

April 23, 2012

To: Ms. Rondella Hawkins

Manager of the Office of Telecommunications & Regulatory Affairs

From: Fox Smolen & Associates, Inc.

Re: Review and Analysis of Texas Gas Service Gas Reliability Infrastructure Program Rate Filing to

the City of Austin dated February 10, 2012.

The purpose of this memorandum is to present the results of Fox Smolen & Associates (FSA) review and analysis of Texas Gas Service's (TGS) Gas Reliability Infrastructure Program (GRIP) filing to the City of Austin (COA) dated February 10, 2012. This memorandum discusses the Texas utility statute that governs TGS GRIP filing, TGS GRIP filing schedules and workpapers, FSA's review and analysis of the TGS GRIP filing and our findings and conclusions related to our review and analysis.

Executive Summary

After a complete and thorough review of the GRIP filing, FSA recommends that the COA approve and adopt TGS GRIP schedules and tariffs as submitted to the COA on February 10, 2012. The TGS rates for all customer classes from 2008 through 2011 are shown below. A detailed discussion of the filing and FSA's review is attached.

		COA Approved Customer Charge				TGS Proposed 2011		TGS Proposed 2011		FSA Proposed 2011	
Rate Schedule - Customer Class	2008		2010		Interim Rate Adjustment		Customer Charge		Customer Charge		
		(a)		(b)		(c)		(d)		(e)	
Gas Sales											
10 - Residential	\$	9.75	\$	10.21	\$	1.12	\$	11.33	\$	11.33	
20 - Commercial	\$	12.75	\$	14.36	\$	4.05	\$	18.41	\$	18.41	
22 - Large Commercial	\$	80.00	\$	97.84	\$	60.84	\$	158.68	\$	158.68	
30 - Industrial	\$	40.00	\$	46.26	\$	18.08	\$	64.34	\$	64.34	
32 - Large Industrial	\$	80.00	\$	105.10	\$	61.52	\$	166.62	\$	166.62	
40 - Public Authority	\$	20.00	\$	22.22	\$	5.71	\$	27.93	\$	27.93	
42 - Large Public Authority	\$	80.00	\$	111.13	\$	74.95	\$	186.08	\$	186.08	
48 - Public Schools/Space Heating	\$	40.00	\$	46.86	\$	17.31	\$	64.17	\$	64.17	
CNG -1- Compressed Nat. Gas	\$	25.00	\$	29.27	\$	9.67	\$	38.94	\$	38.94	
T-1 Standard Transportation											
Commercial	\$	75.00	\$	86.38	\$	27.04	\$	113.42	\$	113.42	
Large Commercial	\$	150.00	\$	187.03	\$	91.51	\$	278.54	\$	278.54	
Industrial	\$	80.00	\$	97.61	\$	42.72	\$	140.33	\$	140.33	
Large Industrial	\$	150.00	\$	224.19	\$	181.83	\$	406.02	\$	406.02	
Public Authority	\$	25.00	\$	28.16	\$	6.48	\$	34.64	\$	34.64	
Large Public Authority	\$	100.00	\$	141.64	\$	108.05	\$	249.69	\$	249.69	
Public Schools/Space Heating	\$	60.00	\$	67.03	\$	17.41	\$	84.44	\$	84.44	
CNG -1- Compressed Nat. Gas	\$	40.00	\$	41.57	\$	3.85	\$	45.42	\$	45.42	

TGS current GRIP revenue requirement of \$3,775,205 is shown in Table 1 of this memorandum, and includes rate components allowed by Texas utility statutes including return on net plant investment (i.e., TGS Direct, Corporate and TGS Division), federal income tax expense, and other plant related costs



including depreciation expense and ad valorem (i.e., property) tax expense for the period January 1, 2011 through January 31, 2011. The primary reason for the increase in TGS GRIP revenue requirement from that approved by the COA in TGS prior GRIP filing relates to the significant increase in net plant investment (i.e., TGS direct and corporate/division allocated plant in service and completed construction not classified plant) occurring during the period January 1, 2011 through December 31, 2011. TGS incurred over \$23.9 million of net plant additions during calendar year 2011 as shown on Table 1.

