



American Gas Association

Energy Analysis

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NATURAL GAS UTILITY RATE STRUCTURE: THE CUSTOMER CHARGE COMPONENT – 2010 UPDATE

I. Introduction

The largest part of a natural gas customer's bill is the cost of the gas itself, over which the utility has little control. This cost accounts for about 58 cents of every dollar of revenue received by a distribution utility.¹ The bill amount for the gas portion varies with price as well as amount consumed. Natural gas utilities also incur costs that are not dependent on a customer's consumption. These "fixed" costs include:

- Meter reading
- Billing
- Fixed costs on plant and equipment
 - Depreciation and taxes
 - Distribution mains, meters, and service lines
- Most administrative and general expenses
 - Wages
 - Buildings, energy, etc.
- Natural gas storage
- Customer and service O&M

Most utilities recover at least a portion of these costs through a fixed charge on a customer's bill. This is most often called the "customer charge", but is also called minimum bill, facility charge, service charge, fixed charge, and access fee. In addition to recovering some of the fixed costs, the customer charge also represents a fee for "readiness to serve", even if the customer does not use any gas for that billing period.²

¹ 2004-2008 Performance Benchmarks for Natural Gas Utilities, American Gas Association, December 15, 2009

² Gas Rate Fundamentals, American Gas Association, 1987

This charge is typically determined between the utility and its government regulators through a rate case.

In the past few years the customer charge has increased in prominence in gas utility rate cases. Many utilities are finding it difficult to achieve authorized rates of return in this increasingly volatile gas market due in part to:

- Declining use per customer
- Significant swings in the commodity cost of natural gas
- Increased costs from recent legal and regulatory mandates (pipeline safety, pension, etc.)
- Growing bad debt costs

Some companies have sought to increase their customer charges to better capture the actual fixed costs of serving these customers, citing the following benefits:

- Moderates volatility in customer bills
- Encourages utilities to promote customer conservation
- Makes utility earnings less dependent on sales volumes
- Improves cash flow, mitigating need for working capital
- Reduces winter bills for high use customers
- Reduces the need for future rate cases, and
- Is a more appropriate way to recover fixed costs

This analysis updates a report done four years ago.³ The purpose of this analysis is to illustrate the current levels of customer charges, estimate the portion of fixed costs that these charges cover, and track the historical growth of these charges.

II. Executive Summary

The customer charge is a part of the natural gas utility customer's bill that does not vary with consumption. Based on Internet searches and AGA surveys, this charge:

- Is typically \$10 per month for residential customers and \$19 for small commercial customers (median values for about 150 rate jurisdictions)
- Represents approximately 13 percent of a residential customer's annual bill
- Typically recovers only forty percent of a utility's actual fixed costs
- Would be \$25 per month for the residential sector, on average, in order to recover all of a utility's typical fixed costs

III. Current Customer Charge Levels

A February 2010 Internet search of natural gas utility tariffs provided data on customer charges for about 150 rate jurisdictions in 47 states and the District of Columbia (see

³ *Natural Gas Utility Rate Structure: The Customer Charge Component* American Gas Association May 19, 2006.

Appendix 1). Residential (excluding master metered apartments) and small commercial⁴ rates were examined.

The median customer charge for the residential sector was \$10.00 per month, with 75 percent of the companies having a residential customer charge of \$12.50 or less. The highest charge was \$25.33. The commercial customer charges showed a wider variation. For the small commercial customer, the median monthly customer charge was \$19.07, with 75 percent at or below \$24.03. The high for this sector was \$100.24.

