Control Number: 49421

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SOAH DOCKET NO. 473-19-3974
PUC DOCKET NO. 49421

2019 JUN 14 PM 1:54

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,

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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

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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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

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 T&L Gas Company, ("T&L" 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

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

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?

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

Q. HOW IS YOUR TESTIMONY ORGANIZED?

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

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

II. PURPOSE AND SCOPE

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

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

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

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

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

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

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

Q. PLEASE DESCRIBE SCHEDULE E.

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

Q. PLEASE DESCRIBE SCHEDULE F.

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

Q. PLEASE DESCRIBE SCHEDULE G.

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

Q. PLEASE DESCRIBE SCHEDULE H.

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

Q. PLEASE DESCRIBE SCHEDULE I.

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

Q. PLEASE DESCRIBE SCHEDULE J.

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

Q. PLEASE DESCRIBE SCHEDULE K.

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

Q. PLEASE DESCRIBE SCHEDULE L.

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

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

A. Yes, they were.

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

A. Yes, they are.

IV. 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. In addition, adjustments were made to the Company's books and records to include Cash Working Capital and exclude certain test year revenues.

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

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

Q. PLEASE DESCRIBE THE ADJUSTMENT TO EMPLOYEE PENSIONS AND BENEFITS.

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

Q. PLEASE DESCRIBE THE ADJUSTMENT TO PAYROLL TAXES.

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

Q. PLEASE DESCRIBE THE CASH WORKING CAPITAL ADJUSTMENT.

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

Q. PLEASE DESCRIBE THE ADJUSTMENT FOR MISCELLANEOUS SERVICE CHARGES.

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

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

V. RATE OF RETURN

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

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

Generally, regulated utilities have several sources of capital with which to finance their utility assets: issuance of common stock and preferred stock, long-term debt, and common equity. T&L, however does not issue publicly traded stock. Therefore, T&L has imputed a return on equity based on a proxy group of utilities derived from a recent proceeding before the Railroad Commission.[3] Furthermore, T&L does not have any long-term debt. The interest rate on long-term debt was estimated based on current interest rates 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).

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

VI. BILLING DETERMINANTS

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

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

Q. IS T&L PROPOSING ANY ADJUSTMENTS TO TEST YEAR BILLING DETERMINANTS?

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

Growth Normalization Adjustment

Q. WHY ARE YOU PROPOSING A GROWTH NORMALIZATION ADJUSTMENT?

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

Q. PLEASE DESCRIBE HOW THIS ADJUSTMENT IS CALCULATED.

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

Q. WHAT IS THE ANNUAL IMPACT OF THIS ADJUSTMENT?

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

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 T&L 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 employed and the temperature information resource most frequently relied upon by the utility industry.

Because NOAA degree days are recorded on a calendar month basis and T&L reads its meters on the first of the month there is a perfect match between the degree day data and gas consumption. Therefore, there is no need to further adjust the data to account for staggered billing cycles. The temperature sensitive usage per MCF for the revenue month calculated as described above is then multiplied by the normal (i.e. the expected or average) number of degree days for the revenue month to derive the normal level of 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. WHAT IS THE ANNUAL IMPACT OF THIS ADJUSTMENT?

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

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

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

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

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

VII. CLASS COST OF SERVICE STUDY

Q. WHAT IS A CLASS COST OF SERVICE STUDY?

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

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

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

Q. PLEASE EXPLAIN WHAT YOU MEAN BY THE TERMS "ALLOCATE" AND "ALLOCATION"?

A. "Allocate" and "allocation," in the context of class cost of service and rate design, are terms used to describe the process by which T&L's rate base items, expenses, and revenues are apportioned among the various rate classes. This allocation is based on various causal parameters. The choice of the parameter to be used is primarily based upon the notion 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. Schedule D is the class cost of service study using adjusted pro-forma amounts. In this schedule 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, income is either allocated to classes (as in the case of other revenue) or directly assigned to classes (as in the case of revenues from gas sales) and operating income is calculated using the previously allocated revenues and expenses by class of service. From this information, return by class under present rates is calculated. 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 the proposed rate of return and the revenue deficiencies by class of service are calculated.

