY PUBLICATIONS AND PRESENTATIONS

Mock Trial Expert Witness, The Energy Bar Association State Commission Practice and Regulation Committee and Young Lawyers Committee and Environment, Energy and Natural Resources Section of the D.C. Bar, Mastering Your First (or Next) State Public Utility Commission Hearing, February 13, 2014.

Panelist, Customer Panel, Virginia State Bar 29th National Regulatory Conference, Williamsburg, Virginia, May 19, 2011.

Chriss, S. (2006). "Regulatory Incentives and Natural Gas Purchasing – Lessons from the Oregon Natural Gas Procurement Study." Presented at the 19th Annual Western Conference, Center for Research in Regulated Industries Advanced Workshop in Regulation and Competition, Monterey, California, June 29, 2006.

Chriss, S. (2005). "Public Utility Commission of Oregon Natural Gas Procurement Study." Public Utility Commission of Oregon, Salem, OR. Report published in June, 2005. Presented to the Public Utility Commission of Oregon at a special public meeting on August 1, 2005.

Chriss, S. and M. Radler (2003). "Report from Houston: Conference on Energy Deregulation and Restructuring." USAEE Dialogue, Vol. 11, No. 1, March, 2003.

Chriss, S., M. Dwyer, and B. Pulliam (2002). "Impacts of Lifting the Ban on ANS Exports on West Coast Crude Oil Prices: A Reconsideration of the Evidence." Presented at the 22nd USAEE/IAEE North American Conference, Vancouver, BC, Canada, October 6-8, 2002.

Contributed to chapter on power marketing: "Power System Operations and Electricity Markets," Fred I. Denny and David E. Dismukes, authors. Published by CRC Press, June 2002.

Contributed to "Moving to the Front Lines: The Economic Impact of the Independent Power Plant Development in Louisiana," David E. Dismukes, author. Published by the Louisiana State University Center for Energy Studies, October 2001.

Dismukes, D.E., D.V. Mesyanzhinov, E.A. Downer, S. Chriss, and J.M. Burke (2001). "Alaska Natural Gas In-State Demand Study." Anchorage: Alaska Department of Natural Resources.

Reported Authorized Returns on Equity, Electric Utility Rate Cases Completed, 2012 to Present