Table 1
Natural Gas Utility Monthly Customer Charges

	First Quartile	Median	Third Quartile
Residential	\$8.00	\$10.00	\$12.50
Commercial	\$13.75	\$19.07	\$24.03

Based on that \$10 monthly figure, the customer charge comprises 12.6 percent of the typical residential customer’s annual natural gas bill.⁵

The utilities were grouped by Census region to determine if charges varied by location. The median residential charge was highest in the Middle Atlantic region at \$12.57 per month, compared to the lowest charge of \$6.00 in the Pacific region. (See Appendix 2 for a map of the Census regions.) The highest median monthly commercial customer charge (\$25.00) occurred in the East South Central region, while the Pacific region again had the lowest (\$11.50 – see Table 2).

Table 2
Natural Gas Utility Median Monthly Customer Charges by Census Region

Census Region	Residential	Commercial
New England	\$ 10.94	\$ 18.60
Middle Atlantic	\$ 12.57	\$ 19.89
East North Central	\$ 10.38	\$ 17.65
West North Central	\$ 12.13	\$ 20.10
South Atlantic	\$ 9.31	\$ 19.00
East South Central	\$ 10.00	\$ 25.00
West South Central	\$ 10.85	\$ 20.70
Mountain	\$ 9.50	\$ 21.00
Pacific	\$ 6.00	\$ 11.50

It should be noted that these variations in customer charges are caused by a number of factors, such as:

- The company itself – age of system, number of customers, employee wages and benefits, etc.
- Local regulatory environment – regulatory philosophy, intervenor activity, etc.

⁴ For tariffs with more than one commercial category, the lowest level of consumption was selected.

⁵ Based on a total bill of \$956 per customer calculated from US Energy Information Administration statistics for 2008. <http://www.eia.doe.gov>

- Geographic location – climate, cost to install mains (e.g. rocky ground = expensive, so proportionally more fixed costs compared to sandy soils), etc.
- Rate case frequency – companies that have not had a rate case in a relatively long time tend to have a relatively lower fixed charge

IV. Customer Charges Relative to Utility Fixed Costs

The customer charge recovers only a percentage of the utility’s actual fixed costs, with the remainder of the fixed costs allocated to volumetric charges. In the spring of 2010, the American Gas Association asked its members,

What percentage of the utility’s fixed costs for the residential sector do you estimate is recovered in the residential monthly customer/service charge?

Companies representing more than 90 rate jurisdictions in 34 states and the District of Columbia responded. The typical response was that only forty percent of the fixed costs were recovered in the customer charge (Table 3). One-quarter of the responders estimated that they recovered less than 25 percent of the fixed costs through the customer charge. Only 35 percent of the responses estimated that they recovered half or more of their fixed costs through the customer charge. Based on a \$10.00 median monthly charge, on average the customer charge would be about \$25 in order to recover all of a utility’s fixed costs.⁶

Table 3
Portion of Fixed Costs Recovered by Customer Charge

First Quartile	24.5%
Median	40.0%
Third Quartile	56.0%

Source: AGA Survey, 2010

Responses were grouped by geographic region to determine if any patterns existed between location and recovery level (Table 4). The highest reported recovery portion is in the West South Central section of the country, while the lowest occurred in the South Atlantic region.

Table 4
Regional Breakout of Portion of Fixed Costs Recovered by Customer Charge (Medians)

New England	35.7%
Middle Atlantic	40.0%
East North Central	47.0%
West North Central	47.5%
South Atlantic	22.0%
East South Central	46.0%
West South Central	88.0%
Mountain	30.0%
Pacific	23.0%

Source: AGA Survey, 2010

⁶ Median charge of \$10.00/month divided by 0.4 (portion of fixed costs recovered)

V. Comparison to Previous Report

This report updates an analysis from 2006. Of the 156 gas utility rate jurisdictions studied, 104, or two-thirds, increased their customer charge since 2006. For those companies with higher charges, the average increase was \$3.35 for the residential class. There was no change for 46 companies, but 20 of those utilities have not had a rate case decided between February 2006 and February 2010. Less than three percent had a decline.