Table 1 – TGS Central Texas Revenue Requirement (GRIP Schedule 1)

Line			Change throu				
No.	Description	T	GS Proposed	FSA	Recommended	Diffe	rence
1	Change in Net Investment	\$	23,922,153	\$	23,922,153	\$	-
2	Aut. Return in most Recent Rate Case		8.40%		8.40%		-
3	Change in Return on Net Investment	\$	2,009,545	\$	2,009,545	\$	-
4	Change in Depreciation Expense		746,477		746,477		-
5	Change in Ad Valorem Tax		291,677		291,677		-
6	Change in Federal Income Taxes		727,507		727,507		-
7	Total Change in Revenue Requirement	\$	3,775,205	\$	3,775,205	\$	-

The costs associated with TGS plant investment for the central Texas service area are shown in plant investment reports filed by TGS as part of its COA GRIP rate application. The majority of the \$23.9 million of TGS net plant additions during calendar year 2011 relate to distribution and general plant assets recorded to the following Federal Energy Regulatory Commission (i.e., FERC) plant accounts:

- Acct. 376 Mains
- Acct. 380 Services
- Acct. 381 Meters
- Acct. 391.9 Computers and Electronic Equipment, and
- Acct. 397 Communications Equipment.

In response to FSA data requests, TGS provided additional narrative descriptions of some of the specific types of direct and corporate/division allocated plant in service and completed construction projects benefiting central Texas service area customers and the rationale for such expenditures. TGS responses to FSA data request 1-4 and 1-5 are summarized in Appendix 1 of this memorandum. Appendix 2 compares TGS proposal rates for Residential and Commercial to rates of other Texas gas utilities.

All GRIP schedules are mathematically accurate and properly compute TGS central Texas GRIP revenue requirement and associated rate design to customer classes using the rate design methodology approved by the COA in TGS previous central Texas rate filing approved by the COA. FSA recommended revenue requirement applicable to the current central Texas service area for the period January 1, 2011 through December 31, 2011.



Review and Analysis of Texas Gas Service Gas Reliability Infrastructure Program Rate Filing to the City of Austin dated February 10, 2012

Background

Utility Statute Governing TGS GRIP Filing

TGS submitted a GRIP filing to the COA on February 10, 2012 requesting interim rate adjustments for increases in return (income) dollars and federal income tax expense resulting from TGS increases in TGS plant investment as well as increases in plant related costs such as depreciation expense, and property tax expense. These increases in TGS costs occurred subsequent to TGS most recent 2011 GRIP filing approved by the COA, and represent increases in costs incurred for the period January 1, 2011 through December 31, 2011. This GRIP filing represents TGS second GRIP filing under applicable utility statutes. The Texas Utilities Code (TUC) Section 103.301 titled *Interim Adjustment for Changes in Investment* governs the filing submitted by TGS. TUC §104.301 include the following provisions:

- A gas utility that has filed a rate case under Subchapter C within the preceding two years may file with the regulatory authority a tariff or rate schedule that provides for an interim adjustment in the utility's monthly customer charge or initial block rate to recover the cost of changes in the investment in service for gas utility services. The adjustment shall be allocated among the gas utility's classes of customers in the same manner as the cost of service was allocated among classes of customers in the utility's latest effective rates for the area in which the tariff or rate schedule is implemented.
- The gas utility shall file the tariff or rate schedule, or the annual adjustment under Subsection (c), with the regulatory authority at least 60 days before the proposed implementation date of the tariff, rate schedule, or annual adjustment. The gas utility shall provide notice of the tariff, rate schedule, or annual adjustment to affected customers by bill insert or direct mail not later than the 45th day after the date the utility files the tariff, rate schedule, or annual adjustment with the regulatory authority. During the 60-day period, the regulatory authority may act to suspend the implementation of the tariff, rate schedule, or annual adjustment for up to 45 days.
- The amount the gas utility shall adjust the utility's rates upward or downward under the tariff or rate schedule each calendar year is based on the difference between the value of the invested capital for the preceding calendar year and the value of the invested capital for the calendar year preceding that calendar year. The value of the invested capital is equal to the original cost of the investment at the time the investment was first dedicated to public use minus the accumulated depreciation related to that investment.
- A gas utility may only adjust the utility's rates under the tariff or rate schedule for the return on investment, depreciation expense, ad valorem taxes, revenue related taxes, and incremental



federal income taxes related to the difference in the value of the invested capital as determined under Subsection (b). The return on investment, depreciation, and incremental federal income tax factors used in the computation must be the same as the factors reflected in the final order issued by or settlement agreement approved by the regulatory authority establishing the gas utility's latest effective rates for the area in which the tariff or rate schedule is implemented.

