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SOAH DOCKET NO. 473-19-3974

PUC DOCKET NO. 49421

2019 JUN 14 PM 1:56

APPLICATION OF CENTERPOINT §
ENERGY HOUSTON ELECTRIC, LLC §
FOR AUTHORITY TO CHANGE RATES §

BEFORE THE STATE OFFICE
OF
ADMINISTRATIVE HEARINGS

**OFFICE OF PUBLIC UTILITY COUNSEL'S RESPONSE TO
CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC'S
SECOND REQUEST FOR INFORMATION**

The Office of Public Utility Counsel ("OPUC") submits this response to CenterPoint Energy Houston Electric, LLC's ("CenterPoint Houston") Second Request for Information that was received on June 10, 2019. Pursuant to State Office of Administrative Hearings Order No. 2, OPUC's response is timely filed within four calendar days of receipt of CenterPoint Houston's discovery request. OPUC stipulates that all parties may treat this response as if it were filed under oath.

Dated: June 14, 2019

Respectfully submitted,

Lori Cobos
Chief Executive & Public Counsel
State Bar No. 24042276



Cassandra Quinn
Assistant Public Counsel
State Bar No. 24053435
Eleanor D'Ambrosio
Assistant Public Counsel
State Bar No. 24097559

OFFICE OF PUBLIC UTILITY COUNSEL
1701 N. Congress Avenue, Suite 9-180
P.O. Box 12397
Austin, Texas 78711-2397
512-936-7500 (Telephone)
512-936-7525 (Facsimile)
cassandra.quinn@opuc.texas.gov
eleanor.dambrosio@opuc.texas.gov
opuc_eservice@opuc.texas.gov (Service)

SOAH DOCKET 473-19-3864
PUC DOCKET NO. 49421
OPUC's Response to CenterPoint Energy Houston Electric LLC's
Second Request for Information

- 2-1. Please provide references (jurisdiction, docket number, and date) for each proceeding in which Mr. Nalepa has previously testified regarding weather normalization. If any such testimony is not readily accessible online, please provide a copy.

RESPONSE:

See the following:

Public Utility Commission of Texas ("PUCT")

Docket No. 35717	Oncor Electric Delivery	November 2008
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Railroad Commission of Texas ("Railroad Commission")

Docket No. 10738	T&L Gas Co.	June 2018
Docket No. 10622	LDC, llc.	April 2017
Docket No. 10617	Onalaska Water & Gas	March 2017
Docket No. 10498	NatGas, Inc.	February 2016
Docket No. 10238	Onalaska Water & Gas	January 2013
Docket No. 10196	Bluebonnet Natural Gas	July 2012
Docket No. 10021	AgriTex Gas, Inc.	October 2011
Docket No. 9810	Bluebonnet Natural Gas	July 2008
Docket No. 9797	Universal Natural Gas	April 2008

Please see Attachment CEHE-OPUC 2-1 for copies of testimony filed with the Railroad Commission.

Prepared By: Karl Nalepa
Sponsored By: Karl Nalepa

Attachment 2-1

GAS UTILITIES DOCKET NO. _____

STATEMENT OF INTENT FILED BY	§	
T&L GAS COMPANY TO CHANGE	§	BEFORE THE
RATES IN THE ENVIRONS OF	§	RAILROAD COMMISSION
MONTGOMERY COUNTY, TEXAS	§	OF TEXAS

DIRECT TESTIMONY

OF

KARL J. NALEPA

ON BEHALF OF

T&L GAS COMPANY

JUNE 12, 2018

**DIRECT TESTIMONY OF
KARL J. NALEPA**

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SCHEDULE K – Compliance with Commission Rule 7.5414
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ADJUSTMENT C – Pensions & Benefits
ADJUSTMENT D – Payroll Taxes
ADJUSTMENT E – Revenues
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GAS UTILITIES DOCKET NO. _____

**STATEMENT OF INTENT FILED BY
T&L GAS COMPANY TO CHANGE
RATES IN THE ENVIRONS OF THE
CITY OF CONROE, TEXAS**

§
§
§
§
§

**BEFORE THE
RAILROAD COMMISSION
OF TEXAS**

**DIRECT TESTIMONY OF
KARL J. NALEPA**

I. INTRODUCTION AND QUALIFICATIONS

1

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

3 A. My name is Karl J. Nalepa. I am President of ReSolved Energy Consulting, LLC, an
4 independent utility consulting company. My business address is 11044 Research Blvd.,
5 Suite A-420, Austin, Texas 78759.

6

7 **Q. ON WHOSE BEHALF ARE YOU PRESENTING TESTIMONY IN THIS**
8 **PROCEEDING?**

9 A. I am presenting testimony on behalf of T&L Gas Company, ("T&L" or "Company").

10

11 **Q. PLEASE OUTLINE YOUR EDUCATIONAL AND PROFESSIONAL**
12 **BACKGROUND.**

13 A. I hold a Bachelor of Science degree in Mineral Economics and a Master of Science degree
14 in Petroleum Engineering and am a certified mediator. I have been a partner in ReSolved
15 Energy Consulting since July 2011, but joined R.J. Covington Consulting, its predecessor

1 firm, in June 2003 as a Management Consultant. Before that I served for more than five
2 years as an Assistant Director with the Texas Railroad Commission ("RRC"). In this
3 position, I was responsible for overseeing the economic regulation of natural gas utilities
4 in Texas. And prior to that, I spent five years with two different consulting firms providing
5 advice regarding a broad range of electric and natural gas industry issues. Before that, I
6 served four years as a Fuels Analyst with the Public Utility Commission of Texas ("PUC").
7 My professional career began with eight years in the reservoir engineering department of
8 the exploration company affiliated with Transco Gas Pipeline, a major interstate pipeline
9 company. My Statement of Qualifications is included as Appendix A.
10

11 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?**

12 A. Yes, I have testified many times before both the RRC and the PUC on a variety of
13 regulatory issues. I have also provided testimony before the Louisiana Public Service
14 Commission and the Arkansas Public Service Commission. A summary of my previously
15 filed testimony is included as Attachment B. In addition, I supervised the staff case in
16 proceedings before the RRC and served as a Technical Rate Examiner on behalf of the
17 RRC. Finally, I have provided analysis and recommendations in a number of city-level
18 regulatory proceedings that resulted in settlements without written testimony.
19

20 **Q. HOW IS YOUR TESTIMONY ORGANIZED?**

21 A. Section I summarizes my experience, education, and qualifications. Section II of my
22 testimony provides the scope and purpose of my direct testimony and a summary of T&L's
23 request. Section III describes the schedules that I am sponsoring as part of this filing.

1 Section IV describes the pro-forma adjustments made to the Company's test year books
2 and records. Section V discusses the capital structure and requested rate of return. Section
3 VI describes the customer usage data and weather adjusted sales by customer class. Section
4 VII provides an explanation of the allocations and results of the class cost of service study.
5 Section VIII of my direct testimony describes and presents the proposed rates for natural
6 gas service. Finally, Section IX summarizes my recommendations.

7 **II. PURPOSE AND SCOPE**

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

9 A. The purpose of my testimony is to present and support the gas sales, customer growth and
10 weather adjustments, class cost of service study, and proposed rate design for T&L.

11
12 **Q. PLEASE SUMMARIZE T&L'S REQUESTED COST OF SERVICE.**

13 A. T&L's cost of service study indicates a revenue requirement of \$309,593. Of this amount,
14 \$297,788 is intended to be recovered through base rates and \$11,775 through
15 miscellaneous service fees.

16
17 **Q. WHY IS T&L REQUESTING TO SET BASE RATES AT THIS LEVEL?**

18 A. It has been over ten years since T&L's last rate case. T&L's current rates are based on
19 outdated costs of conducting business and so the Company is requesting rates that will
20 reflect current costs of operating T&L.

III. SCHEDULES

Q. ARE YOU SPONSORING ANY SCHEDULES TO THE COMPANY'S APPLICATION?

A. Yes, I am sponsoring the entire application which consists of twelve schedules.

Q. PLEASE DESCRIBE SCHEDULE A.

A. Schedule A provides a summary of revenue by customer classification. This schedule identifies the MCF commodity sales and associated revenues per the Company's books, year-end customer and weather adjusted sales and revenue, and the proposed revenue for each retail customer class. The proposed percent change in revenue and the average cost per MCF are also provided on this schedule.

Q. PLEASE DESCRIBE SCHEDULE B.

A. Schedule B provides typical bill comparisons for the proposed rate schedules. The bill comparisons set forth the dollar and percentage change associated with various levels of use for customers.

Q. PLEASE DESCRIBE SCHEDULE C.

A. The development of proposed rates by class is detailed on Schedule C.

Q. PLEASE DESCRIBE SCHEDULE D.

A. Schedule D, the class cost of service analysis, provides the adjusted class cost of service study for the test year ending December 31, 2017. The class cost of service study is used

1 to determine the level of revenues necessary for each class to support its allocated revenue
2 requirement.

3
4 **Q. PLEASE DESCRIBE SCHEDULE E.**

5 A. Schedule E provides the billing units and present rates by rate schedule and provides the
6 calculation of adjusted revenues under present rates. The billing determinants applied are
7 fully adjusted customers and MCF sales levels.

8
9 **Q. PLEASE DESCRIBE SCHEDULE F.**

10 A. Schedule F is the bill frequency model which provides the monthly unadjusted billing
11 determinants by customer class. This schedule also develops the year-end and weather
12 adjusted billing determinants which will be discussed in detail in Section V of my direct
13 testimony.

14
15 **Q. PLEASE DESCRIBE SCHEDULE G.**

16 A. Schedule G sets forth the weather normalization adjustments. The weather normalization
17 adjustment was made to eliminate the effects of atypical historical temperature conditions
18 that cannot reasonably be anticipated to reoccur. The schedule includes a calculation of the
19 10-year normal heating degree days using data collected at the National Oceanic and
20 Atmospheric Administration ("NOAA") weather reporting station located in Conroe
21 Texas.

22
23 **Q. PLEASE DESCRIBE SCHEDULE H.**

1 A. Schedule H provides the rate of return calculation based on estimated debt and equity
2 values. The rate of return calculation is discussed in more detail in Section IV of my direct
3 testimony.

4
5 **Q. PLEASE DESCRIBE SCHEDULE I.**

6 A. Schedule I provides the calculation of federal income tax at the proposed rates. T&L has
7 incorporated an effective 21% federal income tax rate, reflective of the lower tax rate
8 included in the 2017 Tax Cuts and Job Act ("TCJA").

9
10 **Q. PLEASE DESCRIBE SCHEDULE J.**

11 A. Schedule J provides the calculation of allowed interest on customer deposits. The interest
12 rate of 0.91% used in this calculation is per the Railroad Commission of Texas, Oversight
13 and Safety Division, Gas Utilities Information Bulletin No. 1077, dated February 15, 2018.

14
15 **Q. PLEASE DESCRIBE SCHEDULE K.**

16 A. Schedule K provides the calculation of allowable advertising expenses pursuant to
17 Commission rule 7.5414.

18
19 **Q. PLEASE DESCRIBE SCHEDULE L.**

20 A. Schedule L provides a summary of the Company's requested depreciation rates.

21
22 **Q. WERE THESE SCHEDULES PREPARED BY YOU OR UNDER YOUR**
23 **SUPERVISION?**

1 A. Yes, they were.

2

3 **Q. ARE THESE SCHEDULES TRUE AND CORRECT TO THE BEST OF YOUR**
4 **KNOWLEDGE AND BELIEF?**

5 A. Yes, they are.

6 **IV. PRO-FORMA ADJUSTMENTS**

7 **Q. DID THE COMPANY MAKE ANY ADJUSTMENTS TO THE GAS**
8 **DEPARTMENT BOOKS AND RECORDS?**

9 A. Yes, labor and associated benefits and taxes were adjusted to annualize payroll increases.
10 In addition, adjustments were made to the Company's books and records to include Cash
11 Working Capital and exclude certain test year revenues.

12

13 **Q. PLEASE DESCRIBE THE ADJUSTMENT TO ANNUALIZE GAS DEPARTMENT**
14 **PAYROLL INCREASES.**

15 A. The owner, Steve Belovsky, and office manager, Cheryl Belovsky, have not had any recent
16 pay increases. Mr. Belovsky earns \$39,000 per year and Ms. Belovsky earns \$15,300 per
17 year. Concurrent with the rates approved in this proceeding, T&L proposes to increase both
18 Mr. Belovsky's and Ms. Belovsky's base salaries by \$750 per month. Therefore, a known
19 and measurable payroll adjustment was made to annualize these increases. The calculation
20 of this adjustment is provided on the schedule labeled Adjustment A.

21

1 **Q. PLEASE DESCRIBE THE ADJUSTMENT TO EMPLOYEE PENSIONS AND**
2 **BENEFITS.**

3 A. No adjustment was made to Employee Pensions as none were paid during the test year.
4 However, there was an adjustment made to reflect an increase in Medical Benefits which
5 is identified in Adjustment C.

6

7 **Q. PLEASE DESCRIBE THE ADJUSTMENT TO PAYROLL TAXES.**

8 A. As detailed on Adjustment D, the adjustment was calculated by applying the ratio of test
9 year Payroll Tax as a percent of test year payroll to the payroll increase identified in
10 Adjustment A.

11

12 **Q. PLEASE DESCRIBE THE CASH WORKING CAPITAL ADJUSTMENT.**

13 A. There is normally a time lag between the point when service is rendered and the related
14 operating costs are incurred and the point where the revenues to recover such costs are
15 received. The RRC provides for the use of 45-days or 12.50% of operating expense as a
16 component of rate base to fund these going-concern requirements of business.¹ The
17 Company's rate base was increased by \$31,078 on Schedule D, line 2026 to recognize the
18 cash working capital allowance.

19

20 **Q. PLEASE DESCRIBE THE ADJUSTMENT FOR MISCELLANEOUS SERVICE**
21 **CHARGES.**

¹ Railroad Commission of Texas, Gas Services Division, Natural Gas Rate Review Handbook, October 2012, Page 18.

1 A. T&L proposes to increase its miscellaneous service charges, as shown in Adjustment F.
2 The impact of the change in service charges is to increase miscellaneous service charge
3 revenue by \$936 over test year revenues.

4 **V. RATE OF RETURN**

5 **Q. PLEASE DESCRIBE THE CALCULATION OF THE COMPANY'S RATE OF**
6 **RETURN.**

7 A. In setting a gas utility's rates, the regulatory authority establishes the utility's overall
8 revenues at an amount that will permit the utility an opportunity to earn a reasonable return
9 on the utility's invested capital used and useful in providing service to the public in excess
10 of its reasonable and necessary operating expenses.² The overall rate of return is the sum
11 of a weighted cost of debt and return on equity.

12 Generally, regulated utilities have several sources of capital with which to finance
13 their utility assets: issuance of common stock and preferred stock, long-term debt, and
14 common equity. T&L, however does not issue publicly traded stock. Therefore, T&L has
15 imputed a return on equity based on a proxy group of utilities derived from a recent
16 proceeding before the Railroad Commission.³ Furthermore, T&L does not have any long-
17 term debt. The interest rate on long-term debt was estimated based on current interest rates
18 for long-term loans in T&L's service area.

