

BEFORE THE ARKANSAS PUBLIC SERVICE COMMISSION

IN THE MATTER OF THE APPLICATION OF
OKLAHOMA GAS AND ELECTRIC COMPANY
FOR APPROVAL OF A GENERAL CHANGE IN
RATES, CHARGES AND TARIFFS

)
)
) DOCKET NO. 16-052-U
)
)

SURREBUTTAL TESTIMONY

OF

LARRY BLANK

ON BEHALF OF

ARKANSAS RIVER VALLEY ENERGY CONSUMERS

March 30, 2017

Submittal Testimony of Larry Blank
On behalf of the Arkansas River Valley Energy Consumers
APSC 16-052-U

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I. IDENTIFICATION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS FOR THE RECORD.

A. My name is Larry Blank. My business address is TAHOEconomics, LLC, 9120 Double Diamond Pkwy, Suite 3624, Reno, NV 89521. My email address is LB@tahoeconomics.com.

Q. DID YOU PREPARE DIRECT TESTIMONY THAT WAS PREVIOUSLY FILED IN THIS DOCKET?

A. Yes.

II. PURPOSE AND SUMMARY

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. I am testifying on behalf of the Arkansas River Valley Energy Consumers (“ARVEC”) and addressing the following components of the rebuttal testimonies by Oklahoma Gas & Electric Company (“OG&E” or the “Company”), the Staff of the Arkansas Public Service Commission (“Staff”), and the Arkansas Attorney General (“AG”):

1. Allocation of the costs associated with OG&E’s wind power assets.
2. The ARVEC-adjusted Arkansas jurisdictional revenue and class cost of service results.
3. The revenue requirement allocation methods of Staff and the AG and ARVEC’s recommendation on this subject.
4. The Company’s rate design proposals for the large Power and Light rate schedules and the ARVEC bill impact analysis.

Q. PLEASE SUMMARIZE YOUR RESPONSE TO THE OG&E REBUTTAL REGARDING THE ALLOCATION OF COSTS ASSOCIATED WITH OG&E'S WIND ASSETS?

A. OG&E witness Smith's contention that the Commission has already ordered the use of an energy allocator for costs related to wind generation capacity is misleading because the Commission has not explicitly ruled on this matter. Furthermore, for the Crossroads wind facility and other new wind capacity, the Commission has yet to rule on appropriate ratemaking treatment. Because of over-collection due to double recovery in Oklahoma, the Commission may need to order a refund of a portion of the Crossroads costs previously recovered through the ECR rider.

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE STAFF AND AG METHODS FOR REVENUE ALLOCATION?

A. The Commission should authorize cost of service based results and reject the arbitrary methods proposed by AG witness Dismukes and Staff witness Klucher. I provide a much more objective method in which the cost of service results are explicitly recognized.

Q. PLEASE SUMMARIZE YOUR ANALYSIS AND CONCERNS REGARDING THE OGE POWER AND LIGHT RATE DESIGN AND RELATED BILL IMPACT ANALYSIS.

A. OG&E provided unreliable results through the rebuttal testimony of Mr. Scott and direct testimony of Mr. Wai. I provide accurate bill impact estimates that suggest very large adverse impacts for the Power and Light time of use ("PL-TOU") customers, which deviate greatly beyond the OG&E stated overall increases in the application's public

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notice. Based on this evidence, the Commission should reject the Company's attempt to close and combine the PL-TOU rate schedules.

III. OGE WIND ASSET ALLOCATION

Q. WHAT WAS OGE'S REBUTTAL TESTIMONY REGARDING YOUR TESTIMONY CORRECTING THE ALLOCATION OF COSTS RELATED TO OGE'S WIND ASSETS?

A. OG&E witness Smith asserts that "Mr. Blank is confused, he disregards that the Commission has previously decided that wind assets should be allocated on energy, not demand. This applies to OG&E as well as SWEPCO and Empire."¹ He then cites Dockets 13-033-U, 12-067-U, and 10-067-U without any specific reference to a Commission order on this subject.

Q. ARE THERE TWO SEPARATE ISSUES REGARDING THE ALLOCATION OF COSTS ASSOCIATED WITH THE OG&E WIND ASSETS?

A. Yes. The first is on the appropriate jurisdictional allocation method to separate the wind-related costs between Oklahoma and Arkansas. The second issue, once the Arkansas jurisdictional amounts are allocated, is then the appropriate allocation method for determining the amounts to each of the Arkansas retail rate classes. This is an important distinction because the jurisdictional allocation is a determinant in the overall revenue requirement in this case and the latter is a determinant on cost responsibility assignment among the retail rate classes.

¹ Smith Rebuttal at p. 3, lines 11-13.

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Q. IS MR. SMITH'S REBUTTAL OF YOUR TESTIMONY FOCUSED ON THE JURISDICTIONAL ALLOCATION ISSUE OR THE RETAIL ALLOCATION?

A. He seems to be comingling the two issues, although I can be accused of doing the same in my direct testimony. This is understandable from an analyst point of view, because the way in which the OG&E cost of service model is set up, selection of an allocation method automatically applies to both the jurisdictional and retail customer class allocations. But from the point of view of drafting a decision on this matter, it is important for the Commission to understand that there is an important distinction to be made on this subject.

Q. DO YOU BELIEVE MR. SMITH IS CORRECT WHEN HE STATES THAT THE COMMISSION "HAS PREVIOUSLY DECIDED THAT WIND ASSETS SHOULD BE ALLOCATED ON ENERGY"?

A. As far as I know, the Commission has never explicitly ruled on the jurisdictional allocation nor the retail class allocation of costs related to wind assets owned by the utility. However, in looking at the Commission-accepted settlement in OG&E Docket 10-067-U, one could argue that the Commission indirectly adopted an energy allocation method for wind assets because the underlying cost of service model referenced in that settlement used that methodology for both the jurisdictional allocation and retail class allocation. The settlement agreement itself was silent on the proper allocation of costs associated with OG&E's wind assets. In the other dockets Mr. Smith cites, the Commission did not explicitly rule on this matter. OG&E Docket 12-067-U was initiated by OG&E for approval of a temporary surcharge and staff supported cost recovery through the Energy Cost Recovery Rider. The filing by OG&E was silent on the

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1 jurisdictional allocation methodology and there was no Commission decision regarding
2 appropriate allocation of these costs to Arkansas. SWEPCO Docket 13-033-U was
3 limited to cost recovery related to wind energy purchased power agreements, not cost
4 recovery related to wind assets owned by the utility. Therefore, the SWEPCO docket is
5 irrelevant to this discussion because my contention with OG&E's allocation focuses on
6 the allocation of costs associated with their wind assets, not purchased power agreements.
7 Purchased energy is very different in terms of cost causation because, as I explained in
8 my direct testimony, there are capacity costs associated with wind assets.

9 **Q. WHAT WAS THE MATTER BEFORE THE COMMISSION IN DOCKET NO. 12-**
10 **067-U AND WHAT IS ITS RELEVANCE IN THIS DOCKET?**

11 A. OG&E initiated Docket No. 12-67-U with an application for approval of cost recovery of
12 costs related to the Crossroads Wind Generation Facility through a temporary surcharge.
13 The case was resolved when OG&E agreed to the terms set forth by Staff Based on
14 Staff's recommendations, OG&E did not file sur-surrebuttal testimony and instead
15 accepted the recommendations and conclusions of Staff presented in the surrebuttal
16 testimony Mr. Athas and Ms. Butler."² Staff recommended temporary recovery of the
17 Crossroads cost of the facility through the ECR Rider, which utilizes an energy allocation
18 for the retail classes. However, cost recovery through the ECR is subject to further
19 review, as stated in Ms. Butler's surrebuttal testimony, which was adopted by OG&E and
20 the Commission:

21 "The components of the revenue requirement for Crossroads as proposed by
22 OG&E are generally consistent with costs that are recoverable in base rates;

² Joint Motion for Order on the Record, Docket No. 12-067-U, paragraph 4.

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1 however, as stated in my Direct Testimony, the appropriate venue for a
2 comprehensive review of the revenue requirement is a general rate case. A more
3 detailed and exacting revenue requirement determination, consistent with the
4 provisions of Arkansas law should be, and is, reserved for OG&E's next general
5 rate case. Nothing in my testimony is intended to represent a finding of value for
6 ratemaking treatment of any costs of Crossroads other than as to the
7 reasonableness of the development of the revenue requirement for purposes of
8 this case.”³

9 Therefore, because this testimony was adopted by OG&E and the Commission, the
10 determination of jurisdictional revenue requirement for the Crossroads facility and
11 appropriate ratemaking treatment thereof, including retail class allocations, is
12 appropriately an issue for the Commission's consideration in this Docket.

