

Customer Charges

By asking for a 26.5% increase in the residential customer charge, National Fuel Gas has attempted to focus the debate on whether there should be an extremely large increase, a smaller increase, or no increase at all, as was decided in the recent NYSEG / RG&E case. Since everyone now understands that fixed fees for residential customers penalize and provide a disincentive for energy conservation and result in higher costs per CCF for low usage customers, the real debate should be about the size of the reduction in the fixed customer charge.

Although I would prefer to abolish the customer charge to maximize the incentive for energy conservation and require all residential customers to be charged the same price per CCF for delivery, there are some costs which logically could be assigned equally to every residential customer. The two attached spreadsheets show estimates for the maximum customer charge that should be considered.

The spreadsheet titled "Utility Fixed Fees around the Country.xls" looks at the customer charges imposed by other utility companies. The utility companies in the list are the same utility companies which National Fuel Gas cited in its filings as being comparable to them. The table shows that National Fuel's existing customer charge of \$15.54 per customer is already \$4.34 per month above average. National Fuel's customer charge should be reduced by at least \$4.34 per month.

The spreadsheet titled "Customer Charge Calc.xls" uses National Fuel's figures from COSRD-1, Schedule 1. Cost items are labeled by NFG as either "Supply," "Demand," or "Customer." The items that I believe might correctly be assigned as fixed costs per residential customer add up to \$5.58 per customer per month.

The main difference between my calculation and National Fuel's calculation is that they assigned much of the gas main costs to "Customer." The cost of owning or maintaining the gas mains is not directly related to the number of customers or number of meters. If I divided my house into two apartments and had a second meter installed, would National Fuel's costs go up by \$15.54 per month or \$186.48 per year? The cost of reading the second meter would be a small fraction of that. There would be the cost of issuing a second bill, but I am not arguing against the proposed fixed fee for billing of \$1.04 per month. There would be no change in the cost of the gas mains.

National Fuel also filed a document on criteria for a rate design. These criteria were taken from a book written in the 1980's which says that existing rate structures are the best rate structures. I believe that business as usual prior to the 1980's should not be the basis for a settlement in 2016. A more forward-looking policy is "The days of business as usual are over."

Calculation of Demand Charge

8/15/2016 by Richard W. Ford

Although I would prefer to abolish the customer charge to encourage energy conservation and give relief to low income customers, some costs could logically be attributed equally to individual residential customers. The calculations below show that the present customer charge of \$15.54 per month is excessive. The cost of gas mains does not change with the number of customers and should not be included in the customer charge. Using figures in documents filed by National Fuel and including everything that might vary with the number of customers shows a maximum customer charge of \$5.58 per month per customer.

Operation and Maintenance Expense
Source of Data:

RWFord@roadrunner.com

Answer to UIU Information Request Set 2, Question 43.
NFG referred the questioner to Exhibit_(COSD-1) Schedule 1, column G.
This is NFG document no. 32EEDF62-C667-497F-AAD3-7AEF0DFBAB39%7D%20(6).pdf
filed 4/28/16

Operation and Maintenance Expense

Data from rows 303 - 366

Item	Cost	NFG Cost to SC-1 Customers	R. Ford Cost to SC-1 Customers	Notes
Mains and Services	\$ 6,355,721	\$ 5,868,174	\$ -	- Cost of Mains does not change with the number of customers
Customer Installations	\$ 1,575,230	\$ 1,426,248	\$ -	- Is this a transfer of costs to existing customers from real estate developers?
Mains Maintenance	\$ 4,008,113	\$ 3,735,160	\$ -	- Cost of Mains does not change with the number of customers
Maint of Other Equipment	\$ 193,400	\$ 175,109	\$ -	What does this consist of?
Meter and House Regulators	\$ 4,324,392	\$ 2,340,867	\$ 2,340,867	
Services Maintenance	\$ 813,207	\$ 743,946	\$ 743,946	
Supervision & Engineering	\$ 2,296,536	\$ 1,900,191	\$ 1,900,191	
Rents	\$ 100,244	\$ 82,943	\$ -	
Other Distribution Expense	\$ 6,532,240	\$ 5,404,879	\$ -	- What does this consist of?
		\$ -	\$ -	
Total Distribution - Customer	\$ 26,199,083	\$ 21,677,517	\$ 4,985,004	