² TEX UTIL. CODE §104.051.

³ See the Direct Testimony of Bruce Fairchild in GUD No. 10679, *SiEnergy's Statement of Intent to Increase Gas Utility Rates* (January 5, 2018).

1 As shown on Schedule H, I applied this methodology to yield a requested return on
2 equity of 11.50% and a cost of long-term debt of 7.49%. The weighted average rate of
3 return using a 50% debt / equity capital structure is 9.50%.

4 **VI. BILLING DETERMINANTS**

5 **Q. PLEASE DESCRIBE T&L's CUSTOMER CLASSES.**

6 A. T&L served 233 residential, 20 commercial and 2 industrial customers at the end of the
7 test year. Booked commodity sales were 39,268 MCF in the test year, 16% of which is
8 attributed to residential sales. Schedule F details by customer class the number of
9 customers, MCF sales and sales revenue for each month of the test year.

10
11 **Q. IS T&L PROPOSING ANY ADJUSTMENTS TO TEST YEAR BILLING**
12 **DETERMINANTS?**

13 A. Yes, T&L is proposing growth and weather normalization adjustments. Each of these
14 adjustments is described in more detail below.

15
16 **Growth Normalization Adjustment**

17 **Q. WHY ARE YOU PROPOSING A GROWTH NORMALIZATION ADJUSTMENT?**

18 A. T&L is using test year end plant in service to determine its cost of service. For consistency,
19 booked commodity sales and revenue need to be adjusted to show a full years' billing for
20 all customers receiving service at the end of the test year. This adjustment synchronizes
21 the test year-end revenue with the year-end investment.

1 **Q. PLEASE DESCRIBE HOW THIS ADJUSTMENT IS CALCULATED.**

2 A. This adjustment is calculated on Schedule F, lines 147 through 274. The adjustment to
3 commodity sales is calculated on a monthly basis as the ratio of the test year end number
4 of customers minus the historic number of customers in each month of the test year divided
5 by the historic number of customers in each month of the test year. This ratio is multiplied
6 by the monthly unadjusted MCF sales to determine the adjustment to commodity sales.
7 This adjustment to sales is multiplied by the applicable commodity charge to calculate the
8 impact on revenues.

9
10 **Q. WHAT IS THE ANNUAL IMPACT OF THIS ADJUSTMENT?**

11 A. As a result of this growth normalization adjustment, sales increase by 489 MCF and the
12 base rate revenue is adjusted upward by \$3,383.

13

14 **Weather Normalization Adjustment**

15 **Q. WHY ARE YOU PROPOSING A WEATHER NORMALIZATION**
16 **ADJUSTMENT?**

17 A. The weather normalization adjustment was necessary to ensure that sales volumes were
18 neither over-stated nor under-stated relative to normal temperatures. Failure to adjust for
19 abnormal temperature conditions would result in T&L under- or over-recovering its
20 allowed revenue requirement under temperature conditions that are normally expected to
21 occur. The weather normalization adjustment submitted in the rate filing adjusts only the
22 effects of abnormal heating degree days ("HDD"). The weather normalization adjustment
23 is provided in Schedule G of the rate application.

1
2 **Q. PLEASE DESCRIBE HOW THE TEST YEAR SALES BY CLASS OF SERVICE**
3 **WERE WEATHER NORMALIZED.**

4 A. The procedure for adjusting for abnormal temperature conditions involves determining the
5 temperature sensitive portion of monthly usage and dividing that temperature sensitive
6 usage by the actual degree days for the billing month. The weather normalization for gas
7 customers is made for HDD only since there is little or no effect of cooling degree days
8 (“CDD”) upon gas usage. HDD are calculated as the difference between the actual average
9 temperature and a base temperature of 65 degrees. For example, a day with a high
10 temperature of 55 degrees and a low temperature of 35 degrees has an average temperature
11 of 45 degrees and thus 20 HDD ($65^{\circ} - 45^{\circ}$). This is the common practice used to calculate
12 HDD and is the practice employed by NOAA, the source of the temperature data I
13 employed and the temperature information resource most frequently relied upon by the
14 utility industry.

15 Because NOAA degree days are recorded on a calendar month basis and T&L reads
16 its meters on the first of the month there is a perfect match between the degree day data
17 and gas consumption. Therefore, there is no need to further adjust the data to account for
18 staggered billing cycles. The temperature sensitive usage per MCF for the revenue month
19 calculated as described above is then multiplied by the normal (i.e. the expected or average)
20 number of degree days for the revenue month to derive the normal level of temperature
21 sensitive usage per customer. This normalized temperature sensitive usage per month per
22 customer is then added back to the non-temperature sensitive usage to produce the total
23 normalized usage per customer. Each month’s normalized use per customer is multiplied

1 by the year end number of customers to obtain total weather normalized MCF sales for the
2 month.

3
4 **Q. WHAT IS THE ANNUAL IMPACT OF THIS ADJUSTMENT?**

5 A. As a result of this weather normalization adjustment, total residential and commercial sales
6 increased by 2,837 MCF and base rate revenue increased by \$17,021.

7
8 **Q. WHAT HISTORICAL PERIOD DID YOU EMPLOY AS THE BASIS FOR**
9 **COMPUTING NORMAL HEATING DEGREE DAYS?**

10 A. For purposes of this filing, T&L used the most recent 10-year average to calculate normal
11 heating degree days.

12
13 **Q. WHY DID YOU APPLY THE WEATHER NORMALIZATION ADJUSTMENT TO**
14 **YEAR-END CUSTOMER ADJUSTED SALES INSTEAD OF BOOKED SALES?**

15 A. The Railroad Commission of Texas "Natural Gas Rate Review Handbook" dated October
16 2012 states on page 47 that when performing the weather normalization adjustment, "*All*
17 *figures should have already been adjusted for customer growth*".

18 **VII. CLASS COST OF SERVICE STUDY**

19 **Q. WHAT IS A CLASS COST OF SERVICE STUDY?**

20 A. A class cost of service study is an analysis that develops dollar revenue requirements by
21 customer class utilizing causal relationships between cost components and customer
22 characteristics as the basis for assigning costs. A class cost of service study uses the cost

1 elements of the total company revenue requirements and distributes these elements to
2 T&L's various customer classes either by direct assignment or by allocating costs if
3 necessary. Any costs that can be specifically identified as being incurred for the benefit of
4 or as a result of an individual customer or group of customers are directly assigned to that
5 specific customer(s) rate class. Costs that cannot be specifically assigned are allocated to
6 classes of customers using allocation factors that reflect the manner in which costs arise.

7 To a large extent, the reasonableness of the results of a cost of service study depends
8 upon the reasonableness of the methods by which costs are allocated to classes. When
9 allocating costs, it is important that the most appropriate cost driver for each individual
10 cost is used to allocate that cost. Selecting the most appropriate cost driver is essential to
11 ensuring that costs are allocated to the classes for which the costs are incurred. For this
12 reason, class cost of service studies are said to be based upon the principle of "cost
13 causation." Once the costs are allocated to the various rate classes, the total costs of serving
14 each class can be ascertained. By comparing the costs of service by class to the revenues
15 received from each class, rates can be designed for each class as appropriate.

16
17 **Q. PLEASE EXPLAIN WHAT YOU MEAN BY THE TERMS "ALLOCATE" AND**
18 **"ALLOCATION"?**

19 A. "Allocate" and "allocation," in the context of class cost of service and rate design, are terms
20 used to describe the process by which T&L's rate base items, expenses, and revenues are
21 apportioned among the various rate classes. This allocation is based on various causal
22 parameters. The choice of the parameter to be used is primarily based upon the notion that
23 "cost responsibility follows cost causation." Apportionment of cost responsibility is

1 accomplished by allocating or assigning various investments or costs among the rate
2 classes on a basis that represents the usage and, thus, the cost causation of these rate classes.
3

4 **Q. PLEASE DESCRIBE SCHEDULE D WHICH CONTAINS THE ADJUSTED**
5 **CLASS COST OF SERVICE STUDY.**

6 A. Schedule D is the class cost of service study using adjusted pro-forma amounts. In this
7 schedule each component of the system revenue requirement is set forth in rows and the
8 allocated portion of the various cost components for each class is set forth in the column
9 associated with the class. Allocation factors and the underlying information from which
10 the allocation factors are calculated are provided in the first two pages of Schedule D.
11 Following the allocation factor information, plant and other rate base items are allocated
12 to classes. Next, operation and maintenance expenses are allocated to classes using either
13 the input allocation factors or allocation factors that were developed based upon previously
14 allocated plant or rate base items. Following the allocation of operation and maintenance
15 expenses is the allocation of depreciation expense and taxes other than income. Next,
16 income is either allocated to classes (as in the case of other revenue) or directly assigned
17 to classes (as in the case of revenues from gas sales) and operating income is calculated
18 using the previously allocated revenues and expenses by class of service. From this
19 information, return by class under present rates is calculated. Finally, using the rate base,
20 expenses, taxes and revenues that have already been allocated to classes, the cost of service
21 study determines the dollars of return for each customer class under the proposed rate of
22 return and the revenue deficiencies by class of service are calculated.
23

1 **Q. PLEASE IDENTIFY THE RATE CLASSES USED IN THE CLASS COST OF**
2 **SERVICE AND RATE DESIGN STUDY.**

3 A. The rate classes used in the current gas filing include:

- 4 ● Environs Residential Service
- 5 ● Environs Commercial Service
- 6 ● Environs Industrial Service

7
8 **Q. PLEASE DESCRIBE THE ALLOCATION METHODOLOGIES YOU**
9 **EMPLOYED IN THE CLASS COST OF SERVICE STUDY TO ALLOCATE**
10 **COSTS.**

11 A. There are numerous specific allocations made in the cost of service study. The specific
12 allocation of each revenue requirement component is identified by the allocation factor set
13 forth next to the total column. The allocation factors contained in the cost of service study
14 are either externally developed allocation factors (independent) or internally developed
15 allocation factors (dependent). Externally developed allocation factors are calculated using
16 information that is developed externally to the cost of service study, such as sales volumes
17 or number of customer allocation factors. Internally developed allocation factors are
18 calculated within the cost of service study based upon the results of previously allocated
19 items, such as total plant in service.

20 Peak day volumes were used to allocate measurement and regulatory station plant,
21 and distribution mains. While T&L does not possess specific design-day nor peak day
22 send-out data, peak day values were developed using proxy data to calculate demand
23 related allocation factors. The peak day estimates were developed by applying class load

1 factors taken from the Cost Allocation and Rate Design (CARD) model found in
2 CenterPoint Energy Entex Texas Coast Division recent rate filing.⁴ The load factors were
3 used to impute peak day volumes based on average sales volume data.
4

5 **Q. PLEASE DESCRIBE THE OTHER ALLOCATION FACTORS EMPLOYED IN**
6 **THE GAS COST OF SERVICE STUDY.**

7 A. Customer related costs such as meters, services, and house regulators were allocated to
8 classes using the number of customers by class weighted by the relative costs of meters.
9 Distribution expenses related to plant accounts were allocated to classes on previously
10 allocated distribution plant. Administrative and general expenses were allocated to classes
11 on the basis of previously allocated items.
12

13 **Q. PLEASE DESCRIBE THE RESULTS OF THE COST OF SERVICE STUDY.**

14 A. The results of the class cost of service study indicate that the Residential and Industrial
15 classes requires an increase above the system average while the Commercial class requires
16 a rate reduction.

17 **VIII. RATE DESIGN**

18 **Q. PLEASE SUMMARIZE THE RATES YOU PROPOSE FOR T&L.**

19 A. While the cost of service study indicates that the Residential and Industrial classes require
20 a rate increase while the Commercial class requires a decrease, T&L requests that rate
21 stability be considered and that a relatively balanced rate increase be applied. T&L

⁴ GUD No. 10432, *Statement of Intent of CenterPoint Energy Resources Corp., dba CenterPoint Energy Entex and CenterPoint Energy Texas Gas to Increase Rates on a Division-Wide Basis in the Texas Coast Division.*

proposes no structural changes to the existing gas service rates. However, T&L proposes to increase the levels of the Customer and Commodity Charges for each customer class to recover its cost of service and to provide for more revenue stability.

The proposed Customer Charge for Residential customers was increased from \$16.00 per month to \$19.00, and for Commercial customers was increased from \$16.00 per month to \$20.00. The proposed Customer Charge for Industrial customers was increased from \$25.00 to \$35.00. The proposed Commodity Charge for Residential and Commercial customers was increased from \$6.00 per MCF to \$8.25 per MCF, and for Industrial customers was increased from \$2.00 per MCF to \$3.50 per MCF.

The following table provides a comparison of the present and proposed rates by class of service:

<u>Customer Class</u>	<u>Present Rates</u>		<u>Proposed Rates</u>	
	<u>Customer Charge</u> <u>\$/Month</u>	<u>Commodity Charge</u> <u>\$/MCF</u>	<u>Customer Charge</u> <u>\$/Month</u>	<u>Commodity Charge</u> <u>\$/MCF</u>
Residential	\$16.00	\$6.00	\$19.00	\$8.25
Commercial	\$16.00	\$6.00	\$20.00	\$8.25
Industrial	\$25.00	\$2.00	\$35.00	\$3.50

Q. DOES T&L PROPOSE ANY OTHER CHANGES TO ITS TARIFFS?

A. Yes. T&L proposes to file separate rate tariffs for the following:

- Residential – Environs
- Commercial – Environs
- Industrial - Environs
- Gas Cost Adjustment
- Revenue Related Tax Adjustment
- Rate Case Expense (RCE) Rider
- Other Surcharges
- Miscellaneous Service Charges

1 **Q. WHERE IN THE MODEL ARE THE DEVELOPMENT OF T&L'S PROPOSED**
2 **RATES SUMMARIZED?**

3 A. Schedule C provides the billing units and proposed rates by rate schedule and provides the
4 calculation of adjusted revenues under proposed rates. The billing determinants employed
5 to develop the proposed revenues are fully adjusted customers and weather adjusted MCF
6 sales levels. Schedule B provides bill impact analyses for the proposed rate schedules.
7 The bill impact analyses set forth the dollar and percentage increases associated with
8 various levels of use for customers.

9

10 **IX. AFFILIATE TRANSACTIONS**

11 **Q. DOES T&L HAVE ANY AFFILIATE TRANSACTIONS?**

12 A. Yes. T&L's natural gas is supplied by Montgomery County Gas Management, LLC
13 ("MCGM"). MCGM is an affiliate of T&L because it is owned by a family member of the
14 owner of T&L and T&L has an indirect ownership interest in MCGM.