13 **Q. DOES YOUR REVIEW SUGGEST THAT OG&E HAS BEEN OVER-**
14 **RECOVERING THE CROSSROADS WIND FACILITY COSTS?**

15 A. Yes. Because OG&E uses the demand allocator for the jurisdictional split to Oklahoma
16 and the energy allocator for the split to Arkansas, they have not only over-allocated costs
17 for recovery in the Arkansas ECR, they are also recovering a portion of the costs in both
18 jurisdictions; which is, double recovery of costs.

19 **Q. BECAUSE OG&E USED THE 12-067-U CASE IN ITS REBUTTAL OF YOUR**
20 **TESTIMONY, WOULD YOU LIKE TO OFFER AN ADDITIONAL**
21 **RECOMMENDATION ON THE PAST RECOVERY OF CROSSROADS COSTS**
22 **WITHIN THE ECR?**

³ Surrebuttal Testimony of Regina L. Butler, Docket No. 12-067-U, pp. 4-5.

1 A. Yes. First, the Commission should correct the jurisdictional allocation method used for
2 OG&E owned wind assets to align with Oklahoma by using the appropriate production
3 demand allocator. Second, the Commission should order the recalculation of the
4 Arkansas jurisdictional revenue requirement associated with Crossroads and recovered in
5 the past application of the ECR. Third, the Commission should order the refund of past
6 amounts that were in excess of the appropriately allocated revenue requirement for the
7 Arkansas jurisdiction.

8 **Q. MR. SMITH STATES THAT OG&E IS ALLOCATING AS ORDERED BY THE**
9 **COMMISSION AND NOT DOUBLE-COLLECTING. IS THIS A TRUE**
10 **STATEMENT?**

11 A. No. As I explained in my direct testimony, the different methods applied in the Oklahoma
12 and Arkansas jurisdictions effectively result in the potential double-recovery of costs, and
13 as far as I know, this is the first case in which the jurisdictional allocation of wind asset
14 costs has been contested before the Commission. Therefore, there are no explicit
15 decisions from the Commission regarding this matter.

16 **Q. MR. SMITH ARGUES THAT THE NARUC MANUAL MENTIONS SUB-**
17 **FUNCTIONALIZATION. WHAT IS YOUR RESPONSE?**

18 A. The average and excess (“A&E”) demand allocation method applied to generation
19 production costs already recognizes a mix of production assets types with some portion
20 of capacity used to meet average demand (energy) and some portion of capacity used for
21 excess demand (peaking). The 4CP-A&E method used in this docket is a mixed
22 methodology including both an energy allocator and an excess demand allocator. Mr.
23 Smith’s assertion that it is acceptable to separate a particular sub-type of generation asset

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for allocation purposes is incorrect unless this is also done for peaking capacity, which should be allocated based on an excess demand allocation method. Furthermore, as I stated in my direct testimony, intermittent wind assets require additional capacity costs capable of firming up the wind power. Wind generation assets are part of the overall production capacity portfolio of OG&E appropriately allocated based on the 4CP-A&E method, and it is inappropriate to single out one asset type for special treatment without considering special treatment for other asset types, including the additional capacity required to firm up intermittent wind production capacity.

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE ARKANSAS RETAIL CLASS ALLOCATION OF COSTS RELATED TO OG&E OWNED WIND ASSETS?

A. For the reasons I have provided above and in my direct testimony, I recommend the 4CP-A&E production demand allocation method as the appropriate method to allocate these wind asset costs to the retail customer classes in Arkansas. This method also ensures consistency with my recommendation to correct the double-recovery of costs through the use of the production demand allocation method for the jurisdictional split.

Q. WHAT IS THE IMPACT OF CORRECTING THE JURISDICTIONAL ALLOCATION OF THE WIND ASSET COSTS?

A. Based on my cost of service model modifications changing the production demand allocation method, this reduces the rate base allocation to Arkansas by about \$13.6 million and reduces the Arkansas jurisdiction operating expenses by approximately \$1.2 million.

1 **IV. ARVEC REVENUE ADJUSTMENTS AND COST OF SERVICE RESULTS**

2 **Q. HAVE YOU INCORPORATED THE ARVEC RECOMMENDED REVENUE**
3 **REQUIREMENT ADJUSTMENTS INTO OG&E'S COST OF SERVICE**
4 **STUDY?**

5 A. Yes, I have incorporated the ARVEC adjustments into OG&E's Rebuttal cost of service
6 study ("COSS"). The retail class summary results are attached as Exhibit LB-SURR-1,
7 revised Schedule G-1.

8 **Q. DO THE COST OF SERVICE REVENUE REQUIREMENTS IN EXHIBIT LB-**
9 **SURR-1 REPRESENT YOUR DIRECT TESTIMONY RECOMMENDED**
10 **REVENUES BY RATE CLASS?**

11 A. Yes. However, I will also address the revenue allocation recommendations provided by
12 Staff and the AG.

13 **V. REVENUE REQUIREMENT ALLOCATION**

14 **Q. WHAT HAS STAFF PROPOSED FOR THE RATE CLASS ALLOCATION OF**
15 **REVENUE REQUIREMENT?**

16 A. Mr. Klucher at pp. 19-20 of his direct testimony recommends the following:

- 17 1. No customer class should receive a rate decrease from current revenues, including
18 base rates and the expiring riders revenues;
- 19 2. Any revenue surplus attributable to the classes that have no change in current
20 revenues will be used to limit the increase to the Municipal Pumping and Athletic
21 Field Lighting classes to 2.5 times the system average; and

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1 3. The remaining revenue surplus should then be distributed to the Residential
2 classes.

3 **Q. WHAT HAS THE ATTORNEY GENERAL PROPOSED FOR THE RATE CLASS**
4 **ALLOCATION OF REVENUE REQUIREMENT?**

5 A. Dr. Dismukes at p. 61 of his direct testimony recommends allocating 1.25 times the
6 system average increase to all classes earning less than the overall system rate of return
7 based on the class cost of service study ("CCOSS"). He then recommends an increase of
8 0.50 times the system average increase to all classes deserving a rate decrease based on
9 the CCOSS. He then would allocate any remaining revenue requirement to the Standard
10 Power and Light customer class.

11 **Q. WHAT ARE YOUR CONCERNS REGARDING THE STAFF AND AG**
12 **RECOMMENDATIONS ON REVENUE ALLOCATION?**

13 A. The problem with these approaches is that there is no movement toward cost of service
14 because the cost of service results are not explicitly part of the methodologies proposed
15 by Staff and the AG. The AG's proposal actually moves certain rate classes farther from
16 cost of service by proposing a rate increase for those classes in which the CCOSS results
17 suggest a decrease. Staff's proposal contains no movement toward cost of service if the
18 revenue deficiency is close to zero as strongly suggested by ARVEC's case. Staff's
19 methodology also moves certain rate classes increasingly farther away from cost based
20 rates as the revenue deficiency approved by the Commission moves closer to zero.

21 **Q. PLEASE ELABORATE ON WHAT YOU MEAN BY STAFF'S METHODOLOGY**
22 **CAUSES A GREATER DEVIATION FROM COST OF SERVICE AS THE**
23 **REQUIRED REVENUE IS REDUCED.**

1 A. Using Power & Light TOU Class (from Mr. Klucher's Tables 3&4 in his direct
2 testimony) as an example, we see that his methodology deviates from the cost of service
3 result by 11% on base rate revenues. In other words, Mr. Klucher is recommending an
4 approach in which the PL TOU rates are 11% higher than cost-based rates. If we apply
5 Mr. Klucher's methodology to Power & Light TOU using the ARVEC revenue
6 deficiency level, the implied deviation are rates that are in excess of 25% above cost of
7 service. Therefore, Staff's arbitrary position that no customer class ever receive a rate
8 reduction could increase interclass subsidies while conflicting with objective cost of
9 service results.

10 **Q. ARE RATES THAT ARE ELEVEN PERCENT ABOVE COST OF SERVICE**
11 **JUST AND REASONABLE?**

12 A. Absolutely not. There is no justification for such a deviation from cost of service. This
13 would be extremely punitive to the business investors of Arkansas.

14 **Q. WHAT SIGNAL DOES STAFF'S NO RATE DECREASE POLICY SEND TO**
15 **INTERVENORS DESERVING OF A COST-BASED RATE DECREASE?**

16 A. Under Staff's arbitrary policy, no customer class is afforded a rate decrease and, therefore
17 that is the best you can achieve. ARVEC members and other large users on OG&E's
18 system are important to the State's economy and to the greater Fort Smith area. Staff's
19 cost allocation policy, which only exacerbates interclass subsidies, sends a signal that
20 subsidies will be allowed to continue in Arkansas and businesses, such as ARVEC
21 members, will need to continue to provide such subsidies. Staff's arbitrary position in
22 support of subsidies and in moving away from cost-based rates is extremely unjust and
23 punitive toward large customers and employers in Arkansas.