Customer Accounts

Meter Reading	\$ 2,851,324	\$ 2,636,599	\$ 2,636,599	\$ 0.92 per read
Customer Records and Collections	\$ 18,499,508	\$ 17,238,802	\$ 17,238,802	
Misc Customer Accounts	\$ 156,950	\$ 145,132	\$ 145,132	
Supervision	\$ 723,991	\$ 674,652	\$ 674,652	
Total Customer Accounts	\$ 22,231,773	\$ 20,695,185	\$ 20,695,185	

Customer Service

Customer Service	\$ 2,571,394	\$ 1,397,259	\$ -	- When customers call to complain about inaccurate bills, should NFG charge extra for their inaccuracies?
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Summary of Operation and Maintenance Expense

Expense	\$ 51,002,250	\$ 43,769,961	\$ 25,680,189
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No. of RSC-1 Customers 480,042 480,042

Annual O&M per Customer	91.18	53.50		
Return on meters @ 9% & \$149	13.41	13.41	\$ 149.00 meter cost	9% ROI
Annual Customer Cost	104.59	66.91		
Customer Cost/Month	\$ 8.72	\$ 5.58		

Cells added by R. Ford

Cells in white were re-typed from NFG document cited in row 5

Calculation of Demand Charge

8/11/2016

Direct Labor Expense

Source of Data:

Answer to UIU Information Request Set 2, Question 43.

NFG referred the questioner to Exhibit_(COSD-1) Schedule 1, column G.

This is NFG document no. 32EEDF62-C667-497F-AAD3-7AEF0DFBAB39%7D%20(6).pdf

Data is in rows 240 through 270.

Distribution

Item	Cost	NFG Cost to SC-1 Customers	R. Ford Cost to SC-1 Customers	Notes
Mains and Services	\$ 3,980,162	\$ 3,674,843	\$ -	- Cost of Mains does not change with the number of customers
Mains Maintenance	\$ 1,896,671	\$ 1,767,509	\$ -	- "
Services Maintenance	\$ 568,400	\$ 519,990	\$ 519,990	
Meter and House Regulators	\$ 2,893,506	\$ 1,566,303	\$ 1,566,303	
Customer Installations	\$ 2,081,046	\$ 1,884,225	\$ -	- Is this a transfer of costs to existing customers from real estate developers?
Maint of Other Equipment	\$ 98,306	\$ 89,009	\$ -	- What does this consist of?
Supervision and Engineering	\$ 2,140,733	\$ 1,766,002	\$ -	
Other Distribution Expense	\$ 4,279,963	\$ 3,530,765	\$ -	What does this consist of?
Total Distribution - Customer	\$ 17,938,787	\$ 14,798,646	\$ 2,086,293	
Customer Accounts				
Meter Reading	\$ 2,551,612	\$ 2,359,457	\$ 2,359,457	
Customer Records and Collections	\$ 6,658,066	\$ 6,204,333	\$ 6,204,333	
Misc Customer Accounts	\$ 10,101	\$ 9,341	\$ 9,341	
Supervision	\$ 597,875	\$ 557,130	\$ 557,130	
Total Customer Accounts	\$ 9,817,654	\$ 9,130,261	\$ 9,130,261	
Customer Service				
Customer Service	\$ 1,324,320	\$ 365,923	\$ -	- When customers call to complain about inaccurate bills, should NFG charge extra for the inaccuracies?
Summary of Direct Labor Expense	\$ 29,080,761	\$ 24,294,830	\$ 11,216,554	
No. of SC-1 Customers		480,042	480,042	
Annual Direct Labor Cost / Customer	\$	50.61	\$ 23.37	
Monthly Direct Labor Cost / Customer	\$	4.22	\$ 1.95	

Calculation of Demand Charge

8/11/2016

Source of Data:

Answer to UIU Information Request Set 2, Question 43.
 NFG referred the questioner to Exhibit_(COSD-1) Schedule 1, column G.
 This is NFG document no. 8F01DF1B-C099-4605-818F-40C3D62475F4%7D.pdf.
 Data is in rows 240 through 270.