An analysis of all companies shows that the median increased \$2.00 per month for residential customers and over \$9.00 for commercial customers (Table 5). Regionally the largest increase in residential customer charge occurred in the East North Central (\$3.38), and the lowest in the Pacific (\$1.00). The median commercial customer charge increased \$4.07 for the U.S. as a whole. The largest increase (\$7.00) occurred in the East South Central, the lowest (\$1.25) in New England.

Table 5
Natural Gas Utility Median Monthly Customer Charges 2006 vs. 2010

Census Region	2006		2010	
	Residential	Commercial	Residential	Commercial
New England	\$ 8.98	\$ 17.35	\$ 10.94	\$ 18.60
Middle Atlantic	\$ 10.66	\$ 14.98	\$ 12.57	\$ 19.89
East North Central	\$ 8.24	\$ 15.00	\$ 10.38	\$ 17.65
West North Central	\$ 8.75	\$ 15.38	\$ 12.13	\$ 20.10
South Atlantic	\$ 8.28	\$ 15.50	\$ 9.31	\$ 19.00
East South Central	\$ 7.50	\$ 18.00	\$ 10.00	\$ 25.00
West South Central	\$ 9.25	\$ 15.00	\$ 10.85	\$ 20.70
Mountain	\$ 7.27	\$ 15.84	\$ 9.50	\$ 21.00
Pacific	\$ 5.00	\$ 9.12	\$ 6.00	\$ 11.50
United States	\$ 8.00	\$ 15.00	\$ 10.00	\$ 19.07

Four years ago, AGA surveyed its members, again asking utilities to estimate what portion of their fixed costs were recovered by the customer charge. The results show that utilities today recover slightly more of their fixed costs through the fixed charge, but still less than 50 percent (Table 6). The largest relative increase in this proportion occurred in the West South Central region. The South Atlantic exhibited a reduction in portion of fixed costs recovered by the fixed charge.

Table 6
**Regional Breakout of Portion of Fixed Costs
Recovered by Customer Charge (Medians), 2006 vs. 2010**

	2006	2010
New England	29.3%	35.7%
Middle Atlantic	29.5%	40.0%
East North Central	32.0%	47.0%
West North Central	39.0%	47.5%
South Atlantic	24.5%	22.0%
East South Central	35.0%	46.0%
West South Central	49.5%	88.0%
Mountain	40.0%	30.0%
Pacific	19.5%	23.0%
United States	32.1%	40.0%

Source: AGA Survey, 2010

VI. Trends in Customer Charges

AGA surveys its members regarding customer bills on a quarterly basis. Results are available back to December 1980. While the survey does not specifically cover customer charges, it does ask what a customer's bill would be if the customer did not use any gas that month ("zero use"). Compared to the utility's tariff filing, the difference between the posted customer charge and the "zero use" charge, on average, was less than four percent (taxes are one possible explanatory factor). Thus the historical values for this "zero use" figure should be a good indicator of trends in customer charges.

Table 7 shows the historical median values for residential "zero use" bills for 39 rate jurisdictions that reported in almost every period represented (if an analyzed company did not respond for a particular quarter, a previous or subsequent quarter's response was substituted). The median value started out at \$3.50 in 1980, with four companies reporting they had no customer charge, and the highest charge was \$6.61. By 2009, the median value had risen to \$11.18, with the lowest charge of \$5.00 per month and the highest being \$19.60.

Table 7
Trends in Median Residential Customer Charge Levels, 1980-2009

Dec 1980	Dec 1985	Dec 1990	Dec 1995	Dec 2001*	Dec 2005	Dec 2009
\$3.50	\$5.25	\$5.57	\$6.68	\$7.69	\$8.59	\$11.18