State	Docket	Utility	Distribution		Decision Date
			Only	Authorized ROE	
SC	2011-271-E	Duke Energy Carolinas LLC		10.50%	1/25/2012
NC	E-7, Sub 989	Duke Energy Carolinas LLC		10.50%	1/27/2012
MI	16801	Indiana-Michigan Power Co.		10.20%	2/15/2012
OR	UE 233	Idaho Power Co.		9.90%	2/23/2012
FL	110138	Gulf Power Co.		10.25%	2/27/2012
ND	PU-10-657	Northern States Power Co.		10.40%	2/29/2012
MN	10-971	Northern States Power Co.		10.37%	3/29/2012
HI	2009-0164	Hawaii Electric Light Co.		10.00%	4/4/2012
CO	11AL-947E	Public Service Company of Colorado		10.00%	4/26/2012
HI	2009-0163	Maui Electric Company Ltd		10.00%	5/2/2012
WA	UE-111048	Puget Sound Energy Inc.		9.80%	5/7/2012
AZ	E-01345A-11-0224	Arizona Public Service Co.		10.00%	5/15/2012
IL	11-0721	Commonwealth Edison Co.	Yes	10.05%	5/29/2012
MI	16794	Consumers Energy Co.		10.30%	6/7/2012
NY	11-E-0408	Orange & Rockland Utilities Inc.	Yes	9.40%	6/14/2012
WI	6680-UR-118	Wisconsin Power and Light Co.		10.40%	6/15/2012
WY	20003-114-ER-11	Cheyenne Light Fuel Power Co.		9.60%	6/18/2012
SD	EL11-019	Northern States Power Co.		9.25%	6/19/2012
MI	16830	Wisconsin Electric Power Co.		10.10%	6/26/2012
HI	2009-0080	Hawaiian Electric Co.		10.00%	6/29/2012
OK	PUD 201100087	Oklahoma Gas and Electric Co.		10.20%	7/9/2012
WY	20000-405-ER-11	Rocky Mountain Power		9.80%	7/16/2012
MD	9285	Delmarva Power & Light Co.	Yes	9.81%	7/20/2012
MD	9286	Potomac Edison Power Co.	Yes	9.31%	7/20/2012
TX	39896	Entergy Texas Inc.		9.80%	9/13/2012
IL	12-0001	Ameren Illinois	Yes	10.05%	9/19/2012
UT	11-035-200	Rocky Mountain Power		9.80%	9/19/2012
DC	1087	Potomac Edison Power Co.	Yes	9.50%	9/26/2012
NJ	ER-11080469	Atlantic City Electric Co.	Yes	9.75%	10/23/2012
WI	6690-UR-121	Wisconsin Public Service Corp.		10.30%	10/24/2012
WI	3270-UR-118	Madison Gas and Electric Co.		10.30%	11/9/2012
WI	05-UR-106	Wisconsin Electric Power Co.		10.40%	11/28/2012
CA	A12-02-014	California Pacific Electric Co.		9.88%	11/29/2012
DE	D-11-528	Delmarva Power & Light Co.	Yes	9.75%	11/29/2012
IL	12-0293	Ameren Illinois	Yes	9.71%	12/5/2012
PA	E-2012-2290597	PPL Electric Utilities Corp	Yes	10.40%	12/5/2012
MO	ER-2012-0166	Union Electric Co.		9.80%	12/12/2012
FL	120015	Florida Power & Light		10.50%	12/13/2012
KS	12-KCPE-764-RTS	Kansas City Power & Light		9.50%	12/13/2012
WI	4220-UR-118	Northern States Power Co.		10.40%	12/14/2012
IL	12-0321	Commonwealth Edison Co.	Yes	9.71%	12/19/2012
SC	2012-218-E	South Carolina Electric & Gas		10.25%	12/19/2012
CA	A12-04-018	Pacific Gas & Electric		10.40%	12/20/2012
CA	A12-04-016	San Diego Gas & Electric		10.30%	12/20/2012
CA	A12-04-015	Southern California Edison		10.45%	12/20/2012
KY	2012-00221	Kentucky Utilities		10.25%	12/20/2012
KY	2012-00222	Louisville Gas & Electric		10.25%	12/20/2012
OR	UE 246	PacifiCorp		9.80%	12/20/2012
RI	4323	Narragansett Electric Co.	Yes	9.50%	12/20/2012
NC	E-22, Sub 479	Virginia Electric & Power Co.		10.20%	12/21/2012
WA	UE-120436	Avista Corp.		9.80%	12/26/2012
MO	ER-2012-0174	Kansas City Power & Light		9.70%	1/9/2013
MO	ER-2012-0175	KCP&L Greater Missouri Op Co.		9.70%	1/9/2013
IN	44075	Indiana-Michigan Power Co.		10.20%	2/13/2013
MD	9299	Baltimore Gas and Electric Co.	Yes	9.75%	2/22/2013
LA	U-32220	Southwestern Electric Power Co.		10.00%	2/27/2013

NY 12-E-0201

Niagara Mohawk Power Corp.

Yes

9.30%

3/14/2013

Reported Authorized Returns on Equity, Electric Utility Rate Cases Completed, 2012 to Present