Distribution

Item	Cost	Amount		Amount	
		% Included by NFG	Included by NFG	% Included by R. Ford	Included by R. Ford
Mains and Services	8,584,624	74.0361%	6,355,721	0.0000%	-
Mains Maintenance	6,844,456	58.5600%	4,008,113	0.0000%	-
Services Maintenance	1,098,392	74.0361%	813,207	74.0361%	813,207
Meters and House Regulators	4,324,392	100.0000%	4,324,392	100.0000%	4,324,392
			-		
			-		
			-		
			-		

Customer Charges of Gas Utilities in the Natural Gas and Combined Utility Proxy Group

Background: National Fuel Gas has compiled a list of utility companies across the country which they believe are comparable to themselves. I went to each utility company's web site to see what they are charging for a "customer charge." National Fuel's existing \$15.54 per month customer charge is already \$4.34 per month higher than the average, indicating that a sizable reduction is needed.

Combined Utility Proxy Group	Monthly Cu Delivery per C	First 5000	Over 5000 CF
Alliant Energy Corporation	9.38		
Ameren Corporation	20.79	0.093	
Atmos Energy Corporation	14.5	0	
Avista Corporation	9		
CenterPoint Energy, Inc.			
Arkansas	9.75	0.34655	0.16664
Texas	15.85	0	
Mississippi	11.86	0.1698	
CMS Energy Corporation	11.75		
Consolidated Edison, Inc.	18.6		
DTE Energy Company	10.5		DTE Gas Company
Laclede Group, Inc. (The)	22.32		
New Jersey Resources Corporation	8.25		
Northwest Natural Gas Company	8		
NorthWestern Corporation	8		
SCANA Corporation			
North Carolina	10		
South Carolina	10.9		
Georgia	5.95		
Sempra Energy	1.19		
South Jersey Industries, Inc.	8		
Southwest Gas Corporation			
Arizona, single family	10.7		
Arizona, multifamily	9.7		
Arizona, low income	7.5		
California	11		
Nevada	10.8		

Vectren Corporation			
Indiana Gas	11.25		
Vectren Delivery of Ohio	18.25		
Southern Indiana Gas and Electric	11		
WGL Holdings, Inc.			
Washington Gas Light Co.	9.9		
Xcel Energy Inc.			
Minnesota	9	0.185913	
Wisconsin	12.25	0.248	
Average	11.198		
Existing NFG Customer Charge	15.54		
Excess Above Average	4.342		

Projected National Fuel Gas Bills for 2015 - 2016 Heating Season at Proposed Rates