15

16 **Q. DOES T&L PROVIDE ANY SERVICES TO MCGM?**

17 A. Yes. T&L provides billing services on behalf of MCGM. T&L's office manager provides
18 these services and her time is allocated to MCGM on the basis of the number of bills
19 handled. This allocation adjustment is shown on the *Adjustment B – Shared Labor* tab of
20 the cost of service model and in T&L's Cost Allocation Model included with the
21 workpapers attached to this filing. The owner of T&L provides a limited amount of help to

1 MCGM on nights and weekends when needed. None of his time has been allocated to
2 MCGM since regular business hours are devoted solely to the operations of T&L.
3

4 **Q. ARE T&L'S AFFILIATE TRANSACTIONS REASONABLE?**

5 A. Yes, gas supply is delivered under a reasonable supply agreement and billing activities are
6 allocated under a reasonable cost allocation methodology.
7

8 **X. CONCLUSION**

9 **Q. WHERE ARE THE PROPOSED REVENUES BY CUSTOMER CLASS**
10 **SUMMARIZED?**

11 A. Schedule A provides an overall summary of the impact of the adjustments proposed by
12 T&L and the impact of rate changes on each of the retail customer classes. The impact of
13 the proposed rate design is shown both with and without the cost of gas. The total revenue
14 increase, including the cost of gas, is 25.33 percent. While the increase in base rates only
15 (excluding the cost of gas and other revenues) is 41.73 percent.
16

17 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS REGARDING THE**
18 **CLASS BILLING DETERMINANTS.**

19 A. T&L is using test year end plant in service to determine its cost of service. For consistency,
20 booked commodity sales and revenue need to be adjusted to show a full years billing for
21 all customers receiving service at the end of the test year. This adjustment synchronizes
22 the test year-end revenue with the year-end investment.

1 The weather normalization adjustment was necessary to ensure that gas sales
2 volumes were neither over-stated nor under-stated in terms of normal temperatures. Failure
3 to adjust for abnormal temperature conditions would result in T&L under- or over-
4 recovering the allowed revenue requirements under temperature conditions that are
5 normally expected to occur.

6
7 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS REGARDING THE**
8 **CLASS COST OF SERVICE STUDY THAT YOU SPONSOR.**

9 A. The cost of service study provides the allocated revenue requirements by class of service.
10 The allocation methods employed to assign costs to customer classes vary depending upon
11 the particular cost item being allocated using the best data available. For example, mains
12 investment was allocated to classes on the basis of estimated peak day volumes. Customer
13 related costs were allocated on the basis of the number of meters or customers weighted by
14 the relative costs of the assets or expenses being allocated (e.g., meters, regulators,
15 customer accounting expense, etc.).

16 The class cost of service study employs allocation methods that are commonly
17 employed in work of this nature and the results of the allocations are fair and reasonable.

18
19 **Q. PLEASE SUMMARIZE YOUR RATE DESIGN RECOMMENDATIONS.**

20 A. The rate design proposed by T&L reflects rate stability and a continuation of the current
21 rate structure. The Customer and Commodity Charges have been increased to reflect the
22 cost of providing service and to provide for more revenue stability.

1 **Q. IN YOUR OPINION, ARE THE ADJUSTED BILL FREQUENCIES, THE CLASS**
2 **COST OF SERVICE STUDY, AND THE RATE DESIGN PROPOSED BY T&L IN**
3 **ITS RATE FILING APPLICATION FAIR AND REASONABLE?**

4 **A. Yes, they are.**

5

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

7 **A. Yes.**

GAS UTILITIES DOCKET NO. _____

**STATEMENT OF INTENT FILED BY
LDC, LLC TO CHANGE RATES IN
THE ENVIRONS OF THE CITY OF
MONTGOMERY, TEXAS**

**§
§
§
§**

**BEFORE THE
RAILROAD COMMISSION
OF TEXAS**

DIRECT TESTIMONY

OF

KARL J. NALEPA

ON BEHALF OF

LDC, LLC

APRIL 14, 2017

**DIRECT TESTIMONY OF
KARL J. NALEPA**

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ADJUSTMENT E – Revenues

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GAS UTILITIES DOCKET NO. _____

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**BEFORE THE
RAILROAD COMMISSION
OF TEXAS**

**DIRECT TESTIMONY OF
KARL J. NALEPA**

I. INTRODUCTION AND QUALIFICATIONS

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

A. My name is Karl J. Nalepa. I am President of ReSolved Energy Consulting, LLC, an independent utility consulting company. My business address is 11044 Research Blvd., Suite A-420, Austin, Texas 78759.

Q. ON WHOSE BEHALF ARE YOU PRESENTING TESTIMONY IN THIS PROCEEDING?

A. I am presenting testimony on behalf of LDC, LLC, ("LDC" or "Company").

Q. PLEASE OUTLINE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND.

A. I hold a Bachelor of Science degree in Mineral Economics and a Master of Science degree in Petroleum Engineering, and am a certified mediator. I have been a partner in ReSolved Energy Consulting since July 2011, but joined R.J. Covington Consulting, its predecessor

1 firm, in June 2003 as a Management Consultant. Before that I served for more than five
2 years as an Assistant Director with the Texas Railroad Commission ("RRC"). In this
3 position, I was responsible for overseeing the economic regulation of natural gas utilities
4 in Texas. And prior to that, I spent five years with two different consulting firms providing
5 advice regarding a broad range of electric and natural gas industry issues. Before that, I
6 served four years as a Fuels Analyst with the Public Utility Commission of Texas ("PUC").
7 My professional career began with eight years in the reservoir engineering department of
8 the exploration company affiliated with Transco Gas Pipeline, a major interstate pipeline
9 company. My Statement of Qualifications is included as Appendix A.
10

11 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?**

12 A. Yes, I have testified many times before both the RRC and the PUC on a variety of
13 regulatory issues. I have also provided testimony before the Louisiana Public Service
14 Commission and the Arkansas Public Service Commission. A summary of my previously
15 filed testimony is included as Attachment B. In addition, I supervised the staff case in
16 proceedings before the RRC and served as a Technical Rate Examiner on behalf of the
17 RRC. Finally, I have provided analysis and recommendations in a number of city-level
18 regulatory proceedings that resulted in settlements without written testimony.
19

20 **Q. HOW IS YOUR TESTIMONY ORGANIZED?**

21 A. Section I summarizes my experience, education, and qualifications. Section II of my
22 testimony provides the scope and purpose of my direct testimony and a summary of LDC's
23 request. Section III describes the schedules that I am sponsoring as part of this filing.

1 Section IV describes the pro-forma adjustments made to the Company's test year books
2 and records. Section V discusses the capital structure and requested rate of return. Section
3 VI describes the customer usage data and weather adjusted sales by customer class. Section
4 VII provides an explanation of the allocations and results of the natural gas class cost of
5 service study. Section VIII of my direct testimony describes and presents the proposed
6 rates for natural gas service. Finally, Section IX summarizes my recommendations.

7 **II. PURPOSE AND SCOPE**

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

9 A. The purpose of my testimony is to present and support the gas sales, customer growth and
10 weather adjustments, class cost of service study, and proposed rate design for LDC.

11
12 **Q. PLEASE SUMMARIZE LDC'S REQUESTED COST OF SERVICE.**

13 A. LDC's cost of service study indicates a revenue requirement of \$1,422,367. Of this amount,
14 \$782,678 is intended to be recovered through base rates and \$639,689 through contract
15 sales and miscellaneous service fees. However, LDC is asking to set base rates to recover
16 only \$731,118. This is \$51,560 less than indicated by the cost of service model.

17
18 **Q. WHY IS LDC REQUESTING TO SET BASE RATES AT THIS LEVEL?**

19 A. There are several reasons that LDC is requesting base rates set at the proposed level. First,
20 LDC seeks to set rates that are attractive compared to competing energy providers and
21 believes the requested rates do that. Second, LDC serves a growing area of Montgomery
22 County. In fact, since its last base rate case in 2009, the number of customers served by

1 LDC has more than doubled. During the current test year, the number of customers served
2 by LDC increased 8%. LDC is confident that load growth will help generate the shortfall
3 in revenues at the proposed rates. Finally, LDC plans to request annual interim rate
4 adjustments as allowed by law, and expects that these filings will ensure adequate revenues
5 for LDC as its continues to expand its distribution system.

6 **III. SCHEDULES**

7 **Q. ARE YOU SPONSORING ANY SCHEDULES TO THE COMPANY'S**
8 **APPLICATION?**

9 A. Yes, I am sponsoring the entire application which consists of twelve schedules.

10
11 **Q. PLEASE DESCRIBE SCHEDULE A.**

12 A. Schedule A provides a summary of revenue by customer classification. This schedule
13 identifies the MCF commodity sales and associated revenues per the Company's books,
14 year-end customer and weather adjusted sales and revenue, and the proposed revenue for
15 each retail customer class. The proposed percent change in revenue and the average cost
16 per MCF are also provided on this schedule.

17
18 **Q. PLEASE DESCRIBE SCHEDULE B.**

19 A. Schedule B provides typical bill comparisons for the proposed rate schedules. The bill
20 comparisons set forth the dollar and percentage change associated with various levels of
21 use for customers.

1 **Q. PLEASE DESCRIBE SCHEDULE C.**

2 A. The development of proposed rates by class is detailed on Schedule C.

3

4 **Q. PLEASE DESCRIBE SCHEDULE D.**

5 A. Schedule D, the class cost of service analysis, provides the adjusted class cost of service
6 study for the test year ending December 31, 2016. The class cost of service study is used
7 to determine the level of revenues necessary for each class to support its allocated revenue
8 requirement.

9

10 **Q. PLEASE DESCRIBE SCHEDULE E.**

11 A. Schedule E provides the billing units and present rates by rate schedule and provides the
12 calculation of adjusted revenues under present rates. The billing determinants applied are
13 fully adjusted customers and MCF sales levels.

14

15 **Q. PLEASE DESCRIBE SCHEDULE F.**

16 A. Schedule F is the bill frequency model which provides the monthly unadjusted billing
17 determinants by customer class. This schedule also develops the year-end and weather
18 adjusted billing determinants which will be discussed in detail in Section V of my direct
19 testimony.

20

21 **Q. PLEASE DESCRIBE SCHEDULE G.**

22 A. Schedule G sets forth the weather normalization adjustments. The weather normalization
23 adjustment was made to eliminate the effects of atypical historical temperature conditions

1 that cannot reasonably be anticipated to reoccur. The schedule includes a calculation of the
2 10 year normal heating degree days using data collected at the National Oceanic and
3 Atmospheric Administration ("NOAA") weather reporting station located in Conroe
4 Texas.

5
6 **Q. PLEASE DESCRIBE SCHEDULE H.**

7 A. Schedule H provides the rate of return calculation based estimated debt and equity values.
8 The rate of return calculation is discussed in more detail in Section IV of my direct
9 testimony.

10
11 **Q. PLEASE DESCRIBE SCHEDULE I.**

12 A. Schedule I provides the calculation of federal income tax at the proposed rates. Based on
13 its proposed revenues, LDC will be subject to an effective 35.2% federal income tax rate.

14
15 **Q. PLEASE DESCRIBE SCHEDULE J.**

16 A. Schedule J provides the calculation of allowed interest on customer deposits. The interest
17 rate of 0.11% used in this calculation is per the Railroad Commission of Texas, Gas
18 Services Division, Gas Utilities Information Bulletin No. 1050, dated December 28, 2016.

19
20 **Q. PLEASE DESCRIBE SCHEDULE K.**

21 A. Schedule K provides the calculation of allowable advertising expenses pursuant to
22 Commission rule 7.5414. However, this calculation is for demonstration only as LDC did
23 not have advertising expenses during the test year.

1

2 **Q. PLEASE DESCRIBE SCHEDULE L.**

3 A. Schedule L provides a summary of the Company's requested depreciation rates.

4

5 **Q. WERE THESE SCHEDULES PREPARED BY YOU OR UNDER YOUR**
6 **SUPERVISION?**

7 A. Yes, they were.

8

9 **Q. ARE THESE SCHEDULES TRUE AND CORRECT TO THE BEST OF YOUR**
10 **KNOWLEDGE AND BELIEF?**

11 A. Yes, they are.

12

IV. PRO-FORMA ADJUSTMENTS

13 **Q. DID THE COMPANY MAKE ANY ADJUSTMENTS TO THE GAS**
14 **DEPARTMENT BOOKS AND RECORDS?**

15 A. Yes, labor and associated benefits and taxes were adjusted to annualize payroll increases.
16 In addition, adjustments were made to the Company's books and records to include Cash
17 Working Capital and exclude certain test year revenues.

18

19 **Q. PLEASE DESCRIBE THE ADJUSTMENT TO ANNUALIZE GAS DEPARTMENT**
20 **PAYROLL INCREASES.**

1 A. Three employees received pay increases in January 2017. Therefore, a known and
2 measurable payroll adjustment was made to annualize these increases. The calculation of
3 this adjustment is provided on the schedule labeled Adjustment A.
4

5 **Q. PLEASE DESCRIBE THE ADJUSTMENT TO EMPLOYEE PENSIONS AND**
6 **BENEFITS.**

7 A. No adjustment was made to Employee Pensions and Benefits as none were paid during the
8 test year.
9

10 **Q. PLEASE DESCRIBE THE ADJUSTMENT TO PAYROLL TAXES.**

11 A. As detailed on Adjustment D, the adjustment was calculated by applying the ratio of test
12 year Payroll Tax as a percent of test year payroll to the payroll increase identified in
13 Adjustment A.
14

15 **Q. PLEASE DESCRIBE THE CASH WORKING CAPITAL ADJUSTMENT.**

16 A. There is normally a time lag between the point when service is rendered and the related
17 operating costs are incurred and the point where the revenues to recover such costs are
18 received. The RRC provides for the use of 45-days or 12.50% of operating expense as a
19 component of rate base to fund these going-concern requirements of business.¹ The
20 Company's rate base was increased by \$38,420 on Schedule D, line 2024 to recognize the
21 cash working capital allowance.
22

¹ Railroad Commission of Texas, Gas Services Division, Natural Gas Rate Review Handbook, October 2012, Page 18.

1 **Q. PLEASE DESCRIBE THE REVENUE ADJUSTMENT.**

2 A. During the test year, LDC realized revenues associated with an industrial customer, EVO,
3 of \$83,857. It also realized miscellaneous service revenues of \$99,146 and transportation
4 revenues of \$78,346 associated with another industrial customer, SIGMA. However, EVO
5 was sold effective in January 2017 and SIGMA was sold effective in July 2016. Thus, total
6 revenues of \$261,448 was removed from the rate filing as shown in Adjustment E.

7
8 **Q. PLEASE DESCRIBE THE ADJUSTMENT FOR MISCELLANEOUS SERVICE**
9 **CHARGES.**

10 A. LDC proposes to increase its miscellaneous service charges, as shown in Adjustment F.
11 The impact of the change in service charges is to increase miscellaneous service charge
12 revenue by \$30,740 over test year revenues.

13 **V. RATE OF RETURN**

14 **Q. PLEASE DESCRIBE THE CALCULATION OF THE COMPANY'S RATE OF**
15 **RETURN.**

16 A. In setting a gas utility's rates, the regulatory authority establishes the utility's overall
17 revenues at an amount that will permit the utility an opportunity to earn a reasonable return
18 on the utility's invested capital used and useful in providing service to the public in excess
19 of its reasonable and necessary operating expenses.² The overall rate of return is the sum
20 of a weighted cost of debt and return on equity. Generally, regulated utilities have several
21 sources of capital with which to finance their utility assets: issuance of common stock and

² TEX UTIL. CODE §104.051.

1 preferred stock, long-term debt, and common equity. LDC, however does not issue publicly
2 traded stock.