- A gas utility that implements a tariff or rate schedule under this section shall file with the
 regulatory authority an annual report describing the investment projects completed and placed
 in service during the preceding calendar year and the investments retired or abandoned during
 the preceding calendar year. The annual report shall also state the cost, need, and customers
 benefited by the change in investment.
- In addition to the report required under Subsection (e), the gas utility shall file with the regulatory authority an annual earnings monitoring report demonstrating the utility's earnings during the preceding calendar year.
- If a gas utility that implements a tariff or rate schedule under this section does not file a rate case under Subchapter C before the fifth anniversary of the date on which the tariff or rate schedule takes effect, the gas utility shall file a rate case under that subchapter not later than the 180th day after that anniversary in relation to any rates subject to the tariff or rate schedule.

The COA has 60 days to review and evaluate the GRIP filing before revised rates may be implemented. In addition, the COA can suspend rate implementation for an additional 45 days. COA did suspend implementation of TGS rates to on or about May 25, 2012.

FSA Review and Analysis of TGS GRIP Filing

The COA engaged FSA to review and analyze TGS GRIP filing. The purpose of FSA's review and analysis of the TGS GRIP filing were to:

- Determine whether TGS is earning below its authorized rate of return on rate base for the twelve months ended December 31, 2011;
- Determine whether TGS GRIP filing was prepared in accordance with TUC GRIP filing statutes and requirements;
- Determine whether TGS direct GRIP project descriptions relate to TGS central Texas service areas
 and to the customers who benefited from such projects and that the project activity costs for the
 GRIP period (January 1, 2011 through December 31, 2011) were adequately reported in the TGS
 filing;



- Determine whether ONEOK Corporate and TGS Division project descriptions are reasonable and necessary as allocated to the TGS central Texas service area and to the customers who benefited from such projects and that the project activity costs for the GRIP period (January 1, 2011 through December 31, 2011) were adequately reported in the TGS filing;
- Determine whether plant asset account balances and related accumulated depreciation account balances at 12/31/08 and 12/31/11 were properly derived from the books, records, and/or fixed asset reports of TGS, ONEOK Corporate and TGS Division and reported in the TGS GRIP filing;
- Determine whether ratemaking adjustments related to TGS previous central Texas service area GRIP filing as approved by the COA were properly reflected in the current TGS GRIP filing as appropriate;
- Determine whether the ratemaking adjustments for the period January 1, 2011 through December 31, 2011 included in the GRIP filing are reasonable and necessary;
- Determine whether ONEOK Corporate and TGS Division allocation factors used to allocate plant asset balances to the central Texas service area were reasonable in relation to those factors used in TGS previous central Texas service area GRIP filing approved by the COA;
- Determine whether all TGS GRIP schedules, workpapers, and reports were mathematically accurate and computed the correct revenue requirement for the central Texas service area; and
- Determine whether the TGS central Texas service area revenue requirement as assigned to customer class was computed correctly based on the rate design methodology used in TGS previous central Texas service area GRIP filing as approved by the COA.

During the course of FSA's review and analysis of the TGS GRIP filing, FSA prepared and submitted two data requests containing 8 questions to TGS for response. The data requests primarily related to obtaining additional documentation in the form of detailed fixed asset accounting records to support plant asset balances shown in the GRIP filing as well as other questions, related to certain ratemaking adjustments included in the GRIP filing and the rate design used to allocate the GRIP revenue requirement for the central Texas service area. FSA notes that TGS provided complete and timely responses to all FSA data requests. We appreciate the prompt attention provided by TGS and ONEOK corporate representatives in responding to our data requests.

TGS GRIP Filing Schedules, Workpapers, and other Reports

To comply with the provisions of TUC §104.301, TGS filed certain schedules, workpapers, reports and revised customer tariffs (collectively referred to as the TGS GRIP filing) with the COA to implement new customer rates. The TGS GRIP schedules, workpapers, reports are described as follows:



- Schedule 1 TGS Central Texas Service Area Interim Cost and Rate Adjustment Changes from January 1, 2011 through December 31, 2011 Summary this schedule summarizes the change in return resulting from increases in net plant investment, and changes in other costs including depreciation expense, ad valorem (i.e., property taxes) and federal income taxes.
- Schedule 2 TGS Central Texas Service Area Interim Cost and Rate Adjustment Changes from January 1, 2011 through December 31, 2011 Change in Net Investment this schedule presents the change in net investment (i.e., gross plant in service and completed construction not classified less accumulated depreciation) summarized as intangible, distribution plant, and general plant.
 - ➤ Schedule 2a -TGS Central Texas Service Area Interim Cost and Rate Adjustment Changes from January 1, 2011 through December 31, 2011 Changes in Net Plant Direct and Allocated Corporate and TGS Division this schedule presents the change in net plant (i.e., gross plant in service and completed construction not classified less accumulated depreciation) costs by primary Federal Energy Regulatory Account (FERC) Uniform System of Accounts classification for TGS direct and allocated ONEOK corporate and TGS division net plant costs.
 - ➤ Schedule 2b -TGS Central Texas Service Area Interim Cost and Rate Adjustment Changes from January 1, 2011 through December 31, 2011 Change in Plant In Service (101) Direct and Allocated Corporate and TGS Division this schedule presents the change in plant in service (i.e., Acct. 101) for TGS direct and ONEOK corporate and TGS division plant.
 - WKP 2b.1 -TGS Central Texas Service Area Interim Cost and Rate Adjustment Changes from January 1, 2011 through December 31, 2011 – Changes in Plant In Service (101) – Direct – this schedule presents the change in plant in service (i.e., Acct. 101) costs for TGS direct plant.
 - WKP 2b.2 -TGS Central Texas Service Area Interim Cost and Rate Adjustment Changes from January 1, 2011 through December 31, 2011 – Changes in Plant In Service (101) – Direct – this schedule presents the change in plant in service (i.e., Acct. 101) costs for ONEOK corporate and TGS division plant costs.
 - Schedule 2c -TGS Central Texas Service Area Interim Cost and Rate Adjustment Changes from January 1, 2011 through December 31, 2011 – Change in CCNC (106) – Direct and Allocated Corporate and TGS Division – this schedule presents the change in completed construction not classified costs (i.e., Acct. 106) for TGS direct and ONEOK corporate and TGS division costs.
 - WKP 2c.1 -TGS Central Texas Service Area Interim Cost and Rate Adjustment Changes from January 1, 2011 through December 31, 2011 – Change in CCNC (106) – Direct – this workpaper presents the change in completed construction not classified costs (i.e., Acct. 106) for TGS direct plant.



- WKP 2c.2 -TGS Central Texas Service Area Interim Cost and Rate Adjustment Changes from January 1, 2011 through December 31, 2011 Change in CCNC (106) Allocated Corporate and TGS Division this workpaper presents the change in completed construction not classified costs (i.e., Acct. 106) for ONEOK corporate and TGS division plant.
- Schedule 2d -TGS Central Texas Service Area Interim Cost and Rate Adjustment Changes from January 1, 2011 through December 31, 2011 – Change in Accumulated Depreciation and Amortization – Direct and Allocated Corporate and TGS Division – this schedule presents the change in the accumulated depreciation and amortization account balances for TGS direct and ONEOK corporate and TGS division plant.
 - WKP 2d.1 -TGS Central Texas Service Area Interim Cost and Rate Adjustment Changes from January 1, 2011 through December 31, 2011 – Change in Accumulated Depreciation and Amortization) – Direct – this workpaper presents the change in accumulated depreciation account balances for TGS direct plant.
 - WKP 2d.2 -TGS Central Texas Service Area Interim Cost and Rate Adjustment Changes from January 1, 2011 through December 31, 2011 – Change in Accumulated Depreciation and Amortization – Allocated Corporate and TGS Division – this workpaper presents the change in accumulated depreciation account balances for ONEOK corporate and TGS division plant.
- Schedule 3 Central Texas Service Area Interim Cost and Rate Adjustment Changes from January 1,
 2011 through December 31, 2011 Change in Depreciation and Amortization Expense Direct and
 Allocated Corporate and TGS Division this schedule summarizes the net changes in depreciation
 and amortization account balances for plant in service and completed construction not classified
 plant for TGS direct and ONEOK corporate and TGS division plant.
 - > WKP 3a -TGS Central Texas Service Area Interim Cost and Rate Adjustment Changes from January 1, 2011 through December 31, 2011 Depreciation and Amortization Expense Direct this workpaper presents the change in accumulated depreciation account balances for TGS direct plant in service and completed construction not classified plant.
 - ➤ WKP 3b -TGS Central Texas Service Area Interim Cost and Rate Adjustment Changes from January 1, 2011 through December 31, 2011 Change in Accumulated Depreciation and Amortization Allocated Corporate and TGS Division this workpaper presents the change in accumulated depreciation account balances for allocated ONEOK corporate plant in service accounts.
- Schedule 4 TGS Central Texas Service Area Interim Cost and Rate Adjustment December 31, 2011 Cost of Capital this schedule shows the cost of capital and capital structure approved in the most recent central Texas rate case with test year ended 9/30/08 filed with the COA.