Base CCF/Month, excluding heating. 4.67 56 CCF/yr. Sales Tax 4.75%

Billing Date	Days	CCF	Pre-tax Supply Charge	Total Cost	Customer Charge	Total Delivery Service charges	Delivery per CCF	CCF @ Higher Delivery Rate	Price @ Higher Delivery Rate	CCF @ Lower Delivery Rate	Price @ Lower Delivery Rate	Heating Use (CCF)	Delivery Adj / CCF	State Assessment /CCF	WBS charges	Supply Cost/CCF	Marginal Cost/CCF	Sales Tax on Supply	Calculated Total Delivery Service charges	
5/19/2015	33	15.0	4.32	\$ 31.72	19.66	27.20	\$1.81	10	0.388449	0	0	0	10.3	0.020667	0.018502	1.83	0.288	0.676449	0.21	27.20
6/16/2015	28	18.0	5.08	\$ 33.80	19.66	28.48	\$1.58	14	0.388449	0	0	0	13.3	0.021667	0.018502	1.37	0.282222	0.670671	0.24	28.48
7/17/2015	31	5.0	1.43	\$ 24.22	19.66	22.72	\$4.54	1	0.388449	0	0	0	0.0	0.022	0.013987	1.46	0.286	0.674449	0.07	22.72
8/14/2015	28	6.0	1.62	\$ 24.74	19.66	23.04	\$3.84	2	0.388449	0	0	0	0.0	0.021667	0.010268	1.37	0.27	0.658449	0.08	23.04
9/17/2015	34	3.0	0.74	\$ 23.04	19.66	22.26	\$7.42	0	0.388449	0	0	0	0.0	0.02	0.010268	1.50	0.246667	0.635116	0.04	22.26
10/14/2015	27	24.0	6.03	\$ 37.96	19.66	31.64	\$1.32	20	0.388449	0	0	0	19.3	0.020417	0.010268	2.04	0.25125	0.639699	0.29	31.64
11/11/2015	28	24.0	5.85	\$ 37.60	19.66	31.47	\$1.31	20	0.388449	0	0	0	19.3	0.02	0.010268	1.89	0.24375	0.632199	0.28	31.47
12/17/2015	36	52.0	11.41	\$ 57.09	19.66	45.14	\$0.87	48	0.388449	0	0	0	47.3	0.02	0.010268	3.21	0.219423	0.607872	0.54	45.14
1/20/2016	34	131.0	28.31	\$ 87.21	19.66	57.56	\$0.44	46	0.388449	81	0.118708	126.3	0.020534	0.010268	3.77	0.216107	0.334815	1.34	57.56	
2/19/2016	30	128.0	27.01	\$ 84.84	19.66	56.55	\$0.44	47	0.388449	77	0.118708	123.3	0.021016	0.010268	2.92	0.211016	0.329724	1.28	56.55	
3/18/2016	28	62.0	12.6	\$ 58.25	19.66	45.05	\$0.73	44	0.388449	14	0.118708	57.3	0.018065	0.010268	2.84	0.203226	0.321934	0.60	45.05	
4/19/2016	32	73.0	16.25	\$ 62.81	19.66	45.78	\$0.63	45	0.388449	24	0.118708	68.3	0.016575	0.010268	1.76	0.222603	0.341311	0.77	45.78	

Totals 541.0 \$ 120.85 \$ 563.27 \$ 235.92 \$ 436.89 0.807565 297 196.0 485.0 25.96 0.223013 5.73 436.89
 Average/CCF \$ 0.223 \$ 1.041 \$ 0.436 \$ 0.808
 Percent of Gas Used for Heating 90% of Gas Cost \$ 504.97
 Increase in Proposed Rate \$ 59.82 \$ 49.57 \$ 59.82 \$ 0.11
 % Increase in Proposed Rate 11.9% 26.6% 15.9% 15.9%

Projected Gas Cost After Saving 40% on heating. Base CCF/Month, excluding heating. 4.67 Sales Tax 4.75%