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

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

- Environs Residential Service
- Environs Commercial Service
- Environs Industrial Service

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

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

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

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

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

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

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

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

VIII. RATE DESIGN

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

A. While the cost of service study indicates that the Residential and Industrial classes require a rate increase while the Commercial class requires a decrease, T&L requests that rate 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:

	Present Rates		Proposed Rates	
Customer Class	Customer Charge $/Month	Commodity Charge $/MCF	Customer Charge $/Month	Commodity Charge $/MCF
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

Q. WHERE IN THE MODEL ARE THE DEVELOPMENT OF T&L'S 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.

IX. AFFILIATE TRANSACTIONS

Q. DOES T&L HAVE ANY AFFILIATE TRANSACTIONS?

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

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

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

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

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

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

X. CONCLUSION

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

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

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

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

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

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

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

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

Q. PLEASE SUMMARIZE YOUR RATE DESIGN RECOMMENDATIONS.

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

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

A. Yes, they are.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

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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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

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

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?

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

Q. HOW IS YOUR TESTIMONY ORGANIZED?

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

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

II. PURPOSE AND SCOPE

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

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

Q. PLEASE SUMMARIZE LDC'S REQUESTED COST OF SERVICE.

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

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

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

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

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, 2016. The class cost of service study is used to determine the level of revenues necessary for each class to support its allocated revenue requirement.

Q. PLEASE DESCRIBE SCHEDULE E.

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

Q. PLEASE DESCRIBE SCHEDULE F.

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

Q. PLEASE DESCRIBE SCHEDULE G.

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

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

Q. PLEASE DESCRIBE SCHEDULE H.

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

Q. PLEASE DESCRIBE SCHEDULE I.

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

Q. PLEASE DESCRIBE SCHEDULE J.

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

Q. PLEASE DESCRIBE SCHEDULE K.

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

Q. PLEASE DESCRIBE SCHEDULE L.

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

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

A. Yes, they were.

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

A. Yes, they are.

IV. 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. In addition, adjustments were made to the Company's books and records to include Cash Working Capital and exclude certain test year revenues.

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

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

Q. PLEASE DESCRIBE THE ADJUSTMENT TO EMPLOYEE PENSIONS AND BENEFITS.

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

Q. PLEASE DESCRIBE THE ADJUSTMENT TO PAYROLL TAXES.

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

Q. PLEASE DESCRIBE THE CASH WORKING CAPITAL ADJUSTMENT.

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

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

Q. PLEASE DESCRIBE THE REVENUE ADJUSTMENT.

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

Q. PLEASE DESCRIBE THE ADJUSTMENT FOR MISCELLANEOUS SERVICE CHARGES.

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

V. RATE OF RETURN

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

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

[2] TEX UTIL. CODE §104.051.

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

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

VI. BILLING DETERMINANTS

Q. PLEASE DESCRIBE LDC'S CUSTOMER CLASSES.

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

Q. IS LDC PROPOSING ANY ADJUSTMENTS TO TEST YEAR BILLING DETERMINANTS?

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

Growth Normalization Adjustment

Q. WHY ARE YOU PROPOSING A GROWTH NORMALIZATION ADJUSTMENT?

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

Q. PLEASE DESCRIBE HOW THIS ADJUSTMENT IS CALCULATED.

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

Q. WHAT IS THE ANNUAL IMPACT OF THIS ADJUSTMENT?

A. As a result of this growth normalization adjustment, sales increase by 2,661 MCF and the 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

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

Because NOAA degree days are recorded on a calendar month basis and LDC reads its meters on the first of the month there is a perfect match between the degree day data and gas consumption. Therefore, there is no need to further adjust the data to account for staggered billing cycles. The temperature sensitive usage per MCF for the revenue month calculated as described above is then multiplied by the normal (i.e. the expected or average) number of degree days for the revenue month to derive the normal level of 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. WHAT IS THE ANNUAL IMPACT OF THIS ADJUSTMENT?

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

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

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

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

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

VII. CLASS COST OF SERVICE STUDY

Q. WHAT IS A CLASS COST OF SERVICE STUDY?

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

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

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

Q. PLEASE EXPLAIN WHAT YOU MEAN BY THE TERMS "ALLOCATE" AND "ALLOCATION"?

A. "Allocate" and "allocation," in the context of class cost of service and rate design, are terms used to describe the process by which LDC's rate base items, expenses, and revenues are apportioned among the various rate classes. This allocation is based on various causal parameters. The choice of the parameter to be used is primarily based upon the notion 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. Schedule D is the class cost of service study using adjusted pro-forma amounts. In this schedule 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, income is either allocated to classes (as in the case of other revenue) or directly assigned to classes (as in the case of revenues from gas sales) and operating income is calculated using the previously allocated revenues and expenses by class of service. From this information, return by class under present rates is calculated. 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 the proposed rate of return and the revenue deficiencies by class of service are calculated.