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**Q. WHAT IS YOUR RECOMMENDATION REGARDING REVENUE
ALLOCATION?**

A. As I recommended in my direct testimony, the Commission should first consider setting rates that are cost-based following the results of the CCOSS. The ARVEC CCOSS results are reported below in Exhibit LB-SURR-1, attached. If the Commission believes that if it is necessary to deviate from true, cost of service-based rates to avoid excessive increases for certain rate classes, then I recommend that the Commission adopt an approach to revenue allocation that explicitly includes a cost of service-based result. In other words, there needs to be significant movement toward cost of service for all customer classes. If the Commission believes it is necessary to make a more gradual move toward a cost-based revenue requirements, then a much more objective method would be to set each class at least 50% from the revenue deficiency implied by the CCOSS result. In other words, if the CCOSS results imply a \$6 million increase for a customer class, then there should be at least a \$3 million increase for that class. If the CCOSS results suggest a \$6 million decrease for a customer class, then there should be at least a \$3 million decrease for such class.

**Q. WOULD YOU CONSIDER THIS APPROACH TO RESULT IN RATE
ADJUSTMENTS THAT ARE WITHIN A JUST AND REASONABLE RANGE?**

A. Yes, because it is an approach based on objective measures provided in the current cost of service results rather than an arbitrary benchmark using the existing outdated rates.

1 **VI. RATE DESIGN FOR THE POWER AND LIGHT TOU SCHEDULES**

2 **Q. WHAT WAS OG&E'S RESPONSE TO YOUR TESTIMONY REGARDING THE**
3 **COMPANY'S PROPOSED RATE DESIGN CHANGES FOR POWER & LIGHT**
4 **TOU?**

5 A. Mr. Scott offered this criticism at page 9 of his rebuttal testimony:

6 "In addition, witness Blank also speculates there are significant customer bill
7 impacts attributable to OG&E's proposed PL-TOU rate structure change. This is
8 not correct. OG&E witness Wai's Direct Exhibit WHW-2 shows customer bill
9 impacts for each of the PL and PL-TOU classes. In regards to witness Blank's
10 concern of insufficient data supporting Wai's Direct Exhibit WHW-2, the
11 Company provides the related information to AVREC Data Request 13.01."

12 **Q. HAVE YOU REVIEWED THE ADDITIONAL DATA PROVIDED IN**
13 **RESPONSE TO ARVEC DATA REQUEST 13.01?**

14 A. Yes. First, the data provided are raw billing determinant data for every customer within
15 the Power and Light rate schedules. The response does not contain the executable
16 workpapers for Direct Exhibit WHW-2 despite the fact that we asked for that in
17 discovery. Second, my analysis of the data demonstrates that I was correct in that Mr.
18 Wai's Direct Exhibit WHW-2 is unreliable and should not be relied upon by the
19 Commission. With the additional billing determinant data, I have performed the bill
20 impact analysis purportedly reported in Direct Exhibit WHW-2. Contrary to Mr. Wai's
21 reported results, my analysis demonstrates significant billing impacts to the customers
22 currently on PL-TOU-D rates if they were forced unto the Company's new proposed PL-
23 TOU rate schedule. Specifically, based on the most recent 12 months of billing data, the

23 PL-TOU-D Service Level 3 customers will see an average increase of 12.2% under the proposed rates. Most of the individual customer increases in this group are \$10,000 to \$100,000 per year, but one customer has an estimated increase of \$200,000 per year. The 51 PL-TOU-D Service Level 5 customers will see an average increase of 25.9% under the proposed rates. Most of the individual customer increases in this group are \$1,000 to \$70,000 per year, but one customer has an estimated increase of \$230,000 per year. The three PL-TOU-E Level 3&5 customers will also see large bill increases, 13% and 24%, respectively. These increases are significantly greater than the application noticed increase of 3.8% for Power & Light. My bill impact analysis is summarized in the following table.

PL-TOU-D Bill Impact Analysis Current vs. OGE Proposed				
	Current Demand & Energy Charges	Proposed Demand & Energy Charges	Increase (decrease)	Percent Change
Service Level 3	\$ 5,977,121	\$ 6,703,404	\$ 726,283	12.2%
Service Level 5	\$ 2,524,887	\$ 3,179,804	\$ 654,917	25.9%

Q. ARE THESE INCREASES JUST AND REASONABLE?

A. These are very far from cost-based rates as represented by Mr. Scott. These proposed rates result in significant increases, far removed from those considered just and reasonable.

Q. MR. SCOTT ALSO SUGGESTS THAT THE CUSTOMERS COULD SIMPLY SWITCH TO THE STANDARD POWER AND LIGHT RATE SCHEDULE. DO YOU HAVE A RESPONSE TO THIS SUGGESTION?

1 A. At page 9, lines 2-4 of his rebuttal testimony, Mr. Scott suggests: "If a power and light
2 customer prefers a tariff with demand charges incorporating production costs, then I
3 recommend the customer consider the standard PL-1 tariff." This statement by Mr. Scott
4 is illogical as the proposed standard PL rate schedules actually contain much higher
5 energy charges than the current PL-TOU-D rate schedules as well as higher demand
6 charges. Mr. Scott suggests that ARVEC members move to the standard PL schedule if
7 they do not care for the proposed removal of the rate schedule on which they currently
8 take service, an action that would have adverse economic implications for such members.
9 Also, if this action were appropriate for these customers, they already would have chosen
10 that option.

11 **Q. DO YOU HAVE ANY OTHER RECOMMENDATION WHICH RESULT FROM**
12 **YOUR BILL IMPACT ANALYSIS?**

13 A. Yes. It is critical that all parties on a go-forward basis have access and input to the final
14 calculations and determinations of the detailed rate design to be placed into the tariff rate
15 schedules to ensure that unintended impacts do not result.

16 **Q. WHAT IS YOUR RECOMMENDATION FOR THE COMMISSION?**

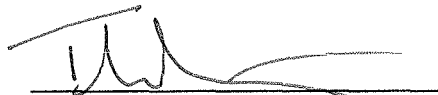
17 A. I continue to recommend that the Commission reject OG&E's proposal to close the PL-
18 TOU-D and E rate schedules for the reasons provided here and in my direct testimony.

20 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

21 A. Yes.

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 this 30th day of March 2017.