Billing Date	Days	CCF	Supply Charge	Total Cost	Customer Charge	Total Delivery Service charges	Delivery per CCF	CCF @ Higher Delivery Rate	Price @ Higher Delivery Rate	CCF @ Lower Delivery Rate	Price @ Lower Delivery Rate	Heating Use (CCF)	Delivery Adj / CCF	Temporary State Assessment /CCF	WBS charges	Supply Cost/CCF	Marginal Cost/CCF	Sales Tax on Supply	Calculated Total Delivery Service charges	
5/19/2015	33	10.9	3.13	\$ 29.03	19.66	25.75	2.37	6.9	0.388449	0.0	0	0	6.20	0.020667	0.018502	1.83	0.288	0.676449	0.15	25.75
6/16/2015	28	12.7	3.57	\$ 29.83	19.66	26.09	2.06	8.7	0.388449	0.0	0	0	8.00	0.021667	0.018502	1.37	0.282222	0.670671	0.17	26.09
7/17/2015	31	5.0	1.43	\$ 24.22	19.66	22.72	4.54	1.0	0.388449	0.0	0	0	0.00	0.022	0.013987	1.46	0.286	0.674449	0.07	22.72
8/14/2015	28	6.0	1.62	\$ 24.74	19.66	23.04	3.84	2.0	0.388449	0.0	0	0	0.00	0.021667	0.010268	1.37	0.27	0.658449	0.08	23.04
9/17/2015	34	3.0	0.74	\$ 22.63	19.66	21.85	7.28	-1.0	0.388449	0.0	0	0	0.00	0.02	0.010268	1.50	0.246667	0.635116	0.04	21.85
10/14/2015	27	16.3	4.09	\$ 32.53	19.66	28.24	1.74	12.3	0.388449	0.0	0	0	11.60	0.020417	0.010268	2.04	0.25125	0.639699	0.19	28.24
11/11/2015	28	16.3	3.97	\$ 32.23	19.66	28.08	1.73	12.3	0.388449	0.0	0	0	11.60	0.02	0.010268	1.89	0.24375	0.632199	0.19	28.08
12/17/2015	36	33.1	7.26	\$ 44.43	19.66	36.83	1.11	29.1	0.388449	0.0	0	0	28.40	0.02	0.010268	3.21	0.219423	0.607872	0.34	36.83
1/20/2016	34	80.5	17.39	\$ 67.86	19.66	49.65	0.62	46.0	0.388449	30.5	0.118708	75.80	0.020534	0.010268	3.77	0.216107	0.334815	0.83	49.65	
2/19/2016	30	78.7	16.60	\$ 65.90	19.66	48.51	0.62	46.0	0.388449	28.7	0.118708	74.00	0.021016	0.010268	2.92	0.211016	0.329724	0.79	48.51	
3/18/2016	28	39.1	7.94	\$ 47.31	19.66	39.00	1.00	35.1	0.388449	0.0	0.118708	34.40	0.018065	0.010268	2.84	0.203226	0.591675	0.38	39.00	
4/19/2016	32	45.7	10.17	\$ 51.32	19.66	40.68	0.89	41.7	0.388449	0.0	0.118708	41.00	0.016575	0.010268	1.76	0.222603	0.611052	0.48	40.68	

Totals 347.0 \$ 77.90 \$ 472.04 235.92 \$ 390.44 1.125193 239.8666667 291.0 25.96 0.224485 3.70 390.44
 Average/CCF \$ 0.224 \$ 1.360 \$ 0.680 \$ 1.125
 Savings 194.0 \$ 42.75 \$ 91.24 0.0 \$ 46.45
 Percent Savings 35.9% 35.4% 16.2% 0.0% 10.6% 40.0%
 Cost Savings if Proportional to Energy Savings \$ 199.60
 Actual Savings \$ 91.24
 Energy Conservation Penalty \$ 108.37 54.3%

Table 4

Projected National Fuel Gas Bills for 2015 - 2016 Heating Season at Proposed Rates