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

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

- Incorporated Residential Service
- Environs Residential Service
- Incorporated Commercial Service
- Environs Commercial Service

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

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

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

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

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

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:

	Present Rates		Proposed Rates	
Customer Class	Customer Charge $/Month	Commodity Charge $/MCF	Customer Charge $/Month	Commodity Charge $/MCF
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:

Residential – Incorporated
Residential – Environs
Commercial – Incorporated
Commercial – Environs
Cost of Gas Adjustment
Rate Case Expense (RCE) Rider

Q. WHERE IN THE MODEL ARE THE DEVELOPMENT OF LDC'S 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.

IX. CONCLUSION

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

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

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

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

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

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

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

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

Q. PLEASE SUMMARIZE YOUR RATE DESIGN RECOMMENDATIONS.

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

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

A. Yes, they are.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

GAS UTILITIES DOCKET NO. _____

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

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

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?

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

II. PURPOSE AND SCOPE

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

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

Q. HOW IS YOUR TESTIMONY ORGANIZED?

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

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.

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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 September 30, 2016. The class cost of service study is used to determine the level of revenues necessary for each class to support its allocated revenue requirement.

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

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

Q. PLEASE DESCRIBE SCHEDULE I.

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

Q. PLEASE DESCRIBE SCHEDULE J.

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

Q. PLEASE DESCRIBE SCHEDULE K.

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

Q. PLEASE DESCRIBE SCHEDULE L.

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

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

A. Yes, they were.

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

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

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

Q. PLEASE DESCRIBE THE ADJUSTMENT TO REFLECT SHARED PAYROLL EXPENSES.

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

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

Q. PLEASE DESCRIBE THE ADJUSTMENT TO EMPLOYEE PENSIONS AND BENEFITS.

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

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

Q. PLEASE DESCRIBE THE ADJUSTMENT TO PAYROLL TAXES.

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

Q. PLEASE DESCRIBE THE CASH WORKING CAPITAL ADJUSTMENT.

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

Q. PLEASE DESCRIBE THE BAD DEBTS ADJUSTMENT.

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

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

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

A. The Company's income statement includes revenue associated with Line Extension Charges. Pursuant to the RRC Rate Review Handbook[2] I have included this amount as a Contribution in Aid of Construction, which is a rate base deduction, on Schedule D, line 2031.

IV. RATE OF RETURN

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

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

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

[2] Ibid.
[3] TEX UTIL. CODE §104.051.

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

V. BILLING DETERMINANTS

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

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

Q. IS OW&GS PROPOSING ANY ADJUSTMENTS TO TEST YEAR BILLING DETERMINANTS?

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

Growth Normalization Adjustment

Q. WHY ARE YOU PROPOSING A GROWTH NORMALIZATION ADJUSTMENT?

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

[4] AgriTexGas GUD 10021, FoF 50-54.

Q. PLEASE DESCRIBE HOW THIS ADJUSTMENT IS CALCULATED.

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

Q. WHAT IS THE ANNUAL IMPACT OF THIS ADJUSTMENT?

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

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 OW&GS 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 employed and the temperature information resource most frequently relied upon by the utility industry.

Because NOAA degree days are recorded on a calendar month basis and OW&GS reads its meters on the first of the month there is a perfect match between the degree day data and gas consumption. Therefore, there is no need to further adjust the data to account for staggered billing cycles. The temperature sensitive usage per MCF for the revenue month calculated as described above is then multiplied by the normal (i.e. the expected or average) number of degree days for the revenue month to derive the normal level of 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	389
Difference	10
Actual Use Per Customer	2.31
Less: Non-Temperature Sensitive Use Per Customer	0.49
Equals: Temperature Sensitive Use Per Customer	1.82
Divided by: Actual Heating Degree Days	379
Equals: Temperature Sensitive User Per Customer Per HDD	0.004789
Times: Degree Day Difference	10
Equals:Weather Adjustment Per Customer	.05
Times: Year-end Number of Customers	424
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