Thomas P. Schroedter

LN NO.	DESCRIPTION	1 TOTAL RESIDENTIAL SERVICE Col. 2 thru 4	2 RESIDENTIAL STANDARD S/L-5	3 RESIDENTIAL TOU S/L-5	4 RESIDENTIAL VPP S/L-5	5 NOT USED	6 TOTAL GENERAL SERVICE Col. 7 + 11	7 TOTAL GEN. SVC. STANDARD Col. 8 thru 10
<u>RATE BASE (a)</u>								
1	GROSS PLANT IN SERVICE	\$316,937,205	\$287,081,627	\$5,093,169	\$24,762,209	\$0	\$92,130,345	\$85,600,590
2	ACCUMULATED DEPRECIATION	\$125,247,114	\$113,467,572	\$2,012,292	\$9,767,251	\$0	\$36,420,913	\$33,936,400
3	TOTAL NET PLANT (L1-L2)	\$191,690,090	\$173,614,255	\$3,080,877	\$14,994,958	\$0	\$55,709,432	\$51,664,190
4	WORKING CAPITAL ASSETS	\$16,794,873	\$15,344,666	\$258,298	\$1,191,909	\$0	\$4,906,001	\$4,581,958
5	OTHER RATE BASE ITEMS	\$3,596,210	\$3,257,222	\$58,756	\$280,232	\$0	\$1,051,330	\$987,310
6	TOTAL RATE BASE (L3+L4+L5) (A)	\$212,081,173	\$192,216,143	\$3,397,931	\$16,467,099	\$0	\$61,666,762	\$57,233,459
<u>NON-FUEL OPERATING REVENUES</u>								
7	PRESENT RATE SCHEDULE/CLASS REVENUES (b)	\$33,693,727	\$31,244,632	\$483,309	\$1,965,786	\$0	\$10,230,157	\$9,635,763
8	OTHER OPERATING REVENUES	\$519,079	\$489,660	\$4,854	\$24,565	\$0	\$56,872	\$52,919
9	TOTAL OPERATING REVENUES (L7+L8) (A)	\$34,212,806	\$31,734,292	\$488,163	\$1,990,351	\$0	\$10,287,029	\$9,688,682
<u>EXPENSES (c)</u>								
10	OPERATION AND MAINTENANCE EXPENSE							
11	PRODUCTION	\$5,544,009	\$5,021,347	\$90,638	\$432,024	\$0	\$1,621,801	\$1,523,168
12	TRANSMISSION & REGIONAL MARKET	\$493,377	\$447,140	\$7,841	\$38,396	\$0	\$140,169	\$131,161
13	DISTRIBUTION	\$3,342,090	\$3,026,664	\$53,361	\$262,065	\$0	\$1,007,668	\$923,781
14	CUSTOMER ACCOUNTS	\$1,584,291	\$1,444,812	\$23,247	\$116,233	\$0	\$262,397	\$249,223
15	CUSTOMER SERVICES AND INFORMATIONAL	\$653,347	\$595,287	\$9,338	\$48,722	\$0	\$115,485	\$109,934
16	SALES	\$185,579	\$169,380	\$2,653	\$13,547	\$0	\$39,886	\$37,957
17	ADMINISTRATIVE AND GENERAL	\$4,769,441	\$4,331,507	\$74,622	\$363,313	\$0	\$1,294,440	\$1,208,499
18	TOTAL OPERATION AND MAINTENANCE EXPENSE (Sum L11 thru L17)	\$16,572,135	\$15,036,136	\$261,700	\$1,274,299	\$0	\$4,481,847	\$4,183,723
19	DEPRECIATION & AMORTIZATION EXPENSE	\$8,188,579	\$7,419,811	\$130,942	\$637,827	\$0	\$2,367,150	\$2,202,349
20	TAXES OTHER THAN INCOME TAXES	\$2,711,522	\$2,456,879	\$43,389	\$211,254	\$0	\$775,097	\$722,046
21	FEDERAL & STATE INCOME TAXES	(\$375,816)	(\$20,308)	(\$31,072)	(\$324,436)	\$0	\$197,964	\$233,059
22	TOTAL EXPENSES (Sum L18 thru L21) (A)	\$27,096,420	\$24,892,518	\$404,958	\$1,798,944	\$0	\$7,622,057	\$7,341,177
23	OPERATING INCOME (L9-L22)	\$7,116,386	\$6,841,774	\$83,205	\$191,407	\$0	\$2,464,972	\$2,347,505
24	EARNED RETURN ON RATE BASE (L23 / L6)	3.3555%	3.5594%	2.4487%	1.1624%	#DIV/0!	3.9972%	4.1016%
<u>COST OF SERVICE REVENUE REQUIREMENT RESULTS</u>								
25	REQUIRED RETURN ON RATE BASE GIVEN EQUAL RATES OF RETURN	5.370%	5.370%	5.370%	5.370%	5.370%	5.370%	5.370%
26	REQUIRED OPERATING INCOME (L6*L25)	\$11,388,759	\$10,322,007	\$162,469	\$884,263	\$0	\$3,311,505	\$3,073,437
27	INCOME DEFICIENCY / (SURPLUS) (L26-L23)	\$4,272,373	\$3,480,233	\$99,264	\$692,876	\$0	\$846,533	\$725,932
28	REVENUE CONVERSION FACTOR (d) (A)	1.649038	1.649038	1.649038	1.649038	1.649038	1.649038	1.649038
29	REVENUE DEFICIENCY / (SURPLUS) (L27*L28)	\$7,045,306	\$5,739,036	\$163,690	\$1,142,580	\$0	\$1,395,966	\$1,197,089
30	RATE SCHEDULE REVENUE REQUIREMENT (L7+L29)	\$40,739,033	\$36,983,668	\$646,999	\$3,108,366	\$0	\$11,626,123	\$10,832,852
31	FUEL REVENUES @ PRESENT RATES (b)	\$18,674,040	\$16,878,019	\$304,777	\$1,491,244	\$0	\$5,531,014	\$5,121,882
32	OTHER RIDERS @ PRESENT RATES (b)	\$3,913,068	\$3,532,729	\$63,443	\$316,896	\$0	\$1,131,673	\$1,049,104
33	% INCREASE ON PRESENT RATE SCHEDULE REVENUE (L29 / L7)	20.91%	18.37%	33.87%	58.12%	#DIV/0!	13.65%	12.42%
34	% INCREASE ON PRESENT RATE SCH REV + FUEL REV (L29 / (L7+L31))	13.45%	11.93%	20.77%	33.05%	#DIV/0!	8.86%	8.11%
35	% INCREASE ON PRESENT RATE SCH REV + FUEL REV + OTHER RIDERS (L29 / (L7+L31+L32))	12.52%	11.11%	19.22%	30.28%	#DIV/0!	8.26%	7.57%
36	TOTAL REVENUE REQUIREMENT (b) (L8+L30+L31+L32)	\$63,845,220	\$57,884,076	\$1,020,073	\$4,941,071	\$0	\$18,345,682	\$17,056,757
<u>POSSIBLE REVENUE REQUIREMENTS FOR RATES</u>								
37	PROPOSED RETURN ON RATE BASE	4.638%	4.700%	4.800%	3.880%	0.000%	4.930%	5.000%
38	REQUIRED OPERATING INCOME (L6*L37)	\$9,836,183	\$9,034,159	\$163,101	\$638,923	\$0	\$3,040,100	\$2,861,673
39	INCOME DEFICIENCY / (SURPLUS) (L38-L23)	\$2,719,797	\$2,192,385	\$79,896	\$447,517	\$0	\$575,129	\$514,168
40	REVENUE CONVERSION FACTOR (d) (A)	1.649038	1.649038	1.649038	1.649038	1.649038	1.649038	1.649038
41	REVENUE DEFICIENCY / (SURPLUS) (L39*L40)	\$4,485,049	\$3,615,326	\$131,751	\$737,972	\$0	\$948,409	\$847,882
42	RATE SCHEDULE REVENUE REQUIREMENT (L7+L41)	\$38,178,776	\$34,659,958	\$615,060	\$2,703,758	\$0	\$11,178,566	\$10,483,645
43	FUEL REVENUES @ PRESENT RATES (b)	\$18,674,040	\$16,878,019	\$304,777	\$1,491,244	\$0	\$5,531,014	\$5,121,882
44	OTHER RIDERS @ PRESENT RATES (b)	\$3,913,068	\$3,532,729	\$63,443	\$316,896	\$0	\$1,131,673	\$1,049,104
45	% INCREASE ON PRESENT RATE SCHEDULE REVENUE (L41 / L7)	13.31%	11.57%	27.26%	37.54%	#DIV/0!	9.27%	8.80%
46	% INCREASE ON PRESENT RATE SCH REV + FUEL REV (L41 / (L7+L43))	8.56%	7.51%	16.72%	21.35%	#DIV/0!	6.02%	5.75%
47	% INCREASE ON PRESENT RATE SCH REV + FUEL REV + OTHER RIDERS (L41 / (L7+L43+L44))	7.97%	7.00%	15.47%	19.55%	#DIV/0!	5.61%	5.36%
48	TOTAL REVENUE REQUIREMENT (b) (L8+L42+L43+L44)	\$61,284,963	\$55,760,366	\$988,134	\$4,536,463	\$0	\$17,898,125	\$16,707,550