Source – AGA Surveys

* December 2000 data not available

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Appendix 1

Natural Gas Utility Customer Charge

<u>Company</u>	<u>State</u>	<u>Residential</u>	<u>Small Commercial</u>
Enstar	AK	\$ 9.00	\$ 12.00
Arkansas-Oklahoma	AR	\$ 9.00	\$ 13.75
Southwest Gas	AZ	\$ 10.75	\$ 27.50
Pacific Gas & Electric	CA	\$ 3.00	\$ 8.23
San Diego G&E	CA	\$ -	\$ 10.00
Sempra	CA	\$ 5.00	\$ 15.00
Southwest Gas	CA	\$ 5.00	\$ 11.00
Black Hills Energy	CO	\$ 10.00	\$ 15.00
Atmos	CO	\$ 10.00	\$ 24.00
Colorado Springs Utilities	CO	\$ 9.40	\$ 19.40
Xcel Energy	CO	\$ 10.98	\$ 21.65
Connecticut Natural Gas	CT	\$ 13.00	\$ 38.00
Southern Connecticut Gas	CT	\$ 15.00	\$ 30.00
Yankee Gas	CT	\$ 13.50	\$ 42.00
Washington Gas	DC	\$ 7.85	\$ 13.12
Chesapeake Gas	DE	\$ 10.50	\$ 26.00
Delmarva (was Conectiv)	DE	\$ 9.56	\$ 27.31
Central Florida Gas	FL	\$ 15.00	\$ 15.00
City Gas Florida	FL	\$ 8.00	\$ 9.50
Fort Pierce Utilities	FL	\$ 12.02	\$ 14.72
Peoples Gas (FL)	FL	\$ 12.00	\$ 15.00
Atlanta Gas Light	GA	\$ 9.05	\$ 20.39
Atmos	GA	\$ 10.50	\$ 16.00
Alliant Energy IP&L	IA	\$ 10.00	\$ 19.94
Black Hills Energy	IA	\$ 15.60	\$ 23.60
Atmos	IA	\$ 7.95	\$ 13.00
Avista	ID	\$ 4.00	

Appendix 1 (continued)

Natural Gas Utility Customer Charge

<u>Company</u>	<u>State</u>	<u>Residential</u>	<u>Small Commercial</u>
Ameren CILCO	IL	\$ 11.80	\$ 22.55
Ameren CIPS	IL	\$ 18.51	\$ 30.11
Ameren IP	IL	\$ 19.97	\$ 59.91
Atmos	IL	\$ 9.90	\$ 25.00
Mt. Carmel Public Utilities	IL	\$ 11.50	\$ 38.50
Nicor	IL	\$ 13.55	\$ 20.80
North Shore Gas Company	IL	\$ 18.53	\$ 24.80
Peoples Gas Light & Coke	IL	\$ 20.84	\$ 30.10
Citizens Gas & Coke	IN	\$ 7.00	\$ 7.00
Kokomo Gas	IN	\$ 12.50	\$ 15.00
Northern Indiana Public Service	IN	\$ 6.36	\$ 6.07
Northern Indiana Fuel Gas	IN	\$ 7.50	\$ 11.00
Ohio Valley Gas	IN	\$ 14.50	\$ 14.50
Vectren Indiana Gas	IN	\$ 11.25	\$ 17.00
Vectren SIEGCO	IN	\$ 11.00	\$ 22.00
Black Hills Energy	KS	\$ 16.00	\$ 22.75
Atmos	KS	\$ 12.25	\$ 30.00
Atmos	KY	\$ 9.35	\$ 25.00
Columbia Gas - KY	KY	\$ 12.35	\$ 25.13
Delta Natural Gas	KY	\$ 15.50	\$ 25.00
Duke KY	KY	\$ 16.00	\$ 47.50
Equitable Gas	KY	\$ 7.50	\$ 7.50
Louisville Gas & Electric	KY	\$ 9.50	\$ 23.00
Atmos	LA	\$ 12.50	\$ 21.25
Entergy New Orleans	LA	\$ 10.50	\$ 14.70
Bay State Gas	MA	\$ 10.94	\$ 17.51
Berkshire Gas	MA	\$ 11.41	\$ 12.51
City of Holyoke	MA	\$ 6.00	\$ 10.00
KeySpan Boston	MA	\$ 14.15	\$ 52.40
KeySpan Colonial Cape	MA	\$ 6.59	\$ 10.45
KeySpan Colonial Lowell	MA	\$ 5.01	\$ 7.50
KeySpan Essex	MA	\$ 7.96	\$ 2.50
New England Gas Fall River	MA	\$ 9.00	\$ 20.00
NSTAR	MA	\$ 6.50	\$ 15.00
Westfield Gas & Electric	MA	\$ 6.00	\$ 10.25
Baltimore Gas & Electric	MD	\$ 13.00	\$ 35.00
Chesapeake Gas	MD	\$ 8.75	\$ 17.25
Columbia Gas - MD	MD	\$ 10.29	\$ 26.00
Easton Utilities	MD	\$ 8.15	\$ 30.15
Elkton Gas	MD	\$ 5.75	\$ 11.00
Washington Gas	MD	\$ 10.20	\$ 21.10