State	Docket	Utility	Distribution		Decision Date
			Only	Authorized ROE	
ID	AVU-E-12-08	Avista Corp.		9.80%	3/27/2013
OH	12-1682-EL-AIR	Duke Energy Ohio Inc.	Yes	9.84%	5/1/2013
MI	U-17087	Consumers Energy Co.		10.30%	5/15/2013
NC	E-2, Sub 1023	Duke Energy Progress Inc.		10.20%	5/30/2013
HI	2011-0092	Maui Electric Company Ltd		9.00%	5/31/2013
AZ	E-01933A-12-0291	Tucson Electric Power Co.		10.00%	6/11/2013
NJ	ER-12121071	Atlantic City Electric Co.	Yes	9.75%	6/21/2013
WA	UE-130137	Puget Sound Energy Inc.		9.80%	6/25/2013
MD	9311	Potomac Edison Power Co.	Yes	9.36%	7/12/2013
MN	E-002/GR-12-961	Northern States Power Co.		9.83%	8/8/2013
CT	13-01-19	United Illuminating	Yes	9.15%	8/14/2013
SC	2013-59-E	Duke Energy Carolinas LLC		10.20%	9/11/2013
FL	130040-EI	Tampa Electric Co.		10.25%	9/11/2013
NC	E-7, Sub 1026	Duke Energy Carolinas LLC		10.20%	9/24/2013
TX	40443	Southwestern Electric Power Co.		9.65%	10/3/2013
WI	6690-UR-122	Wisconsin Public Service Corp.		10.20%	11/6/2013
KS	13-WSEE-629-RTS	Westar Energy Inc.		10.00%	11/21/2013
VA	PUE-2013-00020	Virginia Electric & Power Co.		10.00%	11/26/2013
FL	130140-EI	Gulf Power Co.		10.25%	12/3/2013
WA	UE-130043	PacifiCorp		9.50%	12/4/2013
WI	4220-UR-119	Northern States Power Co.		10.20%	12/5/2013
IL	13-0301	Ameren Illinois	Yes	8.72%	12/9/2013
OR	UE 262	Portland General Electric Co.		9.75%	12/9/2013
MD	9326	Baltimore Gas and Electric Co.	Yes	9.75%	12/13/2013
LA	U-32707	Entergy Gulf States Louisiana LLC		9.95%	12/16/2013
LA	U-32708	Entergy Louisiana LLC		9.95%	12/16/2013
NV	13-06002	Sierra Pacific Power Co.		10.12%	12/16/2013
AZ	E-04204A-12-0504	UNS Electric Inc.		9.50%	12/17/2013
GA	36989	Georgia Power Co.		10.95%	12/17/2013
IL	13-0318	Commonwealth Edison Co.	Yes	8.72%	12/18/2013
OR	UE 263	PacifiCorp		9.80%	12/18/2013
MI	U-17274	Upper Peninsula Power Co.		10.15%	12/19/2013
NY	13-E-0030	Consolidated Edison Co. of NY	Yes	9.20%	2/20/2014
ND	PU-12-813	Northern States Power Co.		9.75%	2/26/2014
NH	DE-13-063	Liberty Utilities Granite State	Yes	9.55%	3/17/2014
NM	12-00350-UT	Southwestern Public Service		9.96%	3/26/2014
DC	1103-2013-E	Potomac Edison Power Co.	Yes	9.40%	3/26/2014
DE	13-115	Delmarva Power & Light Co.	Yes	9.70%	4/2/2014
TX	41791	Entergy Texas Inc.		9.80%	5/16/2014
MA	13-90	Fitchburg Gas & Electric Light	Yes	9.70%	5/30/2014
WI	6680-UR-119	Wisconsin Power and Light Co.		10.40%	6/6/2014
ME	2013-00443	Emera Maine	Yes	9.55%	6/30/2014
MD	9336	Potomac Electric Power Co.	Yes	9.62%	7/2/2014
CNO	UD-13-01	Entergy Louisiana LLC (New Orleans)		9.95%	7/10/2014
NJ	ER-13111135	Rockland Electric Company	Yes	9.75%	7/23/2014
ME	2013-00168	Central Maine Power Co.	Yes	9.45%	7/29/2014
WY	20003-132-ER-13	Cheyenne Light Fuel Power Co.		9.90%	7/31/2014
AR	13-028-U ¹	Entergy Arkansas Inc.		9.50%	8/15/2014
NJ	ER-14030245	Atlantic City Electric Co.	Yes	9.75%	8/20/2014
VT	8190	Green Mountain Power Corp.		9.60%	8/25/2014
UT	13-035-184	PacifiCorp		9.80%	8/29/2014
FL	140025-EI	Florida Public Utilities Co.		10.25%	9/15/2014
NV	14-05004	NV Energy South		9.80%	10/9/2014
IL	14-0066	MidAmercian Energy Co.		9.56%	11/6/2014
WI	6690-UR-123	Wisconsin Public Service Corp.		10.20%	11/6/2014

WI 05-UR-107 Wisconsin Electric Power Co.