LN NO.	DESCRIPTION	8 GEN. SVC. STANDARD S/L-2	9 GEN. SVC. STANDARD S/L-3	10 GEN. SVC. STANDARD S/L-5	11 TOTAL COMMERCIAL TOU Cols.(12,13,14,&17)	12 GEN. SVC. TOU S/L-5	13 GEN. SVC. VPP S/L-5	14 TOTAL MUNICIPAL PUMPING Col. 15 + 16
<u>RATE BASE (a)</u>								
1	GROSS PLANT IN SERVICE	\$0	\$149,892	\$85,450,698	\$6,529,755	\$956,429	\$4,088,728	\$635,184
2	ACCUMULATED DEPRECIATION	\$0	\$55,688	\$33,880,712	\$2,484,513	\$377,566	\$1,604,750	\$220,241
3	TOTAL NET PLANT (L1-L2)	\$0	\$94,204	\$51,569,986	\$4,045,242	\$578,863	\$2,483,978	\$414,943
4	WORKING CAPITAL ASSETS	\$0	\$9,004	\$4,572,954	\$324,042	\$58,860	\$198,187	\$32,352
5	OTHER RATE BASE ITEMS	\$0	\$1,200	\$986,111	\$64,019	\$10,709	\$47,974	\$2,631
6	TOTAL RATE BASE (L3+L4+L5) (A)	\$0	\$104,408	\$57,129,051	\$4,433,304	\$648,433	\$2,730,139	\$450,125
<u>NON-FUEL OPERATING REVENUES</u>								
7	PRESENT RATE SCHEDULE/CLASS REVENUES (b)	\$0	\$18,964	\$9,616,799	\$594,394	\$129,597	\$343,241	\$62,858
8	OTHER OPERATING REVENUES	\$0	\$88	\$52,831	\$3,953	\$382	\$2,805	\$373
9	TOTAL OPERATING REVENUES (L7+L8) (A)	\$0	\$19,052	\$9,669,630	\$598,347	\$129,979	\$346,046	\$63,231
<u>EXPENSES (c)</u>								
10	OPERATION AND MAINTENANCE EXPENSE							
11	PRODUCTION	\$0	\$1,834	\$1,521,334	\$98,634	\$16,496	\$73,975	\$4,331
12	TRANSMISSION & REGIONAL MARKET	\$0	\$228	\$130,932	\$9,009	\$1,530	\$6,516	\$506
13	DISTRIBUTION	\$0	\$3,366	\$920,415	\$83,887	\$10,547	\$43,981	\$13,345
14	CUSTOMER ACCOUNTS	\$0	\$555	\$248,669	\$13,173	\$3,041	\$7,552	\$1,720
15	CUSTOMER SERVICES AND INFORMATIONAL	\$0	\$129	\$109,805	\$5,551	\$1,305	\$3,152	\$753
16	SALES	\$0	\$49	\$37,909	\$1,929	\$459	\$1,124	\$227
17	ADMINISTRATIVE AND GENERAL	\$0	\$2,547	\$1,205,951	\$85,942	\$13,787	\$53,941	\$9,031
18	TOTAL OPERATION AND MAINTENANCE EXPENSE (Sum L11 thru L17)	\$0	\$8,709	\$4,175,014	\$298,124	\$47,166	\$190,240	\$29,913
19	DEPRECIATION & AMORTIZATION EXPENSE	\$0	\$4,870	\$2,197,479	\$164,801	\$24,613	\$104,266	\$16,112
20	TAXES OTHER THAN INCOME TAXES	\$0	\$1,279	\$720,768	\$53,050	\$8,097	\$34,372	\$4,769
21	FEDERAL & STATE INCOME TAXES	\$0	\$12	\$233,046	(\$35,095)	\$10,471	(\$37,381)	(\$1,212)
22	TOTAL EXPENSES (Sum L18 thru L21) (A)	\$0	\$14,870	\$7,326,307	\$480,880	\$90,346	\$291,497	\$49,582
23	OPERATING INCOME (L9-L22)	\$0	\$4,182	\$2,343,323	\$117,467	\$39,633	\$54,549	\$13,649
24	EARNED RETURN ON RATE BASE (L23 / L6)	#DIV/0!	4.0057%	4.1018%	2.6496%	6.1121%	1.9980%	3.0323%
<u>COST OF SERVICE REVENUE REQUIREMENT RESULTS</u>								
25	REQUIRED RETURN ON RATE BASE GIVEN EQUAL RATES OF RETURN	5.370%	5.370%	5.370%	5.370%	5.370%	5.370%	5.370%
26	REQUIRED OPERATING INCOME (L6*L25)	\$0	\$5,607	\$3,067,630	\$238,068	\$34,821	\$146,608	\$24,172
27	INCOME DEFICIENCY / (SURPLUS) (L26-L23)	\$0	\$1,424	\$724,507	\$120,602	(\$4,812)	\$92,060	\$10,523
28	REVENUE CONVERSION FACTOR (d) (A)	1.649038	1.649038	1.649038	1.649038	1.649038	1.649038	1.649038
29	REVENUE DEFICIENCY / (SURPLUS) (L27*L28)	\$0	\$2,349	\$1,194,740	\$198,877	(\$7,935)	\$151,810	\$17,352
30	RATE SCHEDULE REVENUE REQUIREMENT (L7+L29)	\$0	\$21,313	\$10,811,539	\$793,271	\$121,662	\$495,051	\$80,210
31	FUEL REVENUES @ PRESENT RATES (b)	\$0	\$11,763	\$5,110,119	\$409,132	\$84,267	\$266,566	\$31,967
32	OTHER RIDERS @ PRESENT RATES (b)	\$0	\$2,273	\$1,046,831	\$82,569	\$17,420	\$55,380	\$5,280
33	% INCREASE ON PRESENT RATE SCHEDULE REVENUE (L29 / L7)	#DIV/0!	12.39%	12.42%	33.46%	-6.12%	44.23%	27.61%
34	% INCREASE ON PRESENT RATE SCH REV + FUEL REV (L29 / (L7+L31))	#DIV/0!	7.64%	8.11%	19.82%	-3.71%	24.89%	18.30%
35	% INCREASE ON PRESENT RATE SCH REV + FUEL REV + OTHER RIDERS (L29 / (L7+L31+L32))	#DIV/0!	7.12%	7.57%	18.31%	-3.43%	22.82%	17.33%
36	TOTAL REVENUE REQUIREMENT (b) (L8+L30+L31+L32)	\$0	\$35,437	\$17,021,320	\$1,288,925	\$223,731	\$819,802	\$117,830
<u>POSSIBLE REVENUE REQUIREMENTS FOR RATES</u>								
37	PROPOSED RETURN ON RATE BASE	0.000%	5.000%	5.000%	4.025%	6.085%	3.930%	4.095%
38	REQUIRED OPERATING INCOME (L6*L37)	\$0	\$5,220	\$2,856,453	\$178,427	\$39,454	\$107,286	\$18,435
39	INCOME DEFICIENCY / (SURPLUS) (L38-L23)	\$0	\$1,038	\$513,130	\$60,961	(\$179)	\$52,738	\$4,786
40	REVENUE CONVERSION FACTOR (d) (A)	1.649038	1.649038	1.649038	1.649038	1.649038	1.649038	1.649038
41	REVENUE DEFICIENCY / (SURPLUS) (L39*L40)	\$0	\$1,712	\$846,170	\$100,527	(\$294)	\$86,966	\$7,892
42	RATE SCHEDULE REVENUE REQUIREMENT (L7+L41)	\$0	\$20,676	\$10,462,969	\$694,921	\$129,303	\$430,207	\$70,750
43	FUEL REVENUES @ PRESENT RATES (b)	\$0	\$11,763	\$5,110,119	\$409,132	\$84,267	\$266,566	\$31,967
44	OTHER RIDERS @ PRESENT RATES (b)	\$0	\$2,273	\$1,046,831	\$82,569	\$17,420	\$55,380	\$5,280
45	% INCREASE ON PRESENT RATE SCHEDULE REVENUE (L41 / L7)	#DIV/0!	9.03%	8.80%	16.91%	-0.23%	25.34%	12.55%
46	% INCREASE ON PRESENT RATE SCH REV + FUEL REV (L41 / (L7+L43))	#DIV/0!	5.57%	5.75%	10.02%	-0.14%	14.26%	8.32%
47	% INCREASE ON PRESENT RATE SCH REV + FUEL REV + OTHER RIDERS (L41 / (L7+L43+L44))	#DIV/0!	5.19%	5.36%	9.26%	-0.13%	13.07%	7.88%
48	TOTAL REVENUE REQUIREMENT (b) (L8+L42+L43+L44)	\$0	\$34,800	\$16,672,750	\$1,190,575	\$231,372	\$754,958	\$108,370

OKLAHOMA GAS & ELECTRIC CO.
TEST YEAR ENDING JUNE 30, 2016
DOCKET NO. 16-052-U
Exhibit 1B-SURR-1
Surrebuttal L. Blank ARVEC