Appendix 1 (continued)

Natural Gas Utility Customer Charge

<u>Company</u>	<u>State</u>	<u>Residential</u>	<u>Small Commercial</u>
Citizens Gas & Fuel	MI	\$ 10.50	\$ 20.00
Consumers Energy	MI	\$ 9.50	\$ 10.50
Michigan Consolidated	MI	\$ 8.50	\$ 20.00
Semco Energy	MI	\$ 10.00	\$ 10.00
Wisconsin Public Service	MI	\$ 5.00	\$ 7.50
Xcel Energy	MI	\$ 6.50	\$ 14.00
Alliant Energy IP&L	MN	\$ 5.00	\$ 5.00
Xcel Energy	MN	\$ 8.00	\$ 20.30
Ameren UE	MO	\$ 15.00	\$ 24.00
Atmos	MO	\$ 18.00	\$ 18.00
Laclede Gas	MO	\$ 16.49	\$ 20.25
Atmos	MS	\$ 6.95	\$ 11.27
Northwestern Energy	MT	\$ 6.75	\$ 16.95
Greenville Utilities	NC	\$ 8.00	\$ 22.00
Lexington Utilities	NC	\$ 9.00	\$ 18.00
Piedmont Gas	NC	\$ 10.00	\$ 22.00
Xcel Energy	ND	\$ 18.48	\$ 30.00
Black Hills Energy	NE	\$ 12.00	\$ 17.00
Northwestern Energy	NE	\$ 8.00	\$ 9.00
KeySpan Energy North	NH	\$ 14.03	\$ 100.24
Northern Utilities	NH	\$ 9.50	\$ 18.70
Elizabethtown Gas	NJ	\$ 8.00	\$ 16.15
New Jersey Natural Gas	NJ	\$ 8.25	\$ 25.00
Public Service Electric & Gas	NJ	\$ 5.46	\$ 9.28
South Jersey Gas	NJ	\$ 7.76	\$ 18.73
New Mexico Gas Company	NM	\$ 9.59	\$ 16.50
NV Energy	NV	\$ 6.50	\$ 16.00
Southwest Gas	NV	\$ 9.00	\$ 24.00

Appendix 1 (continued)