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

Q. WHAT IS THE ANNUAL IMPACT OF THIS ADJUSTMENT?

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

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

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

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

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

VI. CLASS COST OF SERVICE STUDY

Q. WHAT IS A CLASS COST OF SERVICE STUDY?

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

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

Q. PLEASE EXPLAIN WHAT YOU MEAN BY THE TERMS "ALLOCATE" AND "ALLOCATION"?

A. "Allocate" and "allocation," in the context of class cost of service and rate design, are terms used to describe the process by which OW&GS' rate base items, expenses, and revenues are apportioned among the various rate classes. This allocation is based on various causal parameters. The choice of the parameter to be used is primarily based upon the notion 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. Schedule D is the class cost of service study using adjusted pro-forma amounts. In this schedule 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, income is either allocated to classes (as in the case of other revenue) or directly assigned to classes (as in the case of revenues from gas sales) and operating income is calculated using the previously allocated revenues and expenses by class of service. From this information, return by class under present rates is calculated. 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 the proposed rate of return and the revenue deficiencies by class of service are calculated.

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

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

- Incorporated Residential Service
- Environs Residential Service

- Incorporated Commercial Service
- Environs Commercial Service

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

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

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

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

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

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 basis of previously allocated items. For example, labor related A&G was allocated on the sum of non-labor related distribution expenses, customer accounting and sales-related expenses, and non-labor related A&G expenses. Non-labor related A&G expenses were allocated on the sum of distribution related expenses, customer accounting and sales-related expenses.

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.

VII. RATE DESIGN

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

A. OW&GS proposes no structural changes to the existing gas service rates. However, OW&GS 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.

The proposed Customer Charge for Residential customers was increased from $12.00 per month to $15.00 per month. The proposed Customer Charge for Commercial 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:

	Present Rates		Proposed Rates	
Customer Class	Customer Charge $/Month	Commodity Charge $/MCF	Customer Charge $/Month	Commodity Charge $/MCF
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.

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

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

VIII. CONCLUSION

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

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

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

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

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

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

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

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

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

Q. PLEASE SUMMARIZE YOUR RATE DESIGN RECOMMENDATIONS.

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

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

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

A. Yes, they are.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

GAS UTILITIES DOCKET NO. _____

STATEMENT OF INTENT OF	§	
NATGAS, INC. TO INCREASE	§	**BEFORE THE**
RATES IN AND AROUND THE	§	**RAILROAD COMMISSION**
UNICORPORATED COMMUNITY	§	**OF TEXAS**
OF OZONA, 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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STATEMENT OF INTENT OF NATGAS, INC. TO INCREASE RATES IN AND AROUND THE UNICORPORATED COMMUNITY OF OZONA, TEXAS	§ § § § §	**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").

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

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

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSISON?

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

II. PURPOSE AND SCOPE

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

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

Q. WHAT IS NATGAS REQUESTING IN THIS PROCEEDING?

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

Q. HOW IS YOUR TESTIMONY ORGANIZED?

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

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

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

Q. PLEASE DESCRIBE SCHEDULE A.

A. Schedule A provides a summary of revenue by customer classification. This schedule identifies the commodity sales in thousand cubic feet ("MCF") 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 September 30, 2015. The class cost of service study is used to determine the level of revenues necessary for each class to support its allocated revenue requirement.

Q. PLEASE DESCRIBE SCHEDULE E.

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

Q. PLEASE DESCRIBE SCHEDULE F.

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

Q. PLEASE DESCRIBE SCHEDULE G.

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

Q. PLEASE DESCRIBE SCHEDULE H.

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

Q. PLEASE DESCRIBE SCHEDULE I.

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

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

Q. PLEASE DESCRIBE SCHEDULE J.

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

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

A. Yes, they were.

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

A. Yes, they are.

III. BILLING DETERMINANTS

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

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

Q. PLEASE DESCRIBE NATGAS' REVISED CUSTOMER CLASSES.

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

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

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

Growth Normalization Adjustment

Q. WHY ARE YOU PROPOSING A GROWTH NORMALIZATION ADJUSTMENT?

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

Q. PLEASE DESCRIBE HOW THIS ADJUSTMENT IS CALCULATED.

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

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

Q. WHAT IS THE ANNUAL IMPACT OF THIS ADJUSTMENT?

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

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 NatGas 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 Workpaper 3 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 employed and the temperature information resource most frequently relied upon by the utility industry.