3 The RRC found in LDC's previous rate filing that due to the nature of its owners'
4 long term loans to the Company, that its return on equity and capital structure should be
5 based on a proxy group of utilities rather than actuals. Therefore, LDC has imputed a
6 weighted cost of capital based upon the Commission's latest decisions regarding return on
7 equity and capital structure, along with LDC's actual weighted average cost of long-term
8 debt. As shown on Schedule H, I applied this methodology to arrive at a rate of return on
9 rate base of 7.97%.

10 **VI. BILLING DETERMINANTS**

11 **Q. PLEASE DESCRIBE LDC'S CUSTOMER CLASSES.**

12 A. LDC served 962 residential and 30 commercial customers at the end of the test year.
13 Booked commodity sales were 59,157 MCF in the test year, 65% of which is attributed to
14 residential sales. Schedule F details by customer class the number of customers, MCF sales
15 and sales revenue for each month of the test year.

16
17 **Q. IS LDC PROPOSING ANY ADJUSTMENTS TO TEST YEAR BILLING**
18 **DETERMINANTS?**

19 A. Yes, LDC is proposing growth and weather normalization adjustments. Each of these
20 adjustments is described in more detail below.

1

2

Growth Normalization Adjustment

3 **Q. WHY ARE YOU PROPOSING A GROWTH NORMALIZATION ADJUSTMENT?**

4 A. LDC is using test year end plant in service to determine its cost of service. For consistency,
5 booked commodity sales and revenue need to be adjusted to show a full years' billing for
6 all customers receiving service at the end of the test year. This adjustment synchronizes
7 the test year-end revenue with the year-end investment.

8

9 **Q. PLEASE DESCRIBE HOW THIS ADJUSTMENT IS CALCULATED.**

10 A. This adjustment is calculated on Schedule F, lines 128 through 256. The adjustment to
11 commodity sales is calculated on a monthly basis as the ratio of the test year end number
12 of customers minus the historic number of customers in each month of the test year divided
13 by the historic number of customers in each month of the test year. This ratio is multiplied
14 by the monthly unadjusted MCF sales to determine the adjustment to commodity sales.
15 This adjustment to sales is multiplied by the applicable commodity charge to calculate the
16 impact on revenues.

17

18 **Q. WHAT IS THE ANNUAL IMPACT OF THIS ADJUSTMENT?**

19 A. As a result of this growth normalization adjustment, sales increase by 2,661 MCF and the
20 base rate revenue is adjusted upward by \$22,653.

Weather Normalization Adjustment

Q. WHY ARE YOU PROPOSING A WEATHER NORMALIZATION ADJUSTMENT?

A. The weather normalization adjustment was necessary to ensure that sales volumes were neither over-stated nor under-stated relative to normal temperatures. Failure to adjust for abnormal temperature conditions would result in LDC under- or over-recovering its allowed revenue requirement under temperature conditions that are normally expected to occur. The weather normalization adjustment submitted in the rate filing adjusts only the effects of abnormal heating degree days ("HDD"). The weather normalization adjustment is provided in Schedule G of the rate application.

Q. PLEASE DESCRIBE HOW THE TEST YEAR SALES BY CLASS OF SERVICE WERE WEATHER NORMALIZED.

A. The procedure for adjusting for abnormal temperature conditions involves determining the temperature sensitive portion of monthly usage and dividing that temperature sensitive usage by the actual degree days for the billing month. The weather normalization for gas customers is made for HDD only since there is little or no effect of cooling degree days ("CDD") upon gas usage. HDD are calculated as the difference between the actual average temperature and a base temperature of 65 degrees. For example, a day with a high temperature of 55 degrees and a low temperature of 35 degrees has an average temperature of 45 degrees and thus 20 HDD (65° - 45°). This is the common practice used to calculate HDD and is the practice employed by NOAA, the source of the temperature data I

1 employed and the temperature information resource most frequently relied upon by the
2 utility industry.

3 Because NOAA degree days are recorded on a calendar month basis and LDC reads
4 its meters on the first of the month there is a perfect match between the degree day data
5 and gas consumption. Therefore, there is no need to further adjust the data to account for
6 staggered billing cycles. The temperature sensitive usage per MCF for the revenue month
7 calculated as described above is then multiplied by the normal (i.e. the expected or average)
8 number of degree days for the revenue month to derive the normal level of temperature
9 sensitive usage per customer. This normalized temperature sensitive usage per month per
10 customer is then added back to the non-temperature sensitive usage to produce the total
11 normalized usage per customer. Each month's normalized use per customer is multiplied
12 by the year end number of customers to obtain total weather normalized MCF sales for the
13 month.

14
15 **Q. WHAT IS THE ANNUAL IMPACT OF THIS ADJUSTMENT?**

16 A. As a result of this weather normalization adjustment, total residential and commercial sales
17 increased by 2,345 MCF and base rate revenue increased by \$10,871.

18
19 **Q. WHAT HISTORICAL PERIOD DID YOU EMPLOY AS THE BASIS FOR**
20 **COMPUTING NORMAL HEATING DEGREE DAYS?**

21 A. For purposes of this filing, LDC used the most recent 10 year average to calculate normal
22 heating degree days.

1 **Q. WHY DID YOU APPLY THE WEATHER NORMALIZATION ADJUSTMENT TO**
2 **YEAR-END CUSTOMER ADJUSTED SALES INSTEAD OF BOOKED SALES?**

3 A. The Railroad Commission of Texas “Natural Gas Rate Review Handbook” dated October
4 2012 states on page 47 that when performing the weather normalization adjustment, “*All*
5 *figures should have already been adjusted for customer growth*”.

6 **VII. CLASS COST OF SERVICE STUDY**

7 **Q. WHAT IS A CLASS COST OF SERVICE STUDY?**

8 A. A class cost of service study is an analysis that develops dollar revenue requirements by
9 customer class utilizing causal relationships between cost components and customer
10 characteristics as the basis for assigning costs. A class cost of service study uses the cost
11 elements of the total company revenue requirements and distributes these elements to
12 LDC’s various customer classes either by direct assignment or by allocating costs if
13 necessary. Any costs that can be specifically identified as being incurred for the benefit of
14 or as a result of an individual customer or group of customers are directly assigned to that
15 specific customer(s) rate class. Costs that cannot be specifically assigned are allocated to
16 classes of customers using allocation factors that reflect the manner in which costs arise.

17 To a large extent, the reasonableness of the results of a cost of service study depends
18 upon the reasonableness of the methods by which costs are allocated to classes. When
19 allocating costs, it is important that the most appropriate cost driver for each individual
20 cost is used to allocate that cost. Selecting the most appropriate cost driver is essential to
21 ensuring that costs are allocated to the classes for which the costs are incurred. For this
22 reason, class cost of service studies are said to be based upon the principle of “cost

1 causation.” Once the costs are allocated to the various rate classes, the total costs of serving
2 each class can be ascertained. By comparing the costs of service by class to the revenues
3 received from each class, rates can be designed for each class as appropriate.
4

5 **Q. PLEASE EXPLAIN WHAT YOU MEAN BY THE TERMS “ALLOCATE” AND**
6 **“ALLOCATION”?**

7 A. “Allocate” and “allocation,” in the context of class cost of service and rate design, are terms
8 used to describe the process by which LDC’s rate base items, expenses, and revenues are
9 apportioned among the various rate classes. This allocation is based on various causal
10 parameters. The choice of the parameter to be used is primarily based upon the notion that
11 “cost responsibility follows cost causation.” Apportionment of cost responsibility is
12 accomplished by allocating or assigning various investments or costs among the rate
13 classes on a basis that represents the usage and, thus, the cost causation of these rate classes.
14

15 **Q. PLEASE DESCRIBE SCHEDULE D WHICH CONTAINS THE ADJUSTED**
16 **CLASS COST OF SERVICE STUDY.**

17 A. Schedule D is the class cost of service study using adjusted pro-forma amounts. In this
18 schedule each component of the system revenue requirement is set forth in rows and the
19 allocated portion of the various cost components for each class is set forth in the column
20 associated with the class. Allocation factors and the underlying information from which
21 the allocation factors are calculated are provided in the first two pages of Schedule D.
22 Following the allocation factor information, plant and other rate base items are allocated
23 to classes. Next, operation and maintenance expenses are allocated to classes using either

1 the input allocation factors or allocation factors that were developed based upon previously
2 allocated plant or rate base items. Following the allocation of operation and maintenance
3 expenses is the allocation of depreciation expense and taxes other than income. Next,
4 income is either allocated to classes (as in the case of other revenue) or directly assigned
5 to classes (as in the case of revenues from gas sales) and operating income is calculated
6 using the previously allocated revenues and expenses by class of service. From this
7 information, return by class under present rates is calculated. Finally, using the rate base,
8 expenses, taxes and revenues that have already been allocated to classes, the cost of service
9 study determines the dollars of return for each customer class under the proposed rate of
10 return and the revenue deficiencies by class of service are calculated.

11
12 **Q. PLEASE IDENTIFY THE RATE CLASSES USED IN THE CLASS COST OF**
13 **SERVICE AND RATE DESIGN STUDY.**

14 **A.** The rate classes used in the current gas filing include:

- 15 ● Incorporated Residential Service
- 16 ● Environs Residential Service
- 17 ● Incorporated Commercial Service
- 18 ● Environs Commercial Service

19
20 **Q. PLEASE DESCRIBE THE ALLOCATION METHODOLOGIES YOU**
21 **EMPLOYED IN THE CLASS COST OF SERVICE STUDY TO ALLOCATE**
22 **COSTS.**

1 A. There are numerous specific allocations made in the cost of service study. The specific
2 allocation of each revenue requirement component is identified by the allocation factor set
3 forth next to the total column. The allocation factors contained in the cost of service study
4 are either externally developed allocation factors (independent) or internally developed
5 allocation factors (dependent). Externally developed allocation factors are calculated using
6 information that is developed externally to the cost of service study, such as sales volumes
7 or number of customer allocation factors. Internally developed allocation factors are
8 calculated within the cost of service study based upon the results of previously allocated
9 items, such as total plant in service.

10 Commodity sales volumes were used to allocate measurement and regulatory
11 station plant, and distribution mains. LDC does not possess the design-day nor peak day
12 send-out data required to calculate demand related allocation factors.

13
14 **Q. PLEASE DESCRIBE THE OTHER ALLOCATION FACTORS EMPLOYED IN**
15 **THE GAS COST OF SERVICE STUDY.**

16 A. Customer related costs such as meters, services, and house regulators were allocated to
17 classes using the number of customers by class weighted by the relative costs of meters.
18 Distribution expenses related to plant accounts were allocated to classes on previously
19 allocated distribution plant. Administrative and general expenses were allocated to classes
20 on the basis of previously allocated items.

21
22 **Q. PLEASE DESCRIBE THE RESULTS OF THE COST OF SERVICE STUDY.**

A. The results of the class cost of service study indicate that the Commercial class requires a greater increase than the system average percentage increase. The Residential class requires an increase less than the system average.

VIII. RATE DESIGN

Q. PLEASE SUMMARIZE THE RATES YOU PROPOSE FOR LDC.

A. LDC proposes no structural changes to the existing gas service rates. However, LDC proposes to increase the levels of the Customer and Commodity Charges for its gas rates to recover its cost of service and to provide for more revenue stability. LDC also proposes to remove the prompt payment discount of 2.5% for payment of bills received within ten (10) days from the date of the bill.

The proposed Customer Charge for Residential and Commercial customers was increased from \$15.00 per month to \$21.00 per month. The proposed Commodity Charge for Residential customers was increased from \$6.75 per MCF to \$8.25 per MCF, and for Commercial customers was increased from \$4.75 per MCF to \$6.25 per MCF.

The following table provides a comparison of the present and proposed rates by class of service:

	<u>Present Rates</u>		<u>Proposed Rates</u>	
	Customer Charge	Commodity Charge	Customer Charge	Commodity Charge
<u>Customer Class</u>	<u>\$/Month</u>	<u>\$/MCF</u>	<u>\$/Month</u>	<u>\$/MCF</u>
Residential	\$15.00	\$6.75	\$21.00	\$8.25
Commercial	\$15.00	\$4.75	\$21.00	\$6.25

Q. DOES LDC PROPOSE ANY OTHER CHANGES TO ITS TARIFFS?

A. Yes. LDC proposes to file separate rate tariffs for the following:

1 Residential – Incorporated
2 Residential – Environs
3 Commercial – Incorporated
4 Commercial – Environs
5 Cost of Gas Adjustment
6 Rate Case Expense (RCE) Rider
7

8 **Q. WHERE IN THE MODEL ARE THE DEVELOPMENT OF LDC'S PROPOSED**
9 **RATES SUMMARIZED?**

10 A. Schedule C provides the billing units and proposed rates by rate schedule and provides the
11 calculation of adjusted revenues under proposed rates. The billing determinants employed
12 to develop the proposed revenues are fully adjusted customers and weather adjusted MCF
13 sales levels. Schedule B provides bill impact analyses for the proposed rate schedules.
14 The bill impact analyses set forth the dollar and percentage increases associated with
15 various levels of use for customers.

16 **IX. CONCLUSION**

17 **Q. WHERE ARE THE PROPOSED REVENUES BY CUSTOMER CLASS**
18 **SUMMARIZED?**

19 A. Schedule A provides an overall summary of the impact of the adjustments proposed by
20 LDC and the impact of rate changes on each of the retail customer classes. The impact of
21 the proposed rate design is shown both with and without the cost of gas. The total revenue
22 increase, including the cost of gas, is 12.7 percent. While the increase in base rates only
23 (excluding the cost of gas and other revenues) is 29.8 percent.
24

1 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS REGARDING THE**
2 **CLASS BILLING DETERMINANTS.**

3 A. LDC is using test year end plant in service to determine its cost of service. For consistency,
4 booked commodity sales and revenue need to be adjusted to show a full years billing for
5 all customers receiving service at the end of the test year. This adjustment synchronizes
6 the test year-end revenue with the year-end investment.

7 The weather normalization adjustment was necessary to ensure that gas sales
8 volumes were neither over-stated nor under-stated in terms of normal temperatures. Failure
9 to adjust for abnormal temperature conditions would result in LDC under- or over-
10 recovering the allowed revenue requirements under temperature conditions that are
11 normally expected to occur.

12

13 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS REGARDING THE**
14 **CLASS COST OF SERVICE STUDY THAT YOU SPONSOR.**

15 A. The cost of service study provides the allocated revenue requirements by class of service.
16 The allocation methods employed to assign costs to customer classes vary depending upon
17 the particular cost item being allocated using the best data available. For example, mains
18 investment was allocated to classes on the basis of the sales volumes method. Customer
19 related costs were allocated on the basis of the number of meters or customers weighted by
20 the relative costs of the assets or expenses being allocated (e.g., meters, regulators,
21 customer accounting expense, etc.).

22 The class cost of service study employs allocation methods that are commonly
23 employed in work of this nature and the results of the allocations are fair and reasonable.

1

2 **Q. PLEASE SUMMARIZE YOUR RATE DESIGN RECOMMENDATIONS.**

3 A. The rate design proposed by LDC reflects a continuation of the current rate structure. The
4 Customer and Commodity Charges have been increased to reflect the cost of providing
5 service and to provide for more revenue stability.