- Schedule 5 TGS Central Texas Service Area Interim Cost and Rate Adjustment Changes from January 1, 2011 through December 31, 2011 Change in Ad Valorem Tax this schedule shows the computation of the 2010 effective property tax rate and the change in property taxes for the period January 1, 2011 through December 31, 2011.
- Schedule 6 TGS Central Texas Service Area Interim Cost and Rate Adjustment Changes from January 1, 2010 through December 31, 2011 Change in Federal Income Tax this schedule shows the computations of the December 31, 2010 federal income tax expense as approved by the COA in the TGS last GRIP filing and the change in expense for the period January 1, 2011 through December 31, 2011.
 - > WKP 6a -TGS Central Texas Service Area Interim Cost and Rate Adjustment Investment Tax Credit Amortization this workpaper shows the amortization of investment tax credits used in the calculation of federal income tax expense.
- Schedule 7 TGS Central Texas Service Area Interim Cost and Rate Adjustment Changes from January 1, 2011 through December 31, 2011 Change in Customer Charge by Customer Class this schedule shows the rate design computations to assign the GRIP revenue requirement to the customer charge for each customer class.
- TGS Central Texas Service Area Interim Cost and Rate Adjustment Changes from January 1, 2011 through December 31, 2011 Investment Report Summary of CTX Direct Plant in Service (101 & 106) Project Activity this report includes all plant in service and completed construction not classified project related to the central Texas service area and the costs incurred for each project for the period January 1, 2011 through December 31, 2011. Each project includes a project description as well as the customers benefiting from the project. This report also includes adjustments to plant costs related to TGS previous GRIP filing as approved by the COA.
- TGS Central Texas Service Area Interim Cost and Rate Adjustment Changes from January 1, 2011 through December 31, 2011 Investment Report Summary of Corporate Plant in Service (101 & 106) Project Activity this report includes all plant in service and completed construction not classified project activity related to ONEOK Corporate and the costs incurred for each project for the period January 1, 2011 through December 31, 2011 as allocated to the central Texas service area. Each project includes a project description as well as the customers benefiting from the project. This report also includes adjustments to project costs related to TGS previous GRIP filing approved by the COA, as well as other adjustments to project costs to recognize changes in corporate allocation percentages occurring between January 1, 2011 and December 31, 2011.
- TGS Central Texas Service Area Interim Cost and Rate Adjustment Changes from January 1, 2011 through December 31, 2011 Investment Report Summary of TGS Division Plant in Service (101 &



106) Project – this report includes all plant in service and completed construction not classified project activity related to TGS Division and the costs incurred for each project for the period January 1, 2011 through December 31, 2011, as allocated to the central Texas service area. Each project includes a project description as well as the customers benefiting for the project. This report also includes adjustments to project costs related to TGS previous GRIP filing approved the COA.

• TGS Central Texas Service Area Interim Cost and Rate Adjustment Twelve Months Ended December 31, 2011 – Earnings Report – this report together with supporting schedules and workpapers shows TGS calculations of its earned return on rate base for the twelve months ended December 31, 2011 for its central Texas service area. Schedule A shows that TGS earned return on rate base for the twelve months ended December 31, 2010 is 7.84% which is below the 8.40% allowed return approved in the most recent 9/30/08 TGS central Texas rate case and previous GRIP filing approved by the COA.