Natural Gas Utility Customer Charge

<u>Company</u>	<u>State</u>	<u>Residential</u>	<u>Small Commercial</u>
Central Hudson & Gas	NY	\$ 17.00	\$ 30.00
Con Edison	NY	\$ 15.28	\$ 20.05
Corning Natural Gas	NY	\$ 15.25	\$ 15.25
KeySpan Long Island	NY	\$ 13.14	\$ 20.94
KeySpan NYC	NY	\$ 20.94	\$ 20.94
National Fuel Gas	NY	\$ 16.61	\$ 19.89
New York State Electric & Gas	NY	\$ 14.30	\$ 20.00
Orange & Rockland	NY	\$ 15.40	\$ 24.03
Rochester Gas & Electric	NY	\$ 15.00	
Duke Ohio	OH	\$ 25.33	\$ 45.00
Columbia Gas - OH	OH	\$ 17.81	\$ 22.50
Dominion East Ohio	OH	\$ 15.40	\$ 15.40
Vectren	OH	\$ 18.37	\$ 20.00
Arkansas-Oklahoma	OK	\$ 12.90	\$ 20.15
Oklahoma Natural Gas	OK	\$ 11.20	\$ 26.75
Avista	OR	\$ 6.50	
NW Natural Gas	OR	\$ 6.00	\$ 8.00
Columbia Gas - PA	PA	\$ 11.50	\$ 17.00
Dominion Peoples	PA	\$ 11.00	\$ 18.38
Equitable Gas	PA	\$ 13.25	\$ 17.00
Excelon PECO	PA	\$ 10.75	\$ 25.00
National Fuel Gas	PA	\$ 12.00	\$ 19.89
Philadelphia Gas Works	PA	\$ 12.00	\$ 18.00
Valley Energy	PA	\$ 8.64	\$ 8.63
Nat Grid RI	RI	\$ 12.00	\$ 18.60
Piedmont Gas	SC	\$ 8.80	\$ 22.00
Scana	SC	\$ 10.50	\$ 27.55
Northwestern Energy	SD	\$ 7.00	\$ 9.00
Atmos	TN	\$ 12.50	\$ 10.75
Chattanooga Gas	TN	\$ 11.00	\$ 27.00
Knoxville Utilities Board	TN	\$ 5.30	\$ 5.30
Middle Tennessee Natural Gas	TN	\$ 7.00	\$ 16.00
Memphis Light Gas Water	TN	\$ 10.00	\$ 25.00
Nashville Gas	TN	\$ 11.25	\$ 29.00

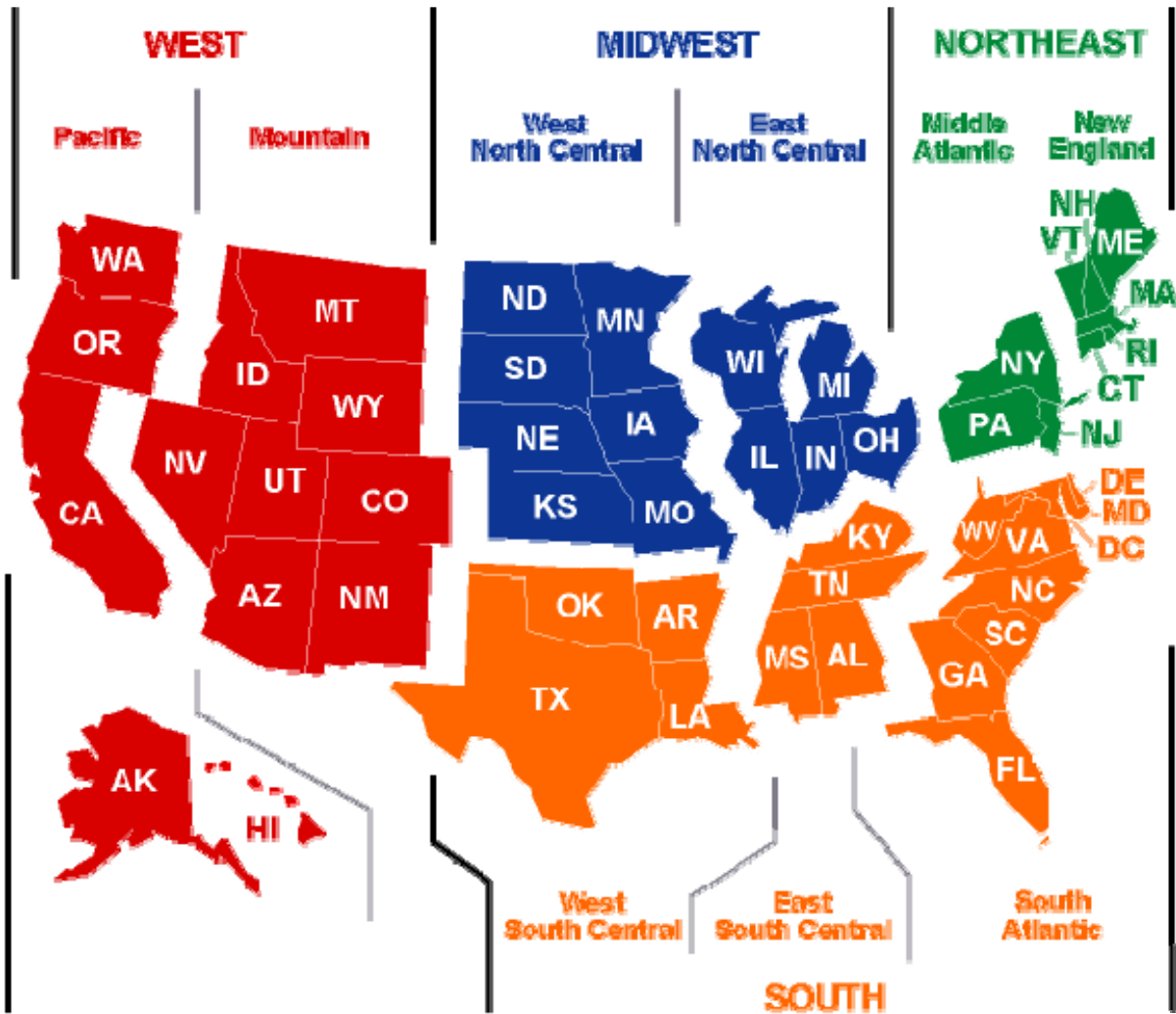
Appendix 1 (continued)