6

7 **Q. IN YOUR OPINION, ARE THE ADJUSTED BILL FREQUENCIES, THE CLASS**
8 **COST OF SERVICE STUDY, AND THE RATE DESIGN PROPOSED BY LDC IN**
9 **ITS RATE FILING APPLICATION FAIR AND REASONABLE?**

10 A. Yes, they are.

11

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

13 A. Yes.

GAS UTILITIES DOCKET NO. _____

STATEMENT OF INTENT FILED BY	§	
ONALASKA WATER & GAS SUPPLY	§	BEFORE THE
CORPORATION TO CHANGE RATES	§	RAILROAD COMMISSION
IN THE ENVIRONS OF THE CITY OF	§	OF TEXAS
ONALASKA	§	

DIRECT TESTIMONY

OF

KARL J. NALEPA

ON BEHALF OF

ONALASKA WATER & GAS SUPPLY CORPORATION

MARCH 24, 2017

**DIRECT TESTIMONY OF
KARL J. NALEPA**

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ADJUSTMENT D – Gas Department Payroll Taxes

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ONALASKA	§	

**DIRECT TESTIMONY OF
KARL J. NALEPA**

I. INTRODUCTION AND QUALIFICATIONS

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

3 A. My name is Karl J. Nalepa. I am President of ReSolved Energy Consulting, LLC, an
4 independent utility consulting company. My business address is 11044 Research Blvd.,
5 Suite A-420, Austin, Texas 78759.

6
7 **Q. ON WHOSE BEHALF ARE YOU PRESENTING TESTIMONY IN THIS**
8 **PROCEEDING?**

9 A. I am presenting testimony on behalf of Onalaska Water & Gas Supply Corporation,
10 ("OW&GS" or "Company").
11

12 **Q. PLEASE OUTLINE YOUR EDUCATIONAL AND PROFESSIONAL**
13 **BACKGROUND.**

14 A. I hold a Bachelor of Science degree in Mineral Economics and a Master of Science degree
15 in Petroleum Engineering, and am a certified mediator. I have been a partner in ReSolved

1 Energy Consulting since July 2011, but joined R.J. Covington Consulting, its predecessor
2 firm, in June 2003 as a Management Consultant. Before that I served for more than five
3 years as an Assistant Director with the Texas Railroad Commission ("RRC"). In this
4 position, I was responsible for overseeing the economic regulation of natural gas utilities
5 in Texas. And prior to that, I spent five years with two different consulting firms providing
6 advice regarding a broad range of electric and natural gas industry issues. Before that, I
7 served four years as a Fuels Analyst with the Public Utility Commission of Texas ("PUC").
8 My professional career began with eight years in the reservoir engineering department of
9 the exploration company affiliated with Transco Gas Pipeline, a major interstate pipeline
10 company. My Statement of Qualifications is included as Appendix A.

11
12 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?**

13 A. Yes, I have testified many times before both the RRC and the PUC on a variety of
14 regulatory issues. I have also provided testimony before the Louisiana Public Service
15 Commission and the Arkansas Public Service Commission. A summary of my previously
16 filed testimony is included as Attachment B. In addition, I supervised the staff case in
17 proceedings before the RRC and served as a Technical Rate Examiner on behalf of the
18 RRC. Finally, I have provided analysis and recommendations in a number of city-level
19 regulatory proceedings that resulted in settlements without written testimony.

20
21 **II. PURPOSE AND SCOPE**

22 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

1 A. The purpose of my testimony is to present and support the gas sales, customer growth and
2 weather adjustments, class cost of service study, and proposed rate design for OW&GS.
3

4 **Q. HOW IS YOUR TESTIMONY ORGANIZED?**

5 A. Section I summarizes my experience, education, and qualifications. Section II of my
6 testimony provides the scope and purpose of my direct testimony and describes the
7 schedules that I am sponsoring as part of this filing. Section III describes the pro-forma
8 adjustments made to the Company's test year books and records. Section IV discusses the
9 capital structure and requested rate of return. Section V describes the customer usage data
10 and weather adjusted sales by customer class. Section VI provides an explanation of the
11 allocations and results of the natural gas class cost of service study. Section VII of my
12 direct testimony describes and presents the proposed rates for natural gas service. Finally,
13 Section VIII summarizes my recommendations.
14

15 **Q. ARE YOU SPONSORING ANY SCHEDULES TO THE COMPANY'S**
16 **APPLICATION?**

17 A. Yes, I am sponsoring the entire application which consists of twelve schedules.
18

19 **Q. PLEASE DESCRIBE SCHEDULE A.**

20 A. Schedule A provides a summary of revenue by customer classification. This schedule
21 identifies the MCF commodity sales and associated revenues per the Company's books,
22 year-end customer and weather adjusted sales and revenue, and the proposed revenue for

1 each retail customer class. The proposed percent change in revenue and the average cost
2 per MCF are also provided on this schedule.

3
4 **Q. PLEASE DESCRIBE SCHEDULE B.**

5 A. Schedule B provides typical bill comparisons for the proposed rate schedules. The bill
6 comparisons set forth the dollar and percentage change associated with various levels of
7 use for customers.

8
9 **Q. PLEASE DESCRIBE SCHEDULE C.**

10 A. The development of proposed rates by class is detailed on Schedule C.

11
12 **Q. PLEASE DESCRIBE SCHEDULE D.**

13 A. Schedule D, the class cost of service analysis, provides the adjusted class cost of service
14 study for the test year ending September 30, 2016. The class cost of service study is used
15 to determine the level of revenues necessary for each class to support its allocated revenue
16 requirement.

17
18 **Q. PLEASE DESCRIBE SCHEDULE E.**

19 A. Schedule E provides the billing units and present rates by rate schedule and provides the
20 calculation of adjusted revenues under present rates. The billing determinants applied are
21 fully adjusted customers and MCF sales levels.

22
23 **Q. PLEASE DESCRIBE SCHEDULE F.**

1 A. Schedule F is the bill frequency model which provides the monthly unadjusted billing
2 determinants by customer class. This schedule also develops the year-end and weather
3 adjusted billing determinants which will be discussed in detail in Section V of my direct
4 testimony.

5
6 **Q. PLEASE DESCRIBE SCHEDULE G.**

7 A. Schedule G sets forth the weather normalization adjustments. The weather normalization
8 adjustment was made to eliminate the effects of atypical historical temperature conditions
9 that cannot reasonably be anticipated to reoccur. The schedule includes a calculation of the
10 10 year normal heating degree days using data collected at the National Oceanic and
11 Atmospheric Administration ("NOAA") weather reporting station located in Conroe
12 Texas.

13
14 **Q. PLEASE DESCRIBE SCHEDULE H.**

15 A. Schedule H provides the rate of return calculation based estimated debt and equity values.
16 The rate of return calculation is discussed in more detail in Section IV of my direct
17 testimony.

18
19 **Q. PLEASE DESCRIBE SCHEDULE I.**

20 A. Schedule I provides the calculation of federal income tax at the proposed rates. Since
21 OW&GS is a non-profit corporation the federal income tax rate is zero.

22
23 **Q. PLEASE DESCRIBE SCHEDULE J.**

1 A. Schedule J provides the calculation of allowed interest on customer deposits. The interest
2 rate of 0.11% used in this calculation is per the Railroad Commission of Texas, Gas
3 Services Division, Gas Utilities Information Bulletin No. 1050, dated December 28, 2016.
4 However, since OW&GS does not collect customer deposits there is zero interest due.

5
6 **Q. PLEASE DESCRIBE SCHEDULE K.**

7 A. Schedule K provides the calculation of allowable advertising expenses pursuant to
8 Commission rule 7.5414.

9
10 **Q. PLEASE DESCRIBE SCHEDULE L.**

11 A. Schedule L provides a summary of the Company's depreciation rates. These rates are based
12 on the depreciation rates approved by the Commission in GUD No. 10238.

13
14 **Q. WERE THESE SCHEDULES PREPARED BY YOU OR UNDER YOUR**
15 **SUPERVISION?**

16 A. Yes, they were.

17
18 **Q. ARE THESE SCHEDULES TRUE AND CORRECT TO THE BEST OF YOUR**
19 **KNOWLEDGE AND BELIEF?**

20 A. Yes, they are.

III. PRO-FORMA ADJUSTMENTS

Q. DID THE COMPANY MAKE ANY ADJUSTMENTS TO THE GAS DEPARTMENT BOOKS AND RECORDS?

A. Yes, labor and associated benefits and taxes were adjusted to annualize payroll increases and for a portion of payroll associated with shared administrative and water department employees providing services to the gas department. In addition adjustments were made to the Company's books and records to include Cash Working Capital, Bad Debt Expenses and Contributions In Aid of Construction.

Q. PLEASE DESCRIBE THE ADJUSTMENT TO ANNUALIZE GAS DEPARTMENT PAYROLL INCREASES.

A. The current employees of the gas department received payroll increases on July 1, 2016. Therefore, a known and measurable payroll adjustment was made for nine months (October 2015 through June 2016) of the test year. The calculation of this adjustment is provided on the schedule labeled Adjustment A.

Q. HAS THE COMPANY ENGAGED IN ANY AFFILIATE TRANSACTIONS?

A. No, it has not. There are certain centralized service functions, such as customer billing and accounting, which are performed for both the gas and water departments by the same front office individuals. In the past, water department employees assisted the gas department with construction projects when needed. Since the last OW&G rate filing, the Company has added a field technician dedicated to natural gas operations which has minimized any need for water department assistance. The allocation of the shared billing and accounting

1 costs are described below, but there are no affiliate companies from which OW&GS buys
2 or sells goods or services. Onalaska's Cost Allocation Manual is included as Appendix C.

3
4 **Q. PLEASE DESCRIBE THE ADJUSTMENT TO REFLECT SHARED PAYROLL**
5 **EXPENSES.**

6 A. Certain administrative duties are performed by general office personnel and the payroll
7 expenses associated with these duties are shared by the gas and water departments. These
8 personnel include a clerk/bookkeeper assigned to the gas department and a senior
9 bookkeeper and clerk/bookkeeper assigned to the water department. While these staff are
10 assigned to their respective departments, all staff service both gas and water customers at
11 the receiving window. Also, while separate bills are sent to gas customers and water
12 customers, preparation for billing is shared between these three administrative personnel.

13 The schedule labeled Adjustment B provides the allocation of the shared office
14 personnel labor and benefit costs to the gas department. These allocations were made on
15 the basis of the number of customers served by each department.

16
17 **Q. PLEASE DESCRIBE THE ADJUSTMENT TO EMPLOYEE PENSIONS AND**
18 **BENEFITS.**

19 A. Two adjustments were made to Employee Pensions and Benefits. The first adjustment was
20 to increase expenses associated with the gas department employee payroll increase. As
21 detailed on Adjustment C, the adjustment was calculated by applying the ratio of test year
22 Pensions and Benefits as a percent of test year payroll to the payroll increase identified in

1 Adjustment A. The second adjustment was to include the allocated pensions and benefits
2 of shared employees calculated in Adjustment B.

3
4 **Q. PLEASE DESCRIBE THE ADJUSTMENT TO PAYROLL TAXES.**

5 A. In a calculation similar to the Employee Pensions and Benefits adjustment, Adjustment D
6 calculated the increase in payroll taxes associated with the gas department salary increases.
7 The payroll taxes associated with shared labor were allocated on Adjustment B.

8
9 **Q. PLEASE DESCRIBE THE CASH WORKING CAPITAL ADJUSTMENT.**

10 A. There is normally a time lag between the point when service is rendered and the related
11 operating costs are incurred and the point where the revenues to recover such costs are
12 received. The RRC provides for the use of 45-days or 12.50% of operating expense as a
13 component of rate base to fund these going-concern requirements of business.¹ The
14 Company's rate base was increased by \$38,420 on Schedule D, line 2024 to recognize the
15 cash working capital allowance.

16
17 **Q. PLEASE DESCRIBE THE BAD DEBTS ADJUSTMENT.**

18 A. The Company's balance sheet includes an allowance for bad debts in the amount of \$5,000.
19 However, for rate-making purposes actual known and measurable amounts are required.
20 The Company provided actual uncollected accounts for the twelve months ending
21 September 30, 2016. This amount was entered into Schedule D on line 3017.

22

¹ Railroad Commission of Texas, Gas Services Division, Natural Gas Rate Review Handbook, October 2012, Page 18.

1 **Q. PLEASE DESCRIBE THE ADJUSTMENT FOR CONTRIBUTIONS IN AID OF**
2 **CONSTRUCTION.**

3 A. The Company's income statement includes revenue associated with Line Extension
4 Charges. Pursuant to the RRC Rate Review Handbook² I have included this amount as a
5 Contribution in Aid of Construction, which is a rate base deduction, on Schedule D, line
6 2031.

7 **IV. RATE OF RETURN**

8 **Q. PLEASE DESCRIBE THE CALCULATION OF THE COMPANY'S RATE OF**
9 **RETURN.**

10 A. In setting a gas utility's rates, the regulatory authority establishes the utility's overall
11 revenues at an amount that will permit the utility an opportunity to earn a reasonable return
12 on the utility's invested capital used and useful in providing service to the public in excess
13 of its reasonable and necessary operating expenses.³ The overall rate of return is the sum
14 of a weighted cost of debt and return on equity. Generally, regulated utilities have several
15 sources of capital with which to finance their utility assets: issuance of common stock and
16 preferred stock, long-term debt, and common equity. OW&GS however is a non-profit
17 corporation that has debt at zero percent interest and no equity component.

18 The RRC found in past cases that it was unreasonable for a utility with zero debt to
19 base its total return on the company's cost of equity. Instead, the RRC imputed a weighted
20 cost of capital based upon a RRC historical average of the component debt and equity

² Ibid.

³ TEX UTIL. CODE §104.051.

1 parts.⁴ As shown on Schedule H, I applied this methodology to arrive at a rate of return on
2 rate base of 8.48%.

3 **V. BILLING DETERMINANTS**

4 **Q. PLEASE DESCRIBE ONALASKA WATER & GAS SUPPLY CORPORATION'S**
5 **CUSTOMER CLASSES.**

6 A. OW&GS served 698 residential and 50 commercial customers at the end of the test year.
7 Booked commodity sales were 19,733.637 MCF in the test year, 58% of which is attributed
8 to residential sales. Schedule F details by customer class the number of customers, MCF
9 sales and sales revenue for each month of the test year.

10
11 **Q. IS OW&GS PROPOSING ANY ADJUSTMENTS TO TEST YEAR BILLING**
12 **DETERMINANTS?**

13 A. Yes, OW&GS is proposing growth and weather normalization adjustments. Each of these
14 adjustments is described in more detail below.

15
16 **Growth Normalization Adjustment**

17 **Q. WHY ARE YOU PROPOSING A GROWTH NORMALIZATION ADJUSTMENT?**

18 A. OW&GS is using test year end plant in service to determine its cost of service. For
19 consistency, booked commodity sales and revenue need to be adjusted to show a full years'
20 billing for all customers receiving service at the end of the test year. This adjustment
21 synchronizes the test year-end revenue with the year-end investment.