Cause No. PUD 201400229
11/14/2014
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Reported Authorized Returns on Equity, Electric Utility Rate Cases Completed, 2012 to Present

WI	3270-UR-120	Madison Gas and Electric Co.	10.20%	11/26/2014
VA	PUE-2014-00026	Appachian Power Co.	9.70%	11/26/2014
OR	UE 283	Portland General Electric	9.68%	12/4/2014

¹ The Arkansas Public Service Commission originally approved a 9.3% ROE, but increased it to 9.5% on rehearing. See Order No. 35, Arkansas Docket 13-028-U.

Entire Period

# of Decisions	116
Average (All Utilities)	9.90%
Average (Distribution Only)	9.58%
Average (Vertically Integrated Only)	10.02%
Median	9.86%
Minimum	8.72%
Maximum	10.95%

2012

# of Decisions	51
Average (All Utilities)	10.02%
Average (Distribution Only)	9.75%
Average (Distribution Only, exc. IL FRP)	9.75%
Average (Vertically Integrated Only)	10.10%

2013

# of Decisions	38
Average (All Utilities)	9.83%
Average (Distribution Only)	9.37%
Average (Distribution Only, exc. IL FRP)	9.56%
Average (Vertically Integrated Only)	9.97%

2014

# of Decisions	27
Average (All Utilities)	9.77%
Average (Distribution Only)	9.57%
Average (Vertically Integrated Only)	9.90%
Average (Vertically Integrated Only, Exc. WI)	9.79%

Source: SNL Financial LC, December 11, 2014

Proposed EGP Revenue Requirement, CWIP vs. AFUDC

Year	EGP CWIP				EGP AFUDC				Difference
	Rate Base	Return on Rate	Expenses	OK Revenue Requirement	Rate Base	Return on Rate	Expenses	OK Revenue Requirement	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
				((2) + (3)) x 89.5151%		(5) x 11.715%		((6) + (7)) x 89.5151%	(4) - (8)
2015	\$ 181,960,670	\$ 13,795,450	\$ 1,569,300	\$ 13,753,772	\$ 56,231,358	\$ 5,314,082	\$ 1,369,359	\$ 5,982,689	\$ 7,771,083
2016	\$ 352,132,648	\$ 32,335,439	\$ 8,162,986	\$ 36,252,205	\$ 97,265,011	\$ 11,235,372	\$ 7,142,469	\$ 16,450,943	\$ 19,801,262
2017	\$ 626,722,322	\$ 59,095,247	\$ 10,537,912	\$ 62,332,192	\$ 110,440,052	\$ 13,140,523	\$ 8,237,936	\$ 19,136,949	\$ 43,195,243
2018	\$ 1,009,951,656	\$ 101,070,482	\$ 41,595,430	\$ 127,707,534	\$ 728,481,111	\$ 62,270,742	\$ 38,055,289	\$ 89,806,947	\$ 37,900,586
2019	\$ 1,074,711,462	\$ 127,363,618	\$ 87,368,172	\$ 192,217,376	\$ 1,169,210,821	\$ 133,619,731	\$ 87,924,706	\$ 198,315,724	\$ (6,098,348)

Total Incremental Spend for CWIP, 2015-2018 \$ 108,668,175

Currently Approved OK Jurisdiction Revenue Requirement	\$ 1,711,207,980
2019 OK Jurisdiction Revenue Requirement, CWIP Regulatory Treatment	\$ 1,903,425,356
2019 OK Jurisdiction Revenue Requirement, AFUDC Regulatory Treatment	\$ 1,909,523,704
Difference in Total Revenue Requirement	-0.3%

Source:
 OIEC 1-1, Chart 1 AFUDC Comparison.xlsx (Exhibit SWC-4)

Oklahoma Estimated Customer Impacts for Environmental Revenue Requirements - Total Projects