SCHEDULE G-1
COST OF SERVICE STUDY
SUMMARY

LN NO.	DESCRIPTION	15 MUNICIPAL PUMPING S/L-4	16 MUNICIPAL PUMPING S/L-5	17 ATHLETIC FIELD S/L-5	18 TOTAL POWER & LIGHT Col. 19 + 26	19 TOTAL PWR & LGHT STANDARD Col. 20 thru 23	20 PWR & LGHT STANDARD S/L-1	21 PWR & LGHT STANDARD S/L-2
<u>RATE BASE (a)</u>								
1	GROSS PLANT IN SERVICE	\$0	\$635,184	\$849,414	\$333,391,732	\$209,734,043	\$0	\$7,499,419
2	ACCUMULATED DEPRECIATION	\$0	\$220,241	\$281,955	\$133,898,726	\$82,202,863	\$0	\$3,164,765
3	TOTAL NET PLANT (L1-L2)	\$0	\$414,943	\$567,458	\$199,493,006	\$127,531,180	\$0	\$4,334,654
4	WORKING CAPITAL ASSETS	\$0	\$32,352	\$34,643	\$21,838,491	\$12,692,517	\$0	\$544,568
5	OTHER RATE BASE ITEMS	\$0	\$2,631	\$2,505	\$4,460,007	\$2,503,526	\$0	\$127,534
6	TOTAL RATE BASE (L3+L4+L5) (A)	\$0	\$450,125	\$604,607	\$225,791,504	\$142,727,223	\$0	\$5,006,757
<u>NON-FUEL OPERATING REVENUES</u>								
7	PRESENT RATE SCHEDULE/CLASS REVENUES (b)	\$0	\$62,658	\$58,698	\$47,579,375	\$27,697,606	\$0	\$1,198,778
8	OTHER OPERATING REVENUES	\$0	\$373	\$393	\$113,486	\$75,010	\$0	\$1,185
9	TOTAL OPERATING REVENUES (L7+L8) (A)	\$0	\$63,231	\$59,091	\$47,692,861	\$27,772,616	\$0	\$1,199,963
<u>EXPENSES (c)</u>								
10	OPERATION AND MAINTENANCE EXPENSE							
11	PRODUCTION	\$0	\$4,331	\$3,832	\$6,869,742	\$3,853,235	\$0	\$196,102
12	TRANSMISSION & REGIONAL MARKET	\$0	\$506	\$457	\$634,941	\$367,861	\$0	\$19,476
13	DISTRIBUTION	\$0	\$13,345	\$16,014	\$2,913,879	\$2,141,870	\$0	\$17,753
14	CUSTOMER ACCOUNTS	\$0	\$1,720	\$861	\$53,984	\$44,075	\$0	\$554
15	CUSTOMER SERVICES AND INFORMATIONAL	\$0	\$753	\$341	\$12,101	\$11,125	\$0	\$35
16	SALES	\$0	\$227	\$119	\$119,675	\$101,431	\$0	\$917
17	ADMINISTRATIVE AND GENERAL	\$0	\$3,031	\$9,182	\$4,274,547	\$2,648,517	\$0	\$92,202
18	TOTAL OPERATION AND MAINTENANCE EXPENSE (Sum L11 thru L17)	\$0	\$23,913	\$30,805	\$14,878,870	\$9,168,114	\$0	\$327,039
19	DEPRECIATION & AMORTIZATION EXPENSE	\$0	\$13,112	\$19,811	\$8,412,129	\$5,267,259	\$0	\$186,400
20	TAXES OTHER THAN INCOME TAXES	\$0	\$4,769	\$5,812	\$2,874,966	\$1,764,368	\$0	\$69,370
21	FEDERAL & STATE INCOME TAXES	\$0	\$(1,212)	\$(6,973)	\$4,858,748	\$2,456,549	\$0	\$153,132
22	TOTAL EXPENSES (Sum L18 thru L21) (A)	\$0	\$49,582	\$49,454	\$31,024,713	\$18,656,289	\$0	\$735,942
23	OPERATING INCOME (L9-L22)	\$0	\$13,649	\$9,637	\$16,668,148	\$9,116,327	\$0	\$464,021
24	EARNED RETURN ON RATE BASE (L23 / L6)	#DIV/0!	3.0323%	1.5939%	7.3821%	6.3872%	#DIV/0!	9.2679%
<u>COST OF SERVICE REVENUE REQUIREMENT RESULTS</u>								
25	REQUIRED RETURN ON RATE BASE GIVEN EQUAL RATES OF RETURN	5.370%	5.370%	5.370%	5.370%	5.370%	5.370%	5.370%
26	REQUIRED OPERATING INCOME (L6*L25)	\$0	\$24,172	\$32,467	\$12,125,004	\$7,664,452	\$0	\$268,863
27	INCOME DEFICIENCY / (SURPLUS) (L26-L23)	\$0	\$10,523	\$22,831	\$(4,543,144)	\$(1,451,875)	\$0	\$(195,158)
28	REVENUE CONVERSION FACTOR (d) (A)	1.649038	1.649038	1.649038	1.649038	1.649038	1.649038	1.649038
29	REVENUE DEFICIENCY / (SURPLUS) (L27*L28)	\$0	\$17,352	\$37,649	\$(7,491,818)	\$(2,394,197)	\$0	\$(321,823)
30	RATE SCHEDULE REVENUE REQUIREMENT (L7+L29)	\$0	\$60,210	\$96,347	\$40,087,557	\$25,303,409	\$0	\$876,955
31	FUEL REVENUES @ PRESENT RATES (b)	\$0	\$1,967	\$26,332	\$39,957,485	\$19,569,550	\$0	\$1,068,061
32	OTHER RIDERS @ PRESENT RATES (b)	\$0	\$5,280	\$4,489	\$5,313,588	\$3,190,596	\$0	\$93,315
33	% INCREASE ON PRESENT RATE SCHEDULE REVENUE (L29 / L7)	#DIV/0!	27.61%	64.14%	-15.75%	-8.64%	#DIV/0!	-26.85%
34	% INCREASE ON PRESENT RATE SCH REV + FUEL REV (L29 / (L7+L31))	#DIV/0!	18.30%	44.28%	-8.56%	-5.07%	#DIV/0!	-14.20%
35	% INCREASE ON PRESENT RATE SCH REV + FUEL REV + OTHER RIDERS (L29 / (L7+L31+L32))	#DIV/0!	7.33%	42.06%	-8.07%	-4.74%	#DIV/0!	-13.64%
36	TOTAL REVENUE REQUIREMENT (b) (L8+L30+L31+L32)	\$0	\$17,830	\$127,561	\$85,472,116	\$48,138,565	\$0	\$2,039,516
<u>POSSIBLE REVENUE REQUIREMENTS FOR RATES</u>								
37	PROPOSED RETURN ON RATE BASE	0.000%	4.095%	2.192%	6.108%	5.848%	0.000%	7.011%
38	REQUIRED OPERATING INCOME (L6*L37)	\$0	\$18,435	\$13,253	\$13,790,922	\$8,346,918	\$0	\$351,030
39	INCOME DEFICIENCY / (SURPLUS) (L38-L23)	\$0	\$4,786	\$3,616	\$(2,877,226)	\$(769,409)	\$0	\$(112,991)
40	REVENUE CONVERSION FACTOR (d) (A)	1.649038	1.649038	1.649038	1.649038	1.649038	1.649038	1.649038
41	REVENUE DEFICIENCY / (SURPLUS) (L39*L40)	\$0	\$7,892	\$5,963	\$(4,744,655)	\$(1,268,784)	\$0	\$(186,326)
42	RATE SCHEDULE REVENUE REQUIREMENT (L7+L41)	\$0	\$70,750	\$64,661	\$42,834,720	\$26,428,822	\$0	\$1,012,452
43	FUEL REVENUES @ PRESENT RATES (b)	\$0	\$13,967	\$26,332	\$39,957,485	\$19,569,550	\$0	\$1,068,061
44	OTHER RIDERS @ PRESENT RATES (b)	\$0	\$5,280	\$4,489	\$5,313,588	\$3,190,596	\$0	\$93,315
45	% INCREASE ON PRESENT RATE SCHEDULE REVENUE (L41 / L7)	#DIV/0!	12.55%	10.16%	-9.97%	-4.58%	#DIV/0!	-15.54%
46	% INCREASE ON PRESENT RATE SCH REV + FUEL REV (L41 / (L7+L43))	#DIV/0!	8.32%	7.01%	-5.42%	-2.68%	#DIV/0!	-8.22%
47	% INCREASE ON PRESENT RATE SCH REV + FUEL REV + OTHER RIDERS (L41 / (L7+L43+L44))	#DIV/0!	7.88%	6.65%	-5.11%	-2.51%	#DIV/0!	-7.89%
48	TOTAL REVENUE REQUIREMENT (b) (L8+L42+L43+L44)	\$0	\$108,370	\$95,875	\$88,219,279	\$49,263,978	\$0	\$2,175,013