⁴ AgriTexGas GUD 10021, FoF 50-54.

1
2 **Q. PLEASE DESCRIBE HOW THIS ADJUSTMENT IS CALCULATED.**

3 A. This adjustment is calculated on Schedule F, lines 128 through 256. The adjustment to
4 commodity sales is calculated on a monthly basis as the ratio of the test year end number
5 of customers minus the historic number of customers in each month of the test year divided
6 by the historic number of customers in each month of the test year. This ratio is multiplied
7 by the monthly unadjusted MCF sales to determine the adjustment to commodity sales.
8 This adjustment to sales is multiplied by the applicable commodity charge to calculate the
9 impact on revenues.
10

11 **Q. WHAT IS THE ANNUAL IMPACT OF THIS ADJUSTMENT?**

12 A. As a result of this growth normalization adjustment, sales increase by 34.8 MCF and the
13 base rate revenue is adjusted upward by \$458.55.
14

15 **Weather Normalization Adjustment**

16 **Q. WHY ARE YOU PROPOSING A WEATHER NORMALIZATION**
17 **ADJUSTMENT?**

18 A. The weather normalization adjustment was necessary to ensure that sales volumes were
19 neither over-stated nor under-stated relative to normal temperatures. Failure to adjust for
20 abnormal temperature conditions would result in OW&GS under- or over-recovering its
21 allowed revenue requirement under temperature conditions that are normally expected to
22 occur. The weather normalization adjustment submitted in the rate filing adjusts only the

1 effects of abnormal heating degree days (“HDD”). The weather normalization adjustment
2 is provided in Schedule G of the rate application.
3

4 **Q. PLEASE DESCRIBE HOW THE TEST YEAR SALES BY CLASS OF SERVICE**
5 **WERE WEATHER NORMALIZED.**

6 A. The procedure for adjusting for abnormal temperature conditions involves determining the
7 temperature sensitive portion of monthly usage and dividing that temperature sensitive
8 usage by the actual degree days for the billing month. The weather normalization for gas
9 customers is made for HDD only since there is little or no effect of cooling degree days
10 (“CDD”) upon gas usage. HDD are calculated as the difference between the actual average
11 temperature and a base temperature of 65 degrees. For example, a day with a high
12 temperature of 55 degrees and a low temperature of 35 degrees has an average temperature
13 of 45 degrees and thus 20 HDD (65°- 45°). This is the common practice used to calculate
14 HDD and is the practice employed by NOAA, the source of the temperature data I
15 employed and the temperature information resource most frequently relied upon by the
16 utility industry.

17 Because NOAA degree days are recorded on a calendar month basis and OW&GS
18 reads its meters on the first of the month there is a perfect match between the degree day
19 data and gas consumption. Therefore, there is no need to further adjust the data to account
20 for staggered billing cycles. The temperature sensitive usage per MCF for the revenue
21 month calculated as described above is then multiplied by the normal (i.e. the expected or
22 average) number of degree days for the revenue month to derive the normal level of
23 temperature sensitive usage per customer. This normalized temperature sensitive usage per

month per customer is then added back to the non-temperature sensitive usage to produce the total normalized usage per customer. Each month's normalized use per customer is multiplied by the year end number of customers to obtain total weather normalized MCF sales for the month.

Q. WOULD YOU PLEASE PROVIDE AN EXAMPLE OF THIS CALCULATION?

A. Yes. The following example illustrates the calculation of the weather normalization adjustment for the Residential Environs gas customers for the month of February 2016.

Note that the revenues booked in February are derived from consumption in January.

Actual HDD	379
Normal HDD	<u>389</u>
Difference	10
Actual Use Per Customer	2.31
Less: Non-Temperature Sensitive Use Per Customer	<u>0.49</u>
Equals: Temperature Sensitive Use Per Customer	1.82
Divided by: Actual Heating Degree Days	<u>379</u>
Equals: Temperature Sensitive User Per Customer Per HDD	0.004789
Times: Degree Day Difference	<u>10</u>
Equals: Weather Adjustment Per Customer	.05
Times: Year-end Number of Customers	<u>424</u>
Equals: Weather Normalization Adjustment	20.9

First, in order to calculate actual and normal HDD for a billing month, it is necessary to synchronize calendar month HDD data with the billing months over which sales are recorded. For example, OW&GS reads residential environs customer meters on the 1st of the month. Therefore, the sales amounts booked in any given month reflect consumption that actually occurs during the calendar month preceding the book month.

Residential environs year-end customer adjusted sales booked in February were 978.5 MCF and the bill cycle HDD for the month were 379. Bill cycle normal HDD for

1 the month are 389, indicating that actual sales were understated relative to normal
2 conditions. Average use per customer was 2.31 MCF. The non-temperature portion of
3 residential environs use was determined to be the average use per month experienced by
4 residential environs customers during the non-heating summer months. This amount was
5 0.49 MCF per customer. Therefore, the temperature sensitive portion of load was 1.82
6 MCF per customer (i.e. $2.31 - 0.49 = 1.82$). This temperature sensitive portion of load was
7 divided by the number of HDD and resulted in a temperature sensitive use per customer
8 per degree day of 0.004789. Multiplying this amount by the normal number of HDD results
9 in an adjustment of 0.05 MCF per customer which, when added back to the actual average
10 use per customer produces a normal use per customer of approximately 2.36 MCF.
11 Multiplying this normal use per customer by the test year end number of customers of 424
12 produces an adjusted class sales amount of 7999.4 MCF, an increase of 20.9 MCF from
13 the year-end customer adjusted sales amount of 978.5. This process was repeated for each
14 month for Residential and Commercial customers using information specific to each month
15 and class. Note that some rounding may have occurred in the example set forth above, but
16 that all numbers were carried out to a greater number of decimals in the actual calculations
17 used to develop the weather normalization adjustment set forth on Schedule G.

18
19 **Q. WHAT IS THE ANNUAL IMPACT OF THIS ADJUSTMENT?**

20 A. As a result of this weather normalization adjustment, total residential and commercial sales
21 increased by 95.6 MCF and base rate revenue increased by \$3,743.5.

1 **Q. WHAT HISTORICAL PERIOD DID YOU EMPLOY AS THE BASIS FOR**
2 **COMPUTING NORMAL HEATING DEGREE DAYS?**

3 A. For purposes of this filing, OW&GS used the most recent 10 year average to calculate
4 normal heating degree days.

5
6 **Q. WHY DID YOU APPLY THE WEATHER NORMALIZATION ADJUSTMENT TO**
7 **YEAR-END CUSTOMER ADJUSTED SALES INSTEAD OF BOOKED SALES?**

8 A. The Railroad Commission of Texas "Natural Gas Rate Review Handbook" dated October
9 2012 states on page 47 that when performing the weather normalization adjustment, "*All*
10 *figures should have already been adjusted for customer growth*".

11 **VI. CLASS COST OF SERVICE STUDY**

12 **Q. WHAT IS A CLASS COST OF SERVICE STUDY?**

13 A. A class cost of service study is an analysis that develops dollar revenue requirements by
14 customer class utilizing causal relationships between cost components and customer
15 characteristics as the basis for assigning costs. A class cost of service study uses the cost
16 elements of the total company revenue requirements and distributes these elements to
17 OW&GS' various customer classes either by direct assignment of by allocating costs if
18 necessary. Any costs that can be specifically identified as being incurred for the benefit of
19 or as a result of an individual customer or group of customers are directly assigned to that
20 specific customer(s) rate class. Costs that cannot be specifically assigned are allocated to
21 classes of customers using allocation factors that reflect the manner in which costs arise.

1 To a large extent, the reasonableness of the results of a cost of service study depends
2 upon the reasonableness of the methods by which costs are allocated to classes. When
3 allocating costs, it is important that the most appropriate cost driver for each individual
4 cost is used to allocate that cost. Selecting the most appropriate cost driver is essential to
5 ensuring that costs are allocated to the classes for which the costs are incurred. For this
6 reason, class cost of service studies are said to be based upon the principle of “cost
7 causation.” Once the costs are allocated to the various rate classes, the total costs of serving
8 each class can be ascertained. By comparing the costs of service by class to the revenues
9 received from each class, rates can be designed for each class as appropriate.

10
11 **Q. PLEASE EXPLAIN WHAT YOU MEAN BY THE TERMS “ALLOCATE” AND**
12 **“ALLOCATION”?**

13 A. “Allocate” and “allocation,” in the context of class cost of service and rate design, are terms
14 used to describe the process by which OW&GS’ rate base items, expenses, and revenues
15 are apportioned among the various rate classes. This allocation is based on various causal
16 parameters. The choice of the parameter to be used is primarily based upon the notion that
17 “cost responsibility follows cost causation.” Apportionment of cost responsibility is
18 accomplished by allocating or assigning various investments or costs among the rate
19 classes on a basis that represents the usage and, thus, the cost causation of these rate classes.

20
21 **Q. PLEASE DESCRIBE SCHEDULE D WHICH CONTAINS THE ADJUSTED**
22 **CLASS COST OF SERVICE STUDY.**

1 A. Schedule D is the class cost of service study using adjusted pro-forma amounts. In this
2 schedule each component of the system revenue requirement is set forth in rows and the
3 allocated portion of the various cost components for each class is set forth in the column
4 associated with the class. Allocation factors and the underlying information from which
5 the allocation factors are calculated are provided in the first two pages of Schedule D.
6 Following the allocation factor information, plant and other rate base items are allocated
7 to classes. Next, operation and maintenance expenses are allocated to classes using either
8 the input allocation factors or allocation factors that were developed based upon previously
9 allocated plant or rate base items. Following the allocation of operation and maintenance
10 expenses is the allocation of depreciation expense and taxes other than income. Next,
11 income is either allocated to classes (as in the case of other revenue) or directly assigned
12 to classes (as in the case of revenues from gas sales) and operating income is calculated
13 using the previously allocated revenues and expenses by class of service. From this
14 information, return by class under present rates is calculated. Finally, using the rate base,
15 expenses, taxes and revenues that have already been allocated to classes, the cost of service
16 study determines the dollars of return for each customer class under the proposed rate of
17 return and the revenue deficiencies by class of service are calculated.

18
19 **Q. PLEASE IDENTIFY THE RATE CLASSES USED IN THE CLASS COST OF**
20 **SERVICE AND RATE DESIGN STUDY.**

21 A. The rate classes used in the current gas filing include:

- 22 ● Incorporated Residential Service
- 23 ● Environs Residential Service

- 1 ● Incorporated Commercial Service
- 2 ● Environs Commercial Service

3

4 **Q. PLEASE DESCRIBE THE ALLOCATION METHODOLOGIES YOU**
5 **EMPLOYED IN THE CLASS COST OF SERVICE STUDY TO ALLOCATE**
6 **COSTS.**

7 A. There are numerous specific allocations made in the cost of service study. The specific
8 allocation of each revenue requirement component is identified by the allocation factor set
9 forth next to the total column. The allocation factors contained in the cost of service study
10 are either externally developed allocation factors (independent) or internally developed
11 allocation factors (dependent). Externally developed allocation factors are calculated using
12 information that is developed externally to the cost of service study, such as sales volumes
13 or number of customer allocation factors. Internally developed allocation factors are
14 calculated within the cost of service study based upon the results of previously allocated
15 items, such as total plant in service.

16 Commodity sales volumes were used to allocate measurement and regulatory
17 station plant, and distribution mains. OW&GS does not possess the design-day nor peak
18 day send-out data required to calculate demand related allocation factors.

19

20 **Q. PLEASE DESCRIBE THE OTHER ALLOCATION FACTORS EMPLOYED IN**
21 **THE GAS COST OF SERVICE STUDY.**

22 A. Customer related costs such as meters, services, and house regulators were allocated to
23 classes using the number of customers by class weighted by the relative costs of meters.

1 Distribution expenses related to plant accounts were allocated to classes on previously
2 allocated distribution plant. Administrative and general expenses were allocated to classes
3 on the basis of previously allocated items. For example, labor related A&G was allocated
4 on the sum of non-labor related distribution expenses, customer accounting and sales-
5 related expenses, and non-labor related A&G expenses. Non-labor related A&G expenses
6 were allocated on the sum of distribution related expenses, customer accounting and sales-
7 related expenses.

8
9 **Q. PLEASE DESCRIBE THE RESULTS OF THE COST OF SERVICE STUDY.**

10 A. The results of the class cost of service study indicate that the Commercial class requires a
11 greater increase than the system average percentage increase. The Residential class
12 requires an increase less than the system average.

13 **VII. RATE DESIGN**

14 **Q. PLEASE SUMMARIZE THE RATES YOU PROPOSE FOR THE OW&GS GAS**
15 **DEPARTMENT.**

16 A. OW&GS proposes no structural changes to the existing gas service rates. However,
17 OW&GS proposes to increase the levels of the Customer and Commodity Charges for its
18 gas rates to recover its cost of service and to provide for more revenue stability.

19 The proposed Customer Charge for Residential customers was increased from
20 \$12.00 per month to \$15.00 per month. The proposed Customer Charge for Commercial
21 customers was increased from \$15.00 per month to \$18.00 per month. The proposed

Commodity Charge for both Residential and Commercial customers was increased from \$9.2100 per MCF to \$12.1074 per MCF.

The following table provides a comparison of the present and proposed rates by class of service:

	<u>Present Rates</u>		<u>Proposed Rates</u>	
	Customer Charge	Commodity Charge	Customer Charge	Commodity Charge
<u>Customer Class</u>	<u>\$/Month</u>	<u>\$/MCF</u>	<u>\$/Month</u>	<u>\$/MCF</u>
Residential	\$12.00	\$9.2100	\$15.00	\$12.1074
Commercial	\$15.00	\$9.2100	\$18.00	\$12.1074

Q. DOES OW&GS PROPOSE ANY CHANGES TO ITS COST OF GAS ADJUSTMENT (CGA)?

A. Yes. OW&GS proposes to update its cost of gas adjustment ("CGA") to reflect the Commission's current preference for monthly cost of gas reconciliation. A revised CGA tariff is included in this application.

Q. WHERE ARE THE DEVELOPMENT OF OW&GS' PROPOSED RATES SUMMARIZED?

A. Schedule C provides the billing units and proposed rates by rate schedule and provides the calculation of adjusted revenues under proposed rates. The billing determinants employed to develop the proposed revenues are fully adjusted customers and weather adjusted MCF sales levels. Schedule B provides bill impact analyses for the proposed rate schedules. The bill impact analyses set forth the dollar and percentage increases associated with various levels of use for customers.

1 Q. DOES OW&GS PROPOSE ANY CHANGES TO THE MISCELLANEOUS
2 SERVICE CHARGES?

3 A. No, the Company does not propose any revisions to its miscellaneous service charges.

VIII. CONCLUSION

5 **Q. WHERE ARE THE PROPOSED REVENUES BY CUSTOMER CLASS**
6 **SUMMARIZED?**

7 A. Schedule A provides an overall summary of the impact of the adjustments proposed by
8 OW&GS and the impact of rate changes on each of the retail customer classes. The impact
9 of the proposed rate design is shown both with and without the cost of gas. The total
10 revenue increase, including the cost of gas, is 22.89 percent. While the increase in base
11 rates only (excluding the cost of gas) is 28.91 percent.