FSA Findings and Conclusions Related to TGS Central Texas GRIP Filing

Based on our review of the TGS GRIP filing including plant investment reports, earnings report and responses to all data requests, FSA concludes the following:

- The TGS earnings monitoring report for the central Texas service area for the twelve months ended December 31, 2011 indicates that the TGS earned return on rate base (i.e., 5.46%) is below the authorized rate of return on rate base authorized and approved by the COA in TGS most recent general rate case (test year ended 9/30/08) and previous central Texas service area GRIP filing approved by the COA;
- TGS GRIP filing is consistent with TUC §104.301;
- The plant investment reports for central Texas Direct, Corporate and TGS Division plant projects filed to support plant asset cost activity and accumulated depreciation changes for the period January 1, 2011 through December 31, 2011 are mathematically accurate and include certain ratemaking adjustments that are reasonable and necessary to reflect the proper activity costs related to the central Texas service area;
- The TGS GRIP filing contains the appropriate plant asset and accumulated depreciation account balances, ratemaking adjustments and authorized rate of return authorized and approved by the COA in TGS previous central Texas service area GRIP filing);
- The ratemaking adjustments related to TGS prior central Texas GRIP filing as approved by the COA are properly reflected in the current GRIP as appropriate and other adjustments to 12/31/10 plant asset account balances appear reasonable and necessary and are applicable to central Texas customer classes for the period January 1, 2011 through December 31, 2011.



- The ONEOK corporate and TGS allocation factors used in the GRIP filing are consistent with those similar factors used in TGS previous central Texas GRIP filing as approved by the COA, and are calculated the allocation factors as of December 31, 2011;
- All GRIP schedules are mathematically accurate and properly compute TGS central Texas GRIP
 revenue requirement and associated rate design to customer classes using the rate design
 methodology approved by the COA in TGS previous central Texas rate filing approved by the COA.
 Table 1 below summarizes TGS proposed and FSA recommended revenue requirement applicable to
 the current central Texas service area for the period January 1, 2011 through December 31, 2011.

<u>Table 1 – TGS Central Texas Revenue Requirement (GRIP Schedule 1)</u>

Line	ne		Change throu				
No.	Description	T	GS Proposed	FSA	Recommended	Diffe	rence
1	Change in Net Investment	\$	23,922,153	\$	23,922,153	\$	-
2	Aut. Return in most Recent Rate Case		8.40%		8.40%		-
3	Change in Return on Net Investment	\$	2,009,545	\$	2,009,545	\$	-
4	Change in Depreciation Expense		746,477		746,477		-
5	Change in Ad Valorem Tax		291,677		291,677		-
6	Change in Federal Income Taxes		727,507		727,507		-
7	Total Change in Revenue Requirement	\$	3,775,205	\$	3,775,205	\$	-

Table 2 - TGS Central Texas Customer Charge History and Current Increase

	COA Approved Customer Charge					TGS Proposed 2011	TGS Proposed 2011		FSA Proposed 2011		
Rate Schedule - Customer Class	2008			2010		Interim Rate Adjustment		Customer Charge		Customer Charge	
		(a)		(b)		(c)		(d)		(e)	
Gas Sales											
10 - Residential	\$	9.75	\$	10.21	\$	1.12	\$	11.33	\$	11.33	
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Large Industrial	\$	150.00	\$	224.19	\$	181.83	\$	406.02	\$	406.02	
Public Authority	\$	25.00	\$	28.16	\$	6.48	\$	34.64	\$	34.64	
Large Public Authority	\$	100.00	\$	141.64	\$	108.05	\$	249.69	\$	249.69	
Public Schools/Space Heating	\$	60.00	\$	67.03	\$	17.41	\$	84.44	\$	84.44	
CNG -1- Compressed Nat. Gas	\$	40.00	\$	41.57	\$	3.85	\$	45.42	\$	45.42	



<u>Appendix 1 – TGS Direct and Corporate/Division Allocated Plant in Service and Completed</u> Construction Project Descriptions Provided in Response to FSA Data Request 1-4 and 1-5