NOAA degree day data were revised so that the data consistently matched NatGas' billing cycle. Because customer usage occurs over portions of two calendar months while degree days are recorded on a calendar month basis, it is necessary to restate the calendar month degree days on the basis of a billing month to ensure that usage and temperatures are properly matched. The temperature sensitive usage per MCF for the revenue month calculated as described above is then multiplied by the normal (i.e. the expected or average) number of degree days for the revenue month to derive the normal level of 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 example in Figure 1 illustrates the calculation of the weather normalization adjustment for Residential customers for the month of February 2015. Note that the revenues booked in February are derived from consumption in January and February.

Figure 1

Actual HDD	394
Normal HDD	335
Difference (adjustment to normal)	-59
Actual Use Per Customer	7.12
Less: Non-Temperature Sensitive Use Per Customer	1.03
Equals: Temperature Sensitive Use Per Customer	6.09
Divided by: Actual Heating Degree Days	394
Equals: Temperature Sensitive User Per Customer Per HDD	0.015453
Times: Degree Day Difference	-59
Equals:Weather Adjustment Per Customer	-0.90
Times: Year-end Number of Customers	1,051
Equals: Weather Normalization Adjustment	-950.6

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, NatGas reads customer meters on the last two working days of the month. Therefore, the sales amounts booked in any given month reflect some consumption that actually occurs during the calendar month preceding the book month.

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

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

Q. WHAT IS THE ANNUAL IMPACT OF THIS ADJUSTMENT?

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

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

Q. PLEASE EXPLAIN THE REASON FOR THE LARGE WEATHER ADJUSTMENT IMPACT ON COMMERCIAL SALES.

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

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

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

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

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

IV. 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. In addition, adjustments were made to the Company's books and records to include Cash Working Capital.

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

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

Q. PLEASE DESCRIBE THE ADJUSTMENT TO EMPLOYEE PENSIONS AND BENEFITS.

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

Q. PLEASE DESCRIBE THE ADJUSTMENT TO PAYROLL TAXES.

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

Q. PLEASE DESCRIBE THE CASH WORKING CAPITAL ADJUSTMENT.

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

V. CLASS COST OF SERVICE STUDY

Q. WHAT IS A CLASS COST OF SERVICE STUDY?

A. A class cost of service study is an analysis that develops dollar revenue requirements by customer class utilizing causal relationships between cost components and 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.

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

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

Q. PLEASE EXPLAIN WHAT YOU MEAN BY THE TERMS "ALLOCATE" AND "ALLOCATION"?

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

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

- Residential
- Commercial, and
- Public Authority

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

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

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

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

Q. COULD YOU DESCRIBE THE PROPORTIONAL RESPONSIBILITY METHOD?

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

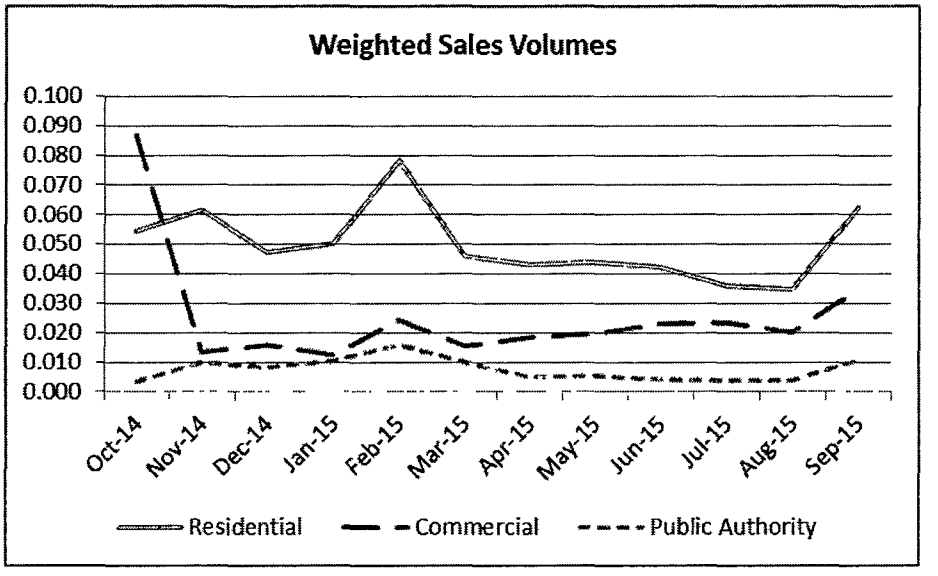
Q. PLEASE DESCRIBE THE DEVELOPMENT OF YOUR PROPORTIONAL RESPONSIBILITY ALLOCATION FACTORS.

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

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

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