Supporting Schedules
(a) G-2
(b) Schedule E-11.1 E-11.2
(c) G-3
(d) C-5

LN NO.	DESCRIPTION	22 PWR & LGHT STANDARD S/L-3	23 PWR & LG-T STANDARD DISTRIBUTION Col. 24 + 25	24 PWR & LGHT STANDARD S/L-4	25 PWR & LGHT STANDARD S/L-5	26 TOTAL PWR & LGHT TOU Col. 27 thru 30	27 PWR & LGHT S/L-1	28 PWR & LGHT TOU S/L-2
<u>RATE BASE (a)</u>								
1	GROSS PLANT IN SERVICE	\$53,242,843	\$148,991,781	\$896,076	\$148,095,705	\$123,657,689	\$41,238,578	\$6,413,701
2	ACCUMULATED DEPRECIATION	\$22,008,344	\$57,029,753	\$338,346	\$56,691,407	\$51,695,864	\$18,429,510	\$2,778,878
3	TOTAL NET PLANT (L1-L2)	\$31,234,498	\$91,962,028	\$557,730	\$91,404,298	\$71,961,825	\$22,809,068	\$3,634,823
4	WORKING CAPITAL ASSETS	\$3,633,955	\$8,513,994	\$55,725	\$8,458,268	\$9,145,974	\$3,614,608	\$556,719
5	OTHER RATE BASE ITEMS	\$738,290	\$1,637,701	\$9,648	\$1,628,053	\$1,956,481	\$866,739	\$121,327
6	TOTAL RATE BASE (L3+L4+L5) (A)	\$35,606,743	\$102,113,723	\$623,104	\$101,490,619	\$83,064,281	\$27,290,416	\$4,312,869
<u>NON-FUEL OPERATING REVENUES</u>								
7	PRESENT RATE SCHEDULE/CLASS REVENUES (b)	\$7,949,843	\$18,548,585	\$157,219	\$18,391,766	\$19,881,769	\$7,785,175	\$1,297,587
8	OTHER OPERATING REVENUES	\$22,470	\$51,555	\$511	\$50,844	\$38,476	\$7,597	\$1,281
9	TOTAL OPERATING REVENUES (L7+L8) (A)	\$7,972,313	\$18,600,140	\$157,730	\$18,442,610	\$19,920,245	\$7,792,772	\$1,298,868
<u>EXPENSES (c)</u>								
10	OPERATION AND MAINTENANCE EXPENSE							
11	PRODUCTION	\$1,134,795	\$2,522,338	\$14,996	\$2,507,342	\$3,016,507	\$1,342,226	\$186,772
12	TRANSMISSION & REGIONAL MARKET	\$114,420	\$233,966	\$856	\$233,109	\$267,079	\$95,424	\$17,694
13	DISTRIBUTION	\$548,318	\$1,575,799	\$13,952	\$1,561,847	\$772,009	\$1,244	\$5,050
14	CUSTOMER ACCOUNTS	\$3,172	\$40,349	\$106	\$40,243	\$9,909	\$2,820	\$444
15	CUSTOMER SERVICES AND INFORMATIONAL	\$388	\$10,702	\$24	\$10,678	\$976	\$24	\$12
16	SALES	\$7,277	\$93,237	\$268	\$92,969	\$18,245	\$4,352	\$787
17	ADMINISTRATIVE AND GENERAL	\$736,177	\$1,820,137	\$12,622	\$1,807,515	\$1,626,031	\$551,755	\$83,702
18	TOTAL OPERATION AND MAINTENANCE EXPENSE (Sum L11 thru L17)	\$2,544,547	\$6,296,528	\$42,825	\$6,253,703	\$5,710,756	\$1,997,844	\$294,461
19	DEPRECIATION & AMORTIZATION EXPENSE	\$1,353,524	\$3,727,334	\$23,136	\$3,704,199	\$3,144,869	\$1,075,183	\$163,464
20	TAXES OTHER THAN INCOME TAXES	\$475,556	\$1,219,441	\$7,101	\$1,212,340	\$1,110,599	\$389,279	\$61,158
21	FEDERAL & STATE INCOME TAXES	\$834,463	\$1,468,553	\$28,979	\$1,439,974	\$2,402,200	\$1,088,971	\$225,359
22	TOTAL EXPENSES (Sum L18 thru L21) (A)	\$5,208,091	\$12,712,256	\$102,041	\$12,610,215	\$12,368,424	\$4,551,277	\$744,442
23	OPERATING INCOME (L9-L22)	\$2,764,222	\$5,888,084	\$55,689	\$5,832,395	\$7,551,821	\$3,241,495	\$554,426
24	EARNED RETURN ON RATE BASE (L23 / L6)	7.7632%	5.7662%	8.9374%	5.7467%	9.0915%	11.8778%	12.8552%
<u>COST OF SERVICE REVENUE REQUIREMENT RESULTS</u>								
25	REQUIRED RETURN ON RATE BASE GIVEN EQUAL RATES OF RETURN	5.370%	5.370%	5.370%	5.370%	5.370%	5.370%	5.370%
26	REQUIRED OPERATING INCOME (L6*L25)	\$1,912,082	\$5,483,507	\$33,461	\$5,450,046	\$4,460,552	\$1,465,495	\$231,601
27	INCOME DEFICIENCY / (SURPLUS) (L26-L23)	(\$852,140)	(\$404,577)	(\$22,228)	(\$382,348)	(\$3,091,270)	(\$1,776,000)	(\$322,825)
28	REVENUE CONVERSION FACTOR (d) (A)	1.649038	1.649038	1.649038	1.649038	1.649038	1.649038	1.649038
29	REVENUE DEFICIENCY / (SURPLUS) (L27*L28)	(\$1,405,211)	(\$667,162)	(\$36,656)	(\$630,507)	(\$5,097,621)	(\$2,928,691)	(\$532,351)
30	RATE SCHEDULE REVENUE REQUIREMENT (L7+L29)	\$6,544,632	\$17,881,823	\$120,563	\$17,761,259	\$14,784,148	\$4,856,484	\$765,236
31	FUEL REVENUES @ PRESENT RATES (b)	\$6,186,848	\$12,314,541	\$28,912	\$12,285,729	\$20,387,935	\$10,673,310	\$1,196,431
32	OTHER RIDERS @ PRESENT RATES (b)	\$964,061	\$2,133,220	\$6,647	\$2,126,573	\$2,122,992	\$431,737	\$209,031
33	% INCREASE ON PRESENT RATE SCHEDULE REVENUE (L29 / L7)	-17.68%	-3.60%	-23.31%	-3.43%	-25.64%	-37.62%	-41.03%
34	% INCREASE ON PRESENT RATE SCH REV + FUEL REV (L29 / (L7+L31))	-9.94%	-2.16%	-19.69%	-2.06%	-12.66%	-15.87%	-21.35%
35	% INCREASE ON PRESENT RATE SCH REV + FUEL REV + OTHER RIDERS (L29 / (L7+L31+L32))	-9.31%	-2.02%	-19.01%	-1.92%	-12.02%	-15.50%	-19.69%
36	TOTAL REVENUE REQUIREMENT (b) (L8+L30+L31+L32)	\$13,718,011	\$32,381,039	\$156,633	\$32,224,405	\$37,333,551	\$15,969,128	\$2,171,979
<u>POSSIBLE REVENUE REQUIREMENTS FOR RATES</u>								
37	PROPOSED RETURN ON RATE BASE	5.800%	5.808%	7.100%	5.800%	6.554%	7.800%	8.859%
38	REQUIRED OPERATING INCOME (L6*L37)	\$2,065,191	\$5,930,696	\$44,240	\$5,886,456	\$5,444,004	\$2,128,652	\$382,075
39	INCOME DEFICIENCY / (SURPLUS) (L38-L23)	(\$699,031)	\$42,613	(\$11,449)	\$54,061	(\$2,107,817)	(\$1,112,842)	(\$172,351)
40	REVENUE CONVERSION FACTOR (d) (A)	1.649038	1.649038	1.649038	1.649038	1.649038	1.649038	1.649038
41	REVENUE DEFICIENCY / (SURPLUS) (L39*L40)	(\$1,152,729)	\$70,270	(\$18,879)	\$89,149	(\$3,475,871)	(\$1,835,119)	(\$284,214)
42	RATE SCHEDULE REVENUE REQUIREMENT (L7+L41)	\$6,797,114	\$18,619,255	\$138,340	\$18,480,915	\$16,405,898	\$5,950,056	\$1,013,373
43	FUEL REVENUES @ PRESENT RATES (b)	\$6,186,848	\$12,314,541	\$28,912	\$12,285,729	\$20,387,935	\$10,673,310	\$1,196,431
44	OTHER RIDERS @ PRESENT RATES (b)	\$964,061	\$2,133,220	\$6,647	\$2,126,573	\$2,122,992	\$431,737	\$209,031
45	% INCREASE ON PRESENT RATE SCHEDULE REVENUE (L41 / L7)	-14.50%	0.38%	-12.01%	0.48%	-17.48%	-23.57%	-21.90%
46	% INCREASE ON PRESENT RATE SCH REV + FUEL REV (L41 / (L7+L43))	-8.15%	0.23%	-10.14%	0.29%	-8.63%	-9.94%	-11.40%
47	% INCREASE ON PRESENT RATE SCH REV + FUEL REV + OTHER RIDERS (L41 / (L7+L43+L44))	-7.63%	0.21%	-9.79%	0.27%	-8.20%	-9.71%	-10.51%
48	TOTAL REVENUE REQUIREMENT (b) (L8+L42+L43+L44)	\$13,970,493	\$33,118,471	\$174,410	\$32,944,061	\$38,955,301	\$17,062,700	\$2,420,116