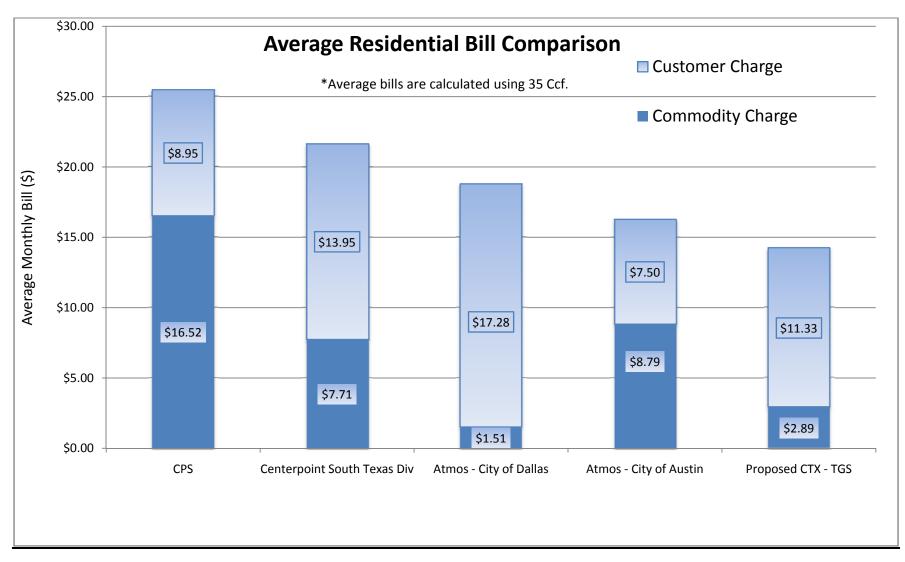
- Acct. 376 Mains the increases in activity for this account are primarily attributable to the following:
 - The replacement or relocation of mains, services, measuring and regulating station equipment, meter settings, gate valves, control equipment, replacement of cathodic protection equipment, equipment used to monitor gas quality, monitoring and communicating pressures and volumes, etc. in response to TGS' efforts to continuously evaluate and modernize infrastructure. Examples of larger projects completed for this purpose is the "Ramsey and 47" project and the "Woodland Chelsea Mission Ridge" project. These projects and others like it are essential for the safe and efficient operation of the TGS distribution system in Central Texas.
 - ➤ Distribution line extensions to connect customers requesting service on the system. This includes the installation of lines to connect industrial, city gate and pipeline customers as well as new regulator stations that may be necessary to serve the customers. The largest installation was for a new Randall's store at The Ranch. TGS must provide extensions to meet its service obligations as Central Texas continues to grow.
 - ➤ Distribution line extensions to connect new customers. This includes new lines to connect industrial, city gate and pipeline customers as well as any necessary regulator stations. The largest installation project is the first phase of an eight inch main installation near Pearce Lane. TGS must provide extensions to meet its service obligations as Central Texas continues to grow.
 - Labor, materials, regulators, etc. necessary to provide service from distribution mains and high pressure distribution lines to serve new customers. An example of one of the larger projects completed for this purpose is the "Stoney Ridge Subdivision" project. It involved the installation of a new regulator station. TGS must provide regulators and extensions from distribution lines to meet its service obligations as Central Texas continues to grow.
 - > The replacement or relocation, at the request of a governmental agency, of mains, district regulators, bypasses, meter settings, gate valves, services, service regulators, control equipment, etc. An example of one of the larger relocation projects is the "East 7" Street" project. It involved the relocation of existing gas lines in conflict with a City of Austin proposed street reconstruction and beautification project; relocation of the lines was necessary to resolve conflicts with the City project.
 - The interconnection/system reinforcement of the existing system to enhance deliverability of gas in the distribution system, when no removal is necessary. This includes the additional installation of line supports, bypasses, regulators, controllers, and cathodic protection equipment (rectifiers and groundbeds). It also includes the initial installation of chromatographs, gas samplers, SCADA or like systems, Distribution Integrity Management Program related to installations, and installation of new odorizers. These system enhancements are necessary for TGS to provide safe and efficient service to Central Texas.