Natural Gas Utility Customer Charge

<u>Company</u>	<u>State</u>	<u>Residential</u>	<u>Small Commercial</u>
City Public Service of San Antonio	TX	\$ 7.92	\$ 35.00
Atmos	TX - Amarillo	\$ 9.50	\$ 14.52
Atmos	TX - Mid	\$ 14.00	\$ 25.00
Questar Gas	UT	\$ 5.00	\$ 21.00
Atmos	VA	\$ 9.00	\$ 20.00
Columbia Gas - VA	VA	\$ 12.25	\$ 23.25
Virginia Natural Gas	VA	\$ 9.78	\$ 12.78
Washington Gas	VA	\$ 9.00	\$ 16.35
Vermont Gas	VT	\$ 18.23	\$ 30.21
Avista	WA	\$ 6.00	
NW Natural Gas	WA	\$ 7.00	\$ 15.00
Puget Sound Energy	WA	\$ 10.00	\$ 30.00
Allete (SWL&P)	WI	\$ 7.00	\$ 13.00
Alliant Energy WP&L	WI	\$ 9.08	\$ 11.87
Madison Gas & Electric	WI	\$ 10.11	\$ 18.30
We Energy - Wisconsin Electric	WI	\$ 8.70	\$ 8.70
We Energy - Wisconsin Gas	WI	\$ 9.30	\$ 9.30
Wisconsin Public Service	WI	\$ 7.00	\$ 7.00
Xcel Energy	WI	\$ 10.25	\$ 20.00
Dominion Hope	WV	\$ 8.90	\$ 17.50
Equitable Gas	WV	\$ 6.50	\$ 10.00
Questar Gas	WY	\$ 10.00	\$ 44.00

Source: Company Web Site postings February 2010

APPENDIX 2
U.S. CENSUS REGIONS



Source: U.S. Dept. of Energy http://www.eia.doe.gov/emeu/cbecs/census_maps.html