	1 <u>2015</u>	2 <u>2016</u>	3 <u>2017</u>	4 <u>2018</u>	5 <u>2019</u>	<u>Total Project</u>
Rate Base						
1 Utility Plant	\$ 185,215,516	\$ 360,952,404	\$ 642,244,154	\$ 1,055,134,221	\$ 1,144,539,597	\$ 1,144,539,597
2 Accumulated Provision for Depreciation	\$ (1,818,260)	\$ (7,284,024)	\$ (13,351,964)	\$ (37,626,782)	\$ (84,897,302)	\$ (84,897,302)
3 Regulatory Asset	\$ -	\$ -	\$ -	\$ -	\$ 29,668,281	\$ 29,668,281
4 ADIT	\$ (1,436,587)	\$ (1,535,733)	\$ (2,169,868)	\$ (7,555,783)	\$ (14,599,114)	\$ (14,599,114)
5 Total Rate Base	\$ 181,960,670	\$ 352,132,648	\$ 626,722,322	\$ 1,009,951,656	\$ 1,074,711,462	\$ 1,074,711,462
6						
7 Return on Rate Base	\$ 13,795,450	\$ 32,335,439	\$ 59,095,247	\$ 101,070,482	\$ 127,363,618	\$ 333,660,236
Expenses						
8 O&M Expense	\$ -	\$ 845,067	\$ 860,447	\$ 10,898,171	\$ 23,612,653	\$ 36,216,338
9 Depreciation Expense	\$ 1,053,325	\$ 5,465,764	\$ 6,067,941	\$ 24,274,817	\$ 47,270,520	\$ 84,132,367
10 Amortization of Regulatory Asset	\$ -	\$ -	\$ -	\$ -	\$ 5,933,656	\$ 5,933,656
11 Property Taxes	\$ 515,975	\$ 1,852,155	\$ 3,609,524	\$ 6,422,442	\$ 10,551,342	\$ 22,951,438
12 Total Expenses	\$ 1,569,300	\$ 8,162,986	\$ 10,537,912	\$ 41,595,430	\$ 87,368,172	\$ 149,233,800

13 Revenue Requirement @ 100%	\$ 15,364,751	\$ 40,498,424	\$ 69,633,159	\$ 142,665,912	\$ 214,731,789	\$ 482,894,036
Allocation Methods:	Okla Juris	Residential	GS	PL	LPL	Other **
Production Demand Allocator *	89.5151%	42.3151%	8.3311%	21.8941%	14.4514%	2.5234%

* Allocators per PUD 087 settled case except for removal of all FERC loads.

** Other includes schools, oil & gas, pumping and lighting classes.

Allocation of Revenue Requirement:

Rev Req @ Demand:	Allocator	2015	2016	2017	2018	2019	
Oklahoma Jurisdiction	89.5151%	\$ 13,753,772	\$ 36,252,205	\$ 62,332,192	\$ 127,707,534	\$ 192,217,376	\$ 6,098,348
Residential	42.3151%	\$ 6,501,610	\$ 17,136,949	\$ 29,465,341	\$ 60,369,223	\$ 90,863,971	\$ 2,580,522
General Service	8.3311%	\$ 1,280,053	\$ 3,373,964	\$ 5,801,208	\$ 11,885,640	\$ 17,889,520	\$ 508,059
Power & Light	21.8941%	\$ 3,363,974	\$ 8,866,766	\$ 15,245,554	\$ 31,235,417	\$ 47,013,593	\$ 1,335,178
Large Power & Light	14.4514%	\$ 2,220,422	\$ 5,852,589	\$ 10,062,966	\$ 20,617,222	\$ 31,031,750	\$ 881,297
Other	2.5234%	\$ 387,714	\$ 1,021,937	\$ 1,757,123	\$ 3,600,032	\$ 5,418,542	\$ 153,886

Average Monthly kWh						
Class		2015	2016	2017	2018	2019
Residential	1,100	\$ 0.80	\$ 2.07	\$ 3.51	\$ 7.08	\$ 10.50

Chart 4 EGP METHOD W/O FUEL

Class	Average Monthly Bill	Average Monthly kWh	2015	2016	2017	2018	2019
Residential	\$ 108.51	1,100	\$ 0.80	\$ 1.27	\$ 1.44	\$ 3.57	\$ 3.42

Oklahoma Estimated Customer Impacts for Environmental Revenue Requirements - Total Projects - AFUDC METHOD WITHOUT FUEL