13 Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS REGARDING THE
14 CLASS BILLING DETERMINANTS.

15 A. OW&GS is using test year end plant in service to determine its cost of service. For
16 consistency, booked commodity sales and revenue need to be adjusted to show a full years
17 billing for all customers receiving service at the end of the test year. This adjustment
18 synchronizes the test year-end revenue with the year-end investment.

19 The weather normalization adjustment was necessary to ensure that gas sales
20 volumes were neither over-stated nor under-stated in terms of normal temperatures. Failure
21 to adjust for abnormal temperature conditions would result in OW&GS under- or over-

1 recovering the allowed revenue requirements under temperature conditions that are
2 normally expected to occur.

3
4 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS REGARDING THE**
5 **CLASS COST OF SERVICE STUDY THAT YOU SPONSOR.**

6 A. The cost of service study provides the allocated revenue requirements by class of service.
7 The allocation methods employed to assign costs to customer classes vary depending upon
8 the particular cost item being allocated using the best data available. For example, mains
9 investment was allocated to classes on the basis of the sales volumes method. Customer
10 related costs were allocated on the basis of the number of meters or customers weighted by
11 the relative costs of the assets or expenses being allocated (e.g., meters, regulators,
12 customer accounting expense, etc.).

13 The class cost of service study employs allocation methods that are commonly
14 employed in work of this nature and the results of the allocations are fair and reasonable.

15
16 **Q. PLEASE SUMMARIZE YOUR RATE DESIGN RECOMMENDATIONS.**

17 A. The rate design proposed by OW&GS reflects a continuation of the current rate structure.
18 The Customer and Commodity Charges have been increased to reflect the cost of providing
19 service and to provide for more revenue stability.

20
21 **Q. IN YOUR OPINION, ARE THE ADJUSTED BILL FREQUENCIES, THE CLASS**
22 **COST OF SERVICE STUDY, AND THE RATE DESIGN PROPOSED BY THE**

1 **OW&GS GAS DEPARTMENT IN ITS RATE FILING APPLICATION FAIR AND**
2 **REASONABLE?**

3 A. Yes, they are.

4

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

6 A. Yes.

GAS UTILITIES DOCKET NO. _____

**STATEMENT OF INTENT OF
NATGAS, INC. TO INCREASE
RATES IN AND AROUND THE
UNINCORPORATED COMMUNITY
OF OZONA, TEXAS**

§
§
§
§
§

**BEFORE THE
RAILROAD COMMISSION
OF TEXAS**

DIRECT TESTIMONY

OF

KARL J. NALEPA

ON BEHALF OF

NATGAS, INC.

FEBRUARY 12, 2016

DIRECT TESTIMONY OF KARL J. NALEPA

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WP 1 – Average & Excess Capacity Allocation

WP 2 – Weighted Monthly Sales Volumes

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GAS UTILITIES DOCKET NO. _____

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**BEFORE THE
RAILROAD COMMISSION
OF TEXAS**

**DIRECT TESTIMONY OF
KARL J. NALEPA**

I. INTRODUCTION AND QUALIFICATIONS

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

A. My name is Karl J. Nalepa. I am the President of ReSolved Energy Consulting, LLC, an independent utility consulting company. My business address is 11044 Research Blvd., Suite A-420, Austin, Texas 78759.

Q. ON WHOSE BEHALF ARE YOU PRESENTING TESTIMONY IN THIS PROCEEDING?

A. I am presenting testimony on behalf of NatGas, Inc. ("NatGas" or "Company").

10

Q. PLEASE OUTLINE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND.

A. I hold a Bachelor of Science degree in Mineral Economics and a Master of Science degree in Petroleum Engineering, and am a certified mediator. My professional experience includes eight years in the reservoir engineering department of an exploration company affiliated with a major interstate pipeline company, then four

1 years as a Fuels Analyst with the Public Utility Commission of Texas
2 (“Commission”). This was followed by five years with two different consulting firms
3 providing expert advice regarding a broad range of electric and natural gas industry
4 issues. Immediately prior to my current position, I served for more than five years as
5 an Assistant Director with the Railroad Commission of Texas (“RRC”). In this
6 position, I was responsible for overseeing the economic regulation of natural gas
7 utilities in Texas. I joined R.J. Covington Consulting, LLC in June of 2003.
8 R.J. Covington Consulting became ReSolved Energy Consulting in August 2011. My
9 Statement of Qualifications is attached as Attachment A.

10

11 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSISON?**

12 A. Yes, I have testified a number of times before both the Texas RRC and the Texas
13 PUC on a variety of regulatory issues. A summary of my previously filed testimony
14 is provided in Appendix B. In addition, I supervised the staff case in proceedings
15 before the RRC and served as a Technical Rate Examiner on behalf of the RRC. I
16 have also provided analysis and recommendations in numerous city-level regulatory
17 proceedings that resulted in settlements without written testimony.

18 **II. PURPOSE AND SCOPE**

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

20 A. The purpose of my testimony is to present and support the class cost of service study
21 and proposed rate design for NatGas.

22

1 **Q. WHAT IS NATGAS REQUESTING IN THIS PROCEEDING?**

2 A. NatGas is requesting to increase annual revenues by \$35,504 or 5.3% including gas
3 costs. The Residential class will see a 6.77% increase in average bills, Commercial
4 class a 2.84% increase in average bills, and the Public Authority class a 2.70%
5 increase in average bills.

6

7 **Q. HOW IS YOUR TESTIMONY ORGANIZED?**

8 A. Section I summarizes my experience, education, and qualifications. Section II of my
9 testimony provides the purpose and scope of my direct testimony and describes the
10 exhibits that I am sponsoring as part of this filing. Section III describes the customer
11 usage data and customer growth adjusted sales by customer class. Section IV of my
12 testimony presents the requested revenue requirement. Section V provides an
13 explanation of the allocations and results of the class cost of service study. Section VI
14 of my direct testimony describes and presents NatGas' proposed rates for gas service.
15 Section VII addresses recovery of rate case expenses, and Section VIII summarizes
16 the relief requested by NatGas.

17

18 **Q. ARE YOU SPONSORING ANY SCHEDULES TO THE COMPANY'S**
19 **APPLICATION?**

20 A. Yes, I am sponsoring the entire application which consists of ten (10) schedules.

21

22

23

1 **Q. PLEASE DESCRIBE SCHEDULE A.**

2 A. Schedule A provides a summary of revenue by customer classification. This schedule
3 identifies the commodity sales in thousand cubic feet (“MCF”) and associated
4 revenues per the Company’s books, year-end customer and weather adjusted sales
5 and revenue, and the proposed revenue for each retail customer class. The proposed
6 percent change in revenue and the average cost per MCF are also provided on this
7 schedule.

8
9 **Q. PLEASE DESCRIBE SCHEDULE B.**

10 A. Schedule B provides typical bill comparisons for the proposed rate schedules. The
11 bill comparisons set forth the dollar and percentage change associated with various
12 levels of use for customers.

13
14 **Q. PLEASE DESCRIBE SCHEDULE C.**

15 A. The development of proposed rates by class is detailed on Schedule C.

16
17 **Q. PLEASE DESCRIBE SCHEDULE D.**

18 A. Schedule D, the class cost of service analysis, provides the adjusted class cost of
19 service study for the test year ending September 30, 2015. The class cost of service
20 study is used to determine the level of revenues necessary for each class to support its
21 allocated revenue requirement.

22

23

1 **Q. PLEASE DESCRIBE SCHEDULE E.**

2 A. Schedule E provides the billing units and present rates by rate schedule and provides
3 the calculation of adjusted revenues under present rates. The billing determinants
4 applied are the fully adjusted customer and MCF sales levels.

5

6 **Q. PLEASE DESCRIBE SCHEDULE F.**

7 A. Schedule F is the bill frequency model which provides the monthly unadjusted billing
8 determinants by customer class. This schedule also develops the year-end and
9 weather adjusted billing determinants which will be discussed in detail in Section V
10 of my direct testimony.

11

12 **Q. PLEASE DESCRIBE SCHEDULE G.**

13 A. Schedule G provides the rate of return calculation based on the Company's debt and
14 equity values. The rate of return calculation is discussed in more detail in Section IV
15 of my direct testimony.

16

17 **Q. PLEASE DESCRIBE SCHEDULE H.**

18 A. Schedule H provides the calculation of federal income tax at the proposed rates.

19

20 **Q. PLEASE DESCRIBE SCHEDULE I.**

21 A. Schedule I provides the calculation of allowed interest on customer deposits. The
22 interest rate of 0.11% used in this calculation is per the Railroad Commission of

1 Texas, Oversight and Safety Division, Gas Utilities Information Bulletin No. 1027,
2 dated January 15, 2016.
3

4 **Q. PLEASE DESCRIBE SCHEDULE J.**

5 A. Schedule J provides the calculation of allowable advertising expenses pursuant to
6 Commission rule 7.5414.
7

8 **Q. WERE THESE SCHEDULES PREPARED BY YOU OR UNDER YOUR**
9 **SUPERVISION?**

10 A. Yes, they were.
11

12 **Q. ARE THESE SCHEDULES TRUE AND CORRECT TO THE BEST OF YOUR**
13 **KNOWLEDGE AND BELIEF?**

14 A. Yes, they are.

15 **III. BILLING DETERMINANTS**

16 **Q. IS NATGAS PROPOSING ANY CHANGES TO ITS CUSTOMER CLASSES?**

17 A. Yes. NatGas currently recognizes for ratemaking purposes two customer classes: (1)
18 Residential & Small Commercial, and (2) Large Commercial. NatGas is proposing to
19 split the Residential & Small Commercial class into separate Residential and
20 Commercial classes, and to change Large Commercial to Public Authority to
21 recognize that this class consists of only tax exempt customers.
22

1 **Q. PLEASE DESCRIBE NATGAS' REVISED CUSTOMER CLASSES.**

2 A. NatGas served 1,051 residential, 107 commercial and 34 public authority customers
3 at the end of the test year. Booked commodity sales were 76,869 MCF in the test
4 year, 65% of which is attributed to residential sales. Schedule F provides details by
5 customer class of the number of customers, MCF sales, and sales revenue for each
6 month of the test year.

7

8 **Q. IS NATGAS PROPOSING ANY ADJUSTMENTS TO TEST YEAR BILLING**
9 **DETERMINANTS?**

10 A. Yes, NatGas is proposing growth and weather normalization adjustments. Each of
11 these adjustments is described in more detail below.

12

13 **Growth Normalization Adjustment**

14 **Q. WHY ARE YOU PROPOSING A GROWTH NORMALIZATION**
15 **ADJUSTMENT?**

16 A. NatGas is using test year-end plant in service to determine its cost of service. For
17 consistency, booked commodity sales and revenue need to be adjusted to show a full
18 years' billing for all customers receiving service at the end of the test year. This
19 adjustment synchronizes the test year-end revenue with the year-end investment.

20

21 **Q. PLEASE DESCRIBE HOW THIS ADJUSTMENT IS CALCULATED.**

22 A. This adjustment is calculated on Schedule F, lines 94 through 180. The adjustment to
23 commodity sales is calculated on a monthly basis as the ratio of the test year end

1 number of customers minus the historic number of customers in each month of the
2 test year divided by the historic number of customers in each month of the test year.
3 This ratio is multiplied by the monthly unadjusted MCF sales to determine the
4 adjustment to commodity sales. This adjustment to sales is multiplied by the
5 applicable commodity charge to calculate the impact on revenues.

6
7 **Q. WHAT IS THE ANNUAL IMPACT OF THIS ADJUSTMENT?**

8 A. As a result of this growth normalization adjustment, sales decrease by 1,686.5 MCF
9 and the base rate revenue is adjusted downward by \$8,052.

10
11 **Weather Normalization Adjustment**

12 **Q. WHY ARE YOU PROPOSING A WEATHER NORMALIZATION**
13 **ADJUSTMENT?**

14 A. The weather normalization adjustment was necessary to ensure that sales volumes
15 were neither over-stated nor under-stated relative to normal temperatures. Failure to
16 adjust for abnormal temperature conditions would result in NatGas under- or over-
17 recovering its allowed revenue requirement under temperature conditions that are
18 normally expected to occur. The weather normalization adjustment submitted in the
19 rate filing adjusts only the effects of abnormal heating degree days ("HDD"). The
20 weather normalization adjustment is provided in Workpaper 3 of the rate application.

21
22 **Q. PLEASE DESCRIBE HOW THE TEST YEAR SALES BY CLASS OF**
23 **SERVICE WERE WEATHER NORMALIZED.**

1 A. The procedure for adjusting for abnormal temperature conditions involves
2 determining the temperature sensitive portion of monthly usage and dividing that
3 temperature sensitive usage by the actual degree days for the billing month. The
4 weather normalization for gas customers is made for HDD only since there is little or
5 no effect of cooling degree days ("CDD") upon gas usage. HDD are calculated as the
6 difference between the actual average temperature and a base temperature of 65
7 degrees. For example, a day with a high temperature of 55 degrees and a low
8 temperature of 35 degrees has an average temperature of 45 degrees and thus 20 HDD
9 ($65^{\circ} - 45^{\circ}$). This is the common practice used to calculate HDD and is the practice
10 employed by NOAA, the source of the temperature data I employed and the
11 temperature information resource most frequently relied upon by the utility industry.

12 NOAA degree day data were revised so that the data consistently matched
13 NatGas' billing cycle. Because customer usage occurs over portions of two calendar
14 months while degree days are recorded on a calendar month basis, it is necessary to
15 restate the calendar month degree days on the basis of a billing month to ensure that
16 usage and temperatures are properly matched. The temperature sensitive usage per
17 MCF for the revenue month calculated as described above is then multiplied by the
18 normal (i.e. the expected or average) number of degree days for the revenue month to
19 derive the normal level of temperature sensitive usage per customer. This normalized
20 temperature sensitive usage per month per customer is then added back to the non-
21 temperature sensitive usage to produce the total normalized usage per customer. Each
22 month's normalized use per customer is multiplied by the year end number of
23 customers to obtain total weather normalized MCF sales for the month.

1

2 **Q. WOULD YOU PLEASE PROVIDE AN EXAMPLE OF THIS**
3 **CALCULATION?**

4 A. Yes. The example in Figure 1 illustrates the calculation of the weather normalization
5 adjustment for Residential customers for the month of February 2015. Note that the
6 revenues booked in February are derived from consumption in January and February.

7

Figure 1

8	Actual HDD	394
9	Normal HDD	<u>335</u>
10	Difference (adjustment to normal)	-59
11		
12	Actual Use Per Customer	7.12
13	Less: Non-Temperature Sensitive Use Per Customer	<u>1.03</u>
14	Equals: Temperature Sensitive Use Per Customer	6.09
15	Divided by: Actual Heating Degree Days	<u>394</u>
16	Equals: Temperature Sensitive User Per Customer Per HDD	0.015453
17	Times: Degree Day Difference	<u>-59</u>
18	Equals: Weather Adjustment Per Customer	-0.90
19	Times: Year-end Number of Customers	<u>1,051</u>
20	Equals: Weather Normalization Adjustment	-950.6
21		

22 First, in order to calculate actual and normal HDD for a billing month, it is
23 necessary to synchronize calendar month HDD data with the billing months over
24 which sales are recorded. For example, NatGas reads customer meters on the last two
25 working days of the month. Therefore, the sales amounts booked in any given month
26 reflect some consumption that actually occurs during the calendar month preceding
27 the book month.