LN NO.	DESCRIPTION	29 PWR & LGHT TOU S/L-3	30 PWR & LGHT TOU DISTRIBUTION Col. 31 + 32	31 PWR & LGHT TOU S/L-4	32 PWR & LGHT TOU S/L-5	33 TOTAL LIGHTING Col. 34 + 35	34 MUNICIPAL LIGHTING S/L-5	35 OUTDOOR SEC. LGHT S/L-5
<u>RATE BASE (a)</u>								
1	GROSS PLANT IN SERVICE	\$48,652,437	\$27,352,972	\$0	\$27,352,972	\$23,135,504	\$7,999,670	\$15,135,835
2	ACCUMULATED DEPRECIATION	\$20,077,054	\$10,410,422	\$0	\$10,410,422	\$9,274,539	\$3,211,811	\$6,062,728
3	TOTAL NET PLANT (L1-L2)	\$28,575,383	\$16,942,551	\$0	\$16,942,551	\$13,860,965	\$4,787,858	\$9,073,107
4	WORKING CAPITAL ASSETS	\$3,337,067	\$1,637,579	\$0	\$1,637,579	\$944,309	\$325,898	\$618,412
5	OTHER RATE BASE ITEMS	\$672,471	\$295,945	\$0	\$295,945	\$66,438	\$20,824	\$45,614
6	TOTAL RATE BASE (L3+L4+L5) (A)	\$32,584,922	\$18,876,075	\$0	\$18,876,075	\$14,871,713	\$5,134,580	\$9,737,133
<u>NON-FUEL OPERATING REVENUES</u>								
7	PRESENT RATE SCHEDULE/CLASS REVENUES (b)	\$7,309,205	\$3,489,802	\$0	\$3,489,802	\$3,118,549	\$1,107,263	\$2,011,286
8	OTHER OPERATING REVENUES	\$20,379	\$9,219	\$0	\$9,219	\$5,483	\$1,832	\$3,651
9	TOTAL OPERATING REVENUES (L7+L8) (A)	\$7,329,584	\$3,499,021	\$0	\$3,499,021	\$3,124,032	\$1,109,095	\$2,014,937
<u>EXPENSES (c)</u>								
10	OPERATION AND MAINTENANCE EXPENSE							
11	PRODUCTION	\$1,032,493	\$455,016	\$0	\$455,016	\$103,132	\$32,322	\$70,809
12	TRANSMISSION & REGIONAL MARKET	\$108,617	\$45,345	\$0	\$45,345	\$6,348	\$2,002	\$4,346
13	DISTRIBUTION	\$492,755	\$272,960	\$0	\$272,960	\$160,459	\$53,596	\$106,862
14	CUSTOMER ACCOUNTS	\$3,307	\$3,338	\$0	\$3,338	\$570	\$570	\$0
15	CUSTOMER SERVICES AND INFORMATIONAL	\$294	\$647	\$0	\$647	\$306	\$306	\$0
16	SALES	\$6,202	\$6,904	\$0	\$6,904	\$1,749	\$672	\$1,077
17	ADMINISTRATIVE AND GENERAL	\$670,779	\$319,795	\$0	\$319,795	\$99,878	\$32,778	\$67,100
18	TOTAL OPERATION AND MAINTENANCE EXPENSE (Sum L11 thru L17)	\$2,314,448	\$1,104,004	\$0	\$1,104,004	\$372,441	\$122,246	\$250,195
19	DEPRECIATION & AMORTIZATION EXPENSE	\$1,235,857	\$670,365	\$0	\$670,365	\$894,907	\$201,935	\$692,972
20	TAXES OTHER THAN INCOME TAXES	\$436,824	\$223,338	\$0	\$223,338	\$134,787	\$46,093	\$88,694
21	FEDERAL & STATE INCOME TAXES	\$782,027	\$305,843	\$0	\$305,843	\$558,845	\$258,429	\$300,417
22	TOTAL EXPENSES (Sum L18 thru L21) (A)	\$4,769,156	\$2,303,549	\$0	\$2,303,549	\$1,960,980	\$628,702	\$1,332,278
23	OPERATING INCOME (L9-L22)	\$2,560,428	\$1,195,472	\$0	\$1,195,472	\$1,163,052	\$480,393	\$682,659
24	EARNED RETURN ON RATE BASE (L23 / L6)	7.8577%	6.3333%	#DIV/0!	6.3333%	7.8206%	9.3560%	7.0109%
<u>COST OF SERVICE REVENUE REQUIREMENT RESULTS</u>								
25	REQUIRED RETURN ON RATE BASE GIVEN EQUAL RATES OF RETURN	5.370%	5.370%	5.370%	5.370%	5.370%	5.370%	5.370%
26	REQUIRED OPERATING INCOME (L6*L25)	\$1,749,810	\$1,013,645	\$0	\$1,013,645	\$798,611	\$275,727	\$522,884
27	INCOME DEFICIENCY / (SURPLUS) (L26-L23)	(\$810,618)	(\$181,827)	\$0	(\$181,827)	(\$364,441)	(\$204,666)	(\$159,775)
28	REVENUE CONVERSION FACTOR (d) (A)	1.649038	1.649038	1.649038	1.649038	1.649038	1.649038	1.649038
29	REVENUE DEFICIENCY / (SURPLUS) (L27*L28)	(\$1,336,740)	(\$299,839)	\$0	(\$299,839)	(\$600,977)	(\$337,501)	(\$263,475)
30	RATE SCHEDULE REVENUE REQUIREMENT (L7+L29)	\$5,972,465	\$3,189,963	\$0	\$3,189,963	\$2,517,572	\$769,762	\$1,747,814
31	FUEL REVENUES @ PRESENT RATES (b)	\$5,720,732	\$2,797,462	\$0	\$2,797,462	\$759,907	\$238,196	\$521,711
32	OTHER RIDERS @ PRESENT RATES (b)	\$1,068,483	\$413,741	\$0	\$413,741	\$97,156	\$30,454	\$66,702
33	% INCREASE ON PRESENT RATE SCHEDULE REVENUE (L29 / L7)	-18.29%	-8.59%	#DIV/0!	-8.59%	-19.27%	-30.48%	-13.10%
34	% INCREASE ON PRESENT RATE SCH REV + FUEL REV (L29 / (L7+L31))	-10.26%	-4.77%	#DIV/0!	-4.77%	-15.50%	-25.08%	-10.40%
35	% INCREASE ON PRESENT RATE SCH REV + FUEL REV + OTHER RIDERS (L29 / (L7+L31+L32))	-9.48%	-4.47%	#DIV/0!	-4.47%	-15.12%	-24.53%	-10.13%
36	TOTAL REVENUE REQUIREMENT (b) (L8+L30+L31+L32)	\$12,782,059	\$6,410,385	\$0	\$6,410,385	\$3,380,118	\$1,040,244	\$2,339,875
<u>POSSIBLE REVENUE REQUIREMENTS FOR RATES</u>								
37	PROPOSED RETURN ON RATE BASE	5.700%	5.700%	0.000%	5.700%	6.454%	6.869%	6.235%
38	REQUIRED OPERATING INCOME (L6*L37)	\$1,857,341	\$1,075,936	\$0	\$1,075,936	\$959,791	\$352,701	\$607,090
39	INCOME DEFICIENCY / (SURPLUS) (L38-L23)	(\$703,088)	(\$119,536)	\$0	(\$119,536)	(\$203,261)	(\$127,692)	(\$75,570)
40	REVENUE CONVERSION FACTOR (d) (A)	1.649038	1.649038	1.649038	1.649038	1.649038	1.649038	1.649038
41	REVENUE DEFICIENCY / (SURPLUS) (L39*L40)	(\$1,159,419)	(\$197,119)	\$0	(\$197,119)	(\$335,186)	(\$210,568)	(\$124,617)
42	RATE SCHEDULE REVENUE REQUIREMENT (L7+L41)	\$6,149,786	\$3,292,683	\$0	\$3,292,683	\$2,783,363	\$896,695	\$1,886,669
43	FUEL REVENUES @ PRESENT RATES (b)	\$5,720,732	\$2,797,462	\$0	\$2,797,462	\$759,907	\$238,196	\$521,711
44	OTHER RIDERS @ PRESENT RATES (b)	\$1,068,483	\$413,741	\$0	\$413,741	\$97,156	\$30,454	\$66,702
45	% INCREASE ON PRESENT RATE SCHEDULE REVENUE (L41 / L7)	-15.86%	-5.65%	#DIV/0!	-5.65%	-10.75%	-19.02%	-6.20%
46	% INCREASE ON PRESENT RATE SCH REV + FUEL REV (L41 / (L7+L43))	-9.90%	-3.14%	#DIV/0!	-3.14%	-8.64%	-15.65%	-4.92%
47	% INCREASE ON PRESENT RATE SCH REV + FUEL REV + OTHER RIDERS (L41 / (L7+L43+L44))	-8.22%	-2.94%	#DIV/0!	-2.94%	-8.43%	-15.30%	-4.79%
48	TOTAL REVENUE REQUIREMENT (b) (L8+L42+L43+L44)	\$12,959,380	\$6,513,105	\$0	\$6,513,105	\$3,645,909	\$1,167,177	\$2,478,733