	1	2	3	4	5	
Rate Base	2015	2016	2017	2018	2019	Total Project
Utility Plant	\$ 59,486,204	\$ 106,259,725	\$ 126,349,540	\$ 775,752,738	\$ 1,244,509,111	\$ 1,244,509,111
Accumulated Provision for Depreciation	\$ (1,818,260)	\$ (7,520,800)	\$ (13,835,692)	\$ (39,729,315)	\$ (90,350,184)	\$ (90,350,184)
Stranded Asset	\$ -	\$ -	\$ -	\$ -	\$ 29,668,281	\$ 29,668,281
ADIT	\$ (1,436,587)	\$ (1,473,914)	\$ (2,073,796)	\$ (7,542,312)	\$ (14,616,387)	\$ (14,616,387)
Total Rate Base	\$ 56,231,358	\$ 97,265,011	\$ 110,440,052	\$ 728,481,111	\$ 1,169,210,821	\$ 1,169,210,821
Return on Rate Base	\$ 5,314,082	\$ 11,235,372	\$ 13,140,523	\$ 62,270,742	\$ 133,619,731	\$ 225,580,450
Expenses						
O&M Expense	\$ -	\$ 845,067	\$ 860,447	\$ 10,898,171	\$ 23,612,653	\$ 36,216,338
Depreciation Expense	\$ 1,053,325	\$ 5,702,540	\$ 6,314,892	\$ 25,893,623	\$ 50,620,869	\$ 89,585,249
Amortization of Stranded Asset	\$ -	\$ -	\$ -	\$ -	\$ 5,933,656	\$ 5,933,656
Property Taxes	\$ 316,034	\$ 594,862	\$ 1,062,597	\$ 1,263,495	\$ 7,757,527	\$ 10,994,516
Total Expenses	\$ 1,369,359	\$ 7,142,469	\$ 8,237,936	\$ 38,055,289	\$ 87,924,706	\$ 142,729,760
Oklahoma Revenue Requirement @ 1%	\$ 6,683,441	\$ 18,377,842	\$ 21,378,459	\$ 100,326,031	\$ 221,544,437	\$ 368,310,209

Allocation Methods:	Okla Juris	Residential	GS	PL	LPL	Other **
Production Demand Allocator *	89.5151%	42.3151%	8.3311%	21.8941%	14.4514%	2.5234%

* Allocators per PUD 087 settled case except for removal of all FERC loads.

** Other includes schools, oil & gas, pumping and lighting classes.

Allocation of Revenue Requirement:

Rev Req @ Demand:	Allocator	2015	2016	2017	2018	2019
Oklahoma Jurisdiction	89.5151%	\$ 5,982,689	\$ 16,450,943	\$ 19,136,949	\$ 89,806,947	\$ 198,315,724
Residential	42.3151%	\$ 2,828,105	\$ 7,776,602	\$ 9,046,316	\$ 42,453,060	\$ 93,746,750
General Service	8.3311%	\$ 556,804	\$ 1,531,076	\$ 1,781,061	\$ 8,358,262	\$ 18,457,089
Power & Light	21.8941%	\$ 1,463,279	\$ 4,023,663	\$ 4,680,621	\$ 21,965,482	\$ 48,505,161
Large Power & Light	14.4514%	\$ 965,851	\$ 2,655,855	\$ 3,089,487	\$ 14,498,516	\$ 32,016,273
Other	2.5234%	\$ 168,650	\$ 463,746	\$ 539,464	\$ 2,531,627	\$ 5,590,452

Class	Average Monthly kWh	2015	2016	2017	2018	2019
Residential	1,100	\$ 0.35	\$ 0.94	\$ 1.08	\$ 4.98	\$ 10.84

AFUDC METHOD WITHOUT FUEL

Class	Average Monthly Bill	Average Monthly kWh	2015	2016	2017	2018	2019	TOTAL
Residential	\$ 108.51	1,100	\$ 0.35	\$ 0.59	\$ 0.14	\$ 3.90	\$ 5.85	\$ 10.84

* Please see Chart 4 Support for workpapers related to the proposed method.