28 Residential year-end customer adjusted sales booked in February were 7,483.0
29 MCF and the bill cycle HDD for the month were 394. Bill cycle normal HDD for the
30 month are 335, indicating that actual sales were overstated relative to normal

1 conditions. Average use per customer was 7.12 MCF. The non-temperature portion of
2 residential use was determined to be the average use per month experienced by
3 residential customers during the non-heating summer months of July and August.
4 This amount was 1.03 MCF per customer. Therefore, the temperature sensitive
5 portion of load was 6.09 MCF per customer (i.e. $7.12 - 1.03 = 6.09$). This
6 temperature sensitive portion of load was divided by the number of HDD and resulted
7 in a temperature sensitive use per customer per degree day of 0.015453. Multiplying
8 this amount by the normal number of HDD results in an adjustment of -0.90 MCF per
9 customer which, when added back to the actual average use per customer produces a
10 normal use per customer of approximately 6.22 MCF. Multiplying this normal use
11 per customer by the test year end number of customers of 1,051 produces and
12 adjusted class sales amount of 6,532.4 MCF, a decrease of 950.6 MCF from the year-
13 end customer adjusted sales amount of 7,483.0. This process was repeated for each
14 month for Residential, Commercial and Public Authority customers using information
15 specific to each month and class. Note that some rounding may have occurred in the
16 calculations set forth above, but that all numbers were carried out to a greater number
17 of decimals in the actual calculations used to develop the weather normalization
18 adjustment set forth on Workpaper 3.

19
20 **Q. WHAT IS THE ANNUAL IMPACT OF THIS ADJUSTMENT?**

21 A. As a result of the weather normalization adjustment, residential and public authority
22 sales decreased by approximately 1.10% and 8.10% respectively. However,

1 commercial sales increased by 28.01%. Overall, total sales increased by 3,494.4
2 MCF and base rate revenue increased by \$14,367.

3
4 **Q. PLEASE EXPLAIN THE REASON FOR THE LARGE WEATHER**
5 **ADJUSTMENT IMPACT ON COMMERCIAL SALES.**

6 A. Certainly. Refer to Workpaper WP – 3, page 2 of 7. In the month of October 2014
7 there is a significant difference between the number of actual heating degree days
8 compared to normal. While October typically experiences 46 heating degree days
9 there were only 8 in October of 2014, indicating the weather was much warmer than
10 normal. Consequently, sales were increased to reflect normal weather conditions.
11 This weather impact is also true for the Residential and Public Authority classes, but
12 the Commercial class experienced a much greater MCF use per customer in that
13 month compared to its base usage per customer as shown on columns 9 and 10. The
14 combination of much warmer weather than normal and the higher average use per
15 customer in October resulted in a significant increase in weather adjusted sales
16 volumes.

17
18 **Q. WHAT HISTORICAL PERIOD DID YOU EMPLOY AS THE BASIS FOR**
19 **COMPUTING NORMAL HEATING DEGREE DAYS?**

20 A. For purposes of this filing, NatGas used the most recent 10 year average to calculate
21 normal heating degree days. This is consistent with past Commission practice and
22 precedent.

1 **Q. WHY DID YOU APPLY THE WEATHER NORMALIZATION**
2 **ADJUSTMENT TO YEAR-END CUSTOMER ADJUSTED SALES INSTEAD**
3 **OF BOOKED SALES?**

4 A. The Railroad Commission of Texas “Natural Gas Rate Review Handbook” dated
5 October 2012 states on page 47 that when performing the weather normalization
6 adjustment, “*All figures should have already been adjusted for customer growth*”.

7 **IV. PRO-FORMA ADJUSTMENTS**

8 **Q. DID THE COMPANY MAKE ANY ADJUSTMENTS TO THE GAS**
9 **DEPARTMENT BOOKS AND RECORDS?**

10 A. Yes, labor and associated benefits and taxes were adjusted to annualize payroll
11 increases. In addition, adjustments were made to the Company’s books and records to
12 include Cash Working Capital.

13

14 **Q. PLEASE DESCRIBE THE ADJUSTMENT TO ANNUALIZE GAS**
15 **DEPARTMENT PAYROLL INCREASES.**

16 A. Three employees of the gas department received payroll increases on January 1, 2015
17 ranging from \$50 to \$150 per month. Therefore a known and measurable payroll
18 adjustment was made for three months (October 2014 through December 2014) of the
19 test year for these three employees. Each of these employees received an additional
20 \$1,200 per year in January 2016.

21

1 **Q. PLEASE DESCRIBE THE ADJUSTMENT TO EMPLOYEE PENSIONS AND**
2 **BENEFITS.**

3 A. An adjustment was made for one employee to reflect an increase of \$49 for AFLAC
4 insurance in July 2015. This increased pensions and benefits by \$441 for the nine
5 prior months of the test year.

6
7 **Q. PLEASE DESCRIBE THE ADJUSTMENT TO PAYROLL TAXES.**

8 A. An adjustment of \$345 in payroll taxes was made to reflect the salary increases.

9
10 **Q. PLEASE DESCRIBE THE CASH WORKING CAPITAL ADJUSTMENT.**

11 A. There is normally a time lag between the point when service is rendered and the
12 related operating costs are incurred and the point where the revenues to recover such
13 costs are received. The RRC provides for the use of 45-days or 12.50% of operating
14 expense as a component of rate base to fund these going-concern requirements of
15 business.¹ The Company's rate base was increased by \$39,972 on Schedule D, line
16 2043 to recognize the cash working capital allowance.

17 **V. CLASS COST OF SERVICE STUDY**

18 **Q. WHAT IS A CLASS COST OF SERVICE STUDY?**

19 A. A class cost of service study is an analysis that develops dollar revenue requirements
20 by customer class utilizing causal relationships between cost components and
21 customer characteristics as the basis for assigning costs. A class cost of service study

¹ Railroad Commission of Texas, Oversight and Safety Division, Natural Gas Rate Review Handbook, October 2012, Page 18.

1 uses the cost elements of the total Company revenue requirements and distributes
2 these elements to NatGas' various customer classes either by allocating costs or by
3 direct assignment if appropriate. Any costs that can be specifically identified as being
4 incurred for the benefit of or as a result of an individual customer or group of
5 customers are directly assigned to that specific customer(s) rate class. Costs that
6 cannot be specifically assigned are allocated to classes of customers using allocation
7 factors that reflect the manner in which costs arise.

8 To a large extent, the reasonableness of the results of a cost of service study
9 depends upon the reasonableness of the methods by which costs are allocated to
10 classes. When allocating costs, it is important that the most appropriate cost driver
11 for each individual cost is used to allocate that cost. Selecting the most appropriate
12 cost driver is essential to ensuring that costs are allocated to the classes for which the
13 costs are incurred. For this reason, class cost of service studies are said to be based
14 upon the principle of "cost causation." Once the costs are allocated to the various rate
15 classes, the total costs of serving each class can be ascertained.

16
17 **Q. PLEASE EXPLAIN WHAT YOU MEAN BY THE TERMS "ALLOCATE"**
18 **AND "ALLOCATION"?**

19 A. "Allocate" and "allocation," in the context of class cost of service and rate design, are
20 terms used to describe the process by which NatGas' rate base items and expenses are
21 apportioned among the various rate classes. This allocation is based on various causal
22 parameters. The choice of the parameter to be used is primarily based upon the notion
23 that "cost responsibility follows cost causation." Apportionment of cost

responsibility is accomplished by allocating or assigning various investments or costs among the rate classes on a basis that represents the usage and, thus, the cost causation of these rate classes.

Q. PLEASE DESCRIBE SCHEDULE D WHICH CONTAINS THE ADJUSTED CLASS COST OF SERVICE STUDY.

A. In Schedule D each component of the system revenue requirement is set forth in rows and the allocated portion of the various cost components for each class is set forth in the column associated with the class. Allocation factors and the underlying information from which the allocation factors are calculated are provided in the first two pages of Schedule D. Following the allocation factor information, plant and other rate base items are allocated to classes. Next, operation and maintenance expenses are allocated to classes using either the input allocation factors or allocation factors that were developed based upon previously allocated plant or rate base items. Following the allocation of operation and maintenance expenses is the allocation of depreciation expense and taxes other than income. Next, other operating revenue is allocated to classes. Finally, using the rate base, expenses, taxes and revenues that have already been allocated to classes, the cost of service study determines the dollars of return for each customer class under NatGas' proposed rate of return by class of service.

Q. PLEASE IDENTIFY THE RATE CLASSES USED IN THE CLASS COST OF SERVICE AND RATE DESIGN STUDY.

1 A. As described earlier, the rate classes used in this gas filing include:

- 2 ● Residential
- 3 ● Commercial, and
- 4 ● Public Authority

5

6 **Q. PLEASE DESCRIBE THE ALLOCATION METHODOLOGIES YOU**
7 **EMPLOYED IN THE CLASS COST OF SERVICE STUDY TO ALLOCATE**
8 **COSTS.**

9 A. There are numerous specific allocations made in the cost of service study. The
10 specific allocation of each revenue requirement component is identified by the
11 allocation factor set forth next to the total column. The allocation factors contained in
12 the cost of service study are either externally developed allocation factors
13 (independent) or internally developed allocation factors (dependent). Externally
14 developed allocation factors are calculated using information that is developed
15 externally to the cost of service study, such as sales volumes or number of customers.
16 Internally developed allocation factors are calculated within the cost of service study
17 based upon the results of previously allocated items, such as total plant in service.

18 NatGas does not possess the design-day nor peak day send-out data required
19 to calculate commonly used demand related allocation factors. However, it is not
20 reasonable to simply allocate plant on the basis of commodity sales volumes as this
21 method provides no recognition of peak demand periods. Therefore, monthly
22 commodity sales volumes, weighted by the monthly cost of gas as a proxy for
23 demand, were used to allocate measurement and regulatory station plant, and

1 distribution mains. We have utilized an approach identified as proportional
2 responsibility to weight the monthly sales volumes.

3

4 **Q. COULD YOU DESCRIBE THE PROPORTIONAL RESPONSIBILITY**
5 **METHOD?**

6 A. The Proportional Responsibility method was originally proposed by Gary H. Grainger
7 in an article entitled "The Proportional Responsibility Method of Capacity Cost
8 Allocation", published in the November 9, 1972 issue of Public Utilities Fortnightly.
9 The method is a capacity allocation procedure which considers the monthly variation
10 in sales by customer class. In contrast, the Design Day Allocation Method relates all
11 costs to a single day, a hypothetical day where temperature extremes create the
12 greatest load for which the utility can provide firm delivery service. This method
13 assumes that all costs are attributable to a single day, so by inference, there is no
14 value to capacity at any other time. Non-peaking period customers would have no
15 capacity cost responsibility at any time. In essence, these customers would receive the
16 benefit of free use of the transmission and distribution system. This anomaly is one of
17 the reasons why the FERC has migrated to capacity allocation methods that recognize
18 customer loads throughout the year, such as the Modified Fixed Variable Method.

19

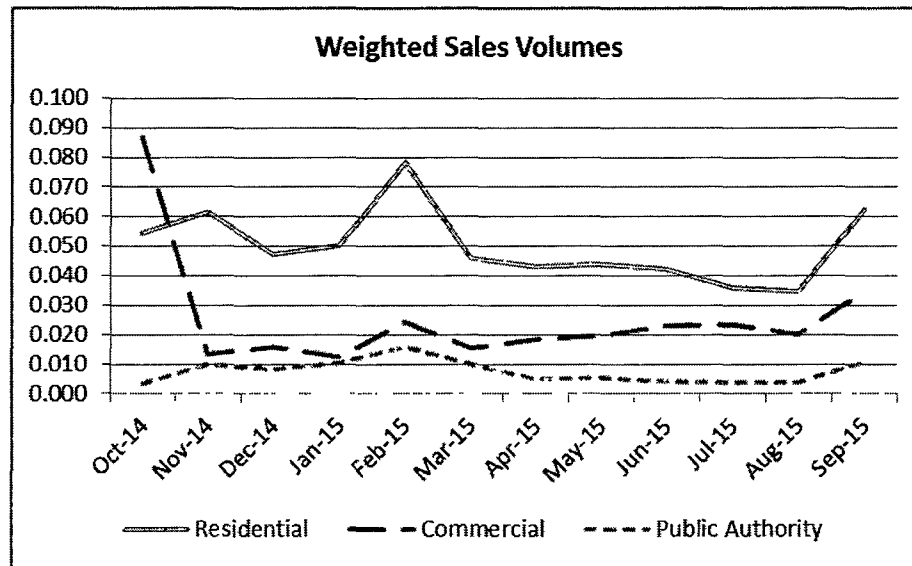
20 **Q. PLEASE DESCRIBE THE DEVELOPMENT OF YOUR PROPORTIONAL**
21 **RESPONSIBILITY ALLOCATION FACTORS.**

22 A. First, monthly gas cost weighting factors are developed using the Proportional
23 Responsibility methodology. This calculation is provided on workpaper WP-2 of this

1 filing. The monthly gas cost is ranked as a percentage of the system's maximum
2 monthly cost of gas. This percentage is the demand cost responsibility. Second, the
3 demand cost responsibility is spread over the month(s) it occurs. For example, the
4 lowest demand cost responsibility on WP-2 is .701909 (August). This occurs in 12
5 months of the year and should be spread over the 12 months, i.e., .058492 per month.
6 The second lowest responsibility is .753637 (July). The difference between .753637
7 and .701909 (.051728) occurs for 11 months of the year. Therefore, the second lowest
8 demand month gets the cost responsibility of the lowest demand over 12 months
9 (.058492) plus the responsibility of the second lowest demand spread over 11 months
10 (.004703) as shown on WP-2. This calculation continues until the highest demand
11 month is calculated. The cumulative monthly weighting factor is computed by
12 adding the month's individual weighting factors such that the sum of the cumulative
13 weighting factor for all 12 months equals 100%.

14 The class demand allocation factor is developed by multiplying the monthly
15 ratio of class to total customer growth adjusted sales volumes by the respective
16 monthly cumulative proportional responsibility weighting factors. This calculation is
17 provided on lines 32 through 36 on Workpaper 2. Figure 2 graphically depicts this
18 allocation factor.

Figure 2



Q. PLEASE DESCRIBE THE OTHER ALLOCATION FACTORS EMPLOYED IN THE GAS COST OF SERVICE STUDY.

A. Meters, services, and house regulators were allocated on the number of customers weighted by the relative cost of meters servicing those respective loads. General plant was allocated on labor. Distribution expenses related to plant accounts were allocated to classes on previously allocated distribution plant. Administrative and general expenses were allocated to classes on the sum of previously allocated distribution related expenses, customer accounting and sales-related expenses. Maintenance of General Plant was allocated on the previously allocated General Plant.

Q. PLEASE DESCRIBE THE RESULTS OF THE CLASS COST OF SERVICE STUDY.