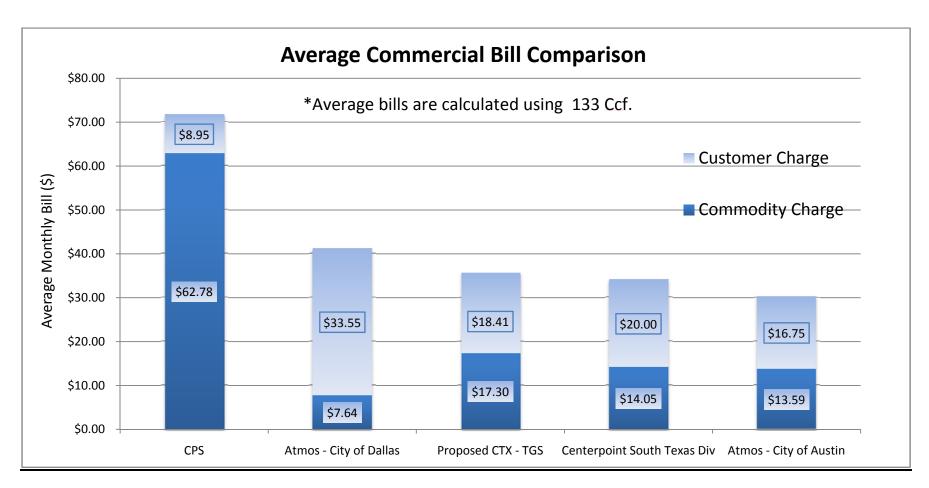
- Acct. 380 Services -increases in activity for this account are primarily attributable to the following:
 - ➤ Labor, materials, regulators, etc. necessary to provide service from distribution mains and high pressure distribution lines to serve new customers. The largest installation project is for the Steiner Ranch, River Dance Phase 6B. TGS must provide extensions to meet its service obligations as Central Texas continues to grow.
 - ➤ Replacement or relocation of mains, services, measuring and regulating station equipment, meter settings, gate valves, control equipment, replacement of cathodic protection equipment, equipment used to monitor gas quality, monitoring and communicating pressures and volumes, etc. for repair or due to corrosion, deterioration, etc. The largest replacement project was for a six inch main serving IBM at the Domain site. Replacement corroded or deteriorated of mains, services, etc. is essential for the safe and efficient operation of the TGS distribution system in Central Texas.
- Acct. 381 Meters increases in activity for this account are primarily attributable to the following:
 - Increase in investment in automated meter reading (AMR). The automated technology uses a small radio transmitter attached to the natural gas meter that, when activated, sends the current reading to a nearby technician who is equipped with a receiver that records the data and ultimately transfers it to the company's accounting system. The technician may obtain the reading from a company vehicle or from the street. AMR devices lead to more accurate bills by reducing the number of estimated readings of hard-to-access natural gas meters. AMR devices will contribute to TGS employee safety by reducing the need for meter readers to enter customers' yards and property.
- Acct. 391.9 Computer and Electronic Equipment The primary reasons for increase in plant activity for this account are:
 - ➤ Replacement of an out of date scheduling and dispatch system. The legacy system was a heavily customized application that was no longer supported by the vendor. It was also running on an outdated Operating System (OS). The replacement system is a unified field service scheduling and dispatch application that provides enhanced capabilities, such as GPS technology to better serve our customers. Using GPS technology we are able to better route technicians to the customer's location and provide better appointment setting.
 - The purchase of computers to replace those that were retired at the end of seven years. This service life was found to be reasonable in TGS' last rate case.
 - The purchase of Business Intelligence software. Business Intelligence is an Excel based software "add-in" that helps TGS more effectively track capital spending. It was developed as a tool to retrieve real time information on capital projects. This software allows TGS to create detailed project level reports with variance analysis. It interfaces with the systems associated with capital spending and job estimating. It has been a valuable tool in TGS service areas for determining the status of a project, tracking budget dollars in real time, and remaining on budget. Reduced delay in accessing this information allows TGS to be more efficient and make more informed decisions about capital expenditures.



- ➤ Enhancements to Geographical Information System (GIS) used for tracking pipe underground. TGS is currently building a GIS database for all areas served by the company to support various business needs such as safety, reliability, critical infrastructure protection, regulatory compliance, aging infrastructure, and process improvements. GIS provides TGS the ability to analyze the gas distribution system to help improve service reliability and safety, reduce costs, more effectively manage its infrastructure and comply with all state and federal requirements.
- ➤ Enhancements to our customer billing system. Banner is the billing system the company uses to maintain records of ONEOK's approximate 2 million customers, premises, services, accounts, meter readings, and other information critical to providing reliable billing and customer service. The Banner Program Change (PCRs) are groups of individual functionality enhancements to provide better customer service and accurate billing of accounts through the Banner Customer Information System (CIS). Some of these requests are driven by regulatory changes others through requests to enhance customer service capabilities.
- Acct. 397 Communications Equipment The increases in activity for this account are primarily related to investment in AMR. This automated technology uses a small radio transmitter attached to the natural gas meter that, when activated, sends the current reading to a nearby technician who is equipped with a receiver that records the data and ultimately transfers it to the company's accounting system. The technician may obtain the reading from a company vehicle or from the street. AMR devices lead to more accurate bills by reducing the number of estimated readings of hard-to-access natural gas meters. AMR devices will contribute to TGS employee safety by reducing the need for meter readers to enter customers' yards and property.



Source: Texas Gas Services



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