Actual National Fuel Gas Bills for 2015 - 2016 Heating Season

Base CCF/Month, excluding heating. 4.67 or 56 CCF/yr. Sales Tax 4.75%

Billing Date	Days	CCF	Pre-tax Supply Charge	Total Cost	Customer Charge	Total Delivery Service charges	Delivery per CCF	CCF @ Higher Delivery Rate	Price @ Higher Delivery Rate	CCF @ Lower Delivery Rate	Price @ Lower Delivery Rate	Heating Use (CCF)	Delivery Adj. / CCF	State Assessment /CCF	WBS charges	Supply Cost/CCF	Marginal Cost/CCF	Sales Tax on Supply	Calculated Total Delivery Service charges
5/19/2015	33	15.0	4.32	\$ 29.55	17.66	25.02	\$1.67	10	0.381022	0	0	10.3	0.020667	0.018502	1.83	0.288	0.669022	0.21	25.02
6/16/2015	28	18.0	5.08	\$ 27.61	13.63	22.29	\$1.24	14	0.396831	0	0	13.3	0.021667	0.018502	1.37	0.282222	0.679053	0.24	22.29
7/17/2015	31	5.0	1.43	\$ 20.41	16.03	18.91	\$3.78	1	0.38407	0	0	0.0	0.022	0.013987	1.46	0.286	0.67007	0.07	18.91
8/14/2015	28	6.0	1.62	\$ 19.73	14.94	18.04	\$3.01	2	0.358225	0	0	0.0	0.021667	0.010268	1.37	0.27	0.628225	0.08	18.04
9/17/2015	34	3.0	0.74	\$ 19.76	16.53	18.98	\$6.33	0	0	0	0	0.0	0.02	0.010268	1.50	0.246667	0.246667	0.04	18.98
10/14/2015	27	24.0	6.03	\$ 32.46	14.52	26.14	\$1.09	20	0.383	0	0	19.3	0.020417	0.010268	2.04	0.25125	0.63425	0.29	26.14
11/11/2015	28	24.0	5.85	\$ 32.40	14.94	26.27	\$1.09	20	0.376136	0	0	19.3	0.02	0.010268	1.89	0.24375	0.619886	0.28	26.27
12/17/2015	36	52.0	11.41	\$ 52.96	16.53	41.01	\$0.79	48	0.371563	0	0	47.3	0.02	0.010268	3.21	0.219423	0.590986	0.54	41.01
1/20/2016	34	131.0	28.31	\$ 80.60	15.53	50.95	\$0.39	46	0.372554	81	0.100813	126.3	0.020534	0.010268	3.77	0.216107	0.31692	1.34	50.95
2/19/2016	30	128.0	27.01	\$ 78.89	16.02	50.60	\$0.40	47	0.375904	77	0.099882	123.3	0.021016	0.010268	2.92	0.211016	0.310898	1.28	50.60
3/18/2016	28	62.0	12.6	\$ 52.35	14.94	39.15	\$0.63	44	0.374508	14	0.096936	57.3	0.018065	0.010268	2.84	0.203226	0.300162	0.60	39.15
4/19/2016	32	73.0	16.25	\$ 56.71	15.08	39.68	\$0.54	45	0.369741	24	0.101955	68.3	0.016575	0.010268	1.76	0.222603	0.324558	0.77	39.68
Totals		541.0	\$ 120.65	\$ 503.42	\$ 186.35	\$ 377.04	0.69693	297		196.0		485.0			25.96			5.73	377.04
Average/CCF			\$ 0.223	\$ 0.931	\$ 0.344	\$ 0.697										0.223013			
Percent of Gas Used for Heating												90%							
90% of Gas Cost				\$ 451.31															

Projected Gas Cost After Saving 0% on heating.

Base CCF/Month, excluding heating. 4.67 Sales Tax 4.75%

Billing Date	Days	CCF	Supply Charge	Total Cost	Customer Charge	Total Delivery Service charges	Delivery per CCF	CCF @ Higher Delivery Rate	Price @ Higher Delivery Rate	CCF @ Lower Delivery Rate	Price @ Lower Delivery Rate	Heating Use (CCF)	Delivery Adj. / CCF	Temporary State Assessment /CCF	WBS charges	Supply Cost/CCF	Marginal Cost/CCF	Sales Tax on Supply	Calculated Total Delivery Service charges
5/19/2015	33	15.0	4.32	\$ 32.13	19.66	27.60	1.84	11.0	0.388449	0.0	0	10.33	0.020667	0.018502	1.83	0.288	0.676449	0.21	27.60
6/16/2015	28	18.0	5.08	\$ 33.80	19.66	28.48	1.58	14.0	0.388449	0.0	0	13.33	0.021667	0.018502	1.37	0.282222	0.670671	0.24	28.48
7/17/2015	31	5.0	1.43	\$ 24.22	19.66	22.72	4.54	1.0	0.388449	0.0	0	0.00	0.022	0.013987	1.46	0.286	0.674449	0.07	22.72
8/14/2015	28	6.0	1.62	\$ 24.74	19.66	23.04	3.84	2.0	0.388449	0.0	0	0.00	0.021667	0.010268	1.37	0.27	0.658449	0.08	23.04
9/17/2015	34	3.0	0.74	\$ 22.63	19.66	21.85	7.28	-1.0	0.388449	0.0	0	0.00	0.02	0.010268	1.50	0.246667	0.635116	0.04	21.85
10/14/2015	27	24.0	6.03	\$ 37.96	19.66	31.64	1.32	20.0	0.388449	0.0	0	19.33	0.020417	0.010268	2.04	0.25125	0.639699	0.29	31.64
11/11/2015	28	24.0	5.85	\$ 37.60	19.66	31.47	1.31	20.0	0.388449	0.0	0	19.33	0.02	0.010268	1.89	0.24375	0.632199	0.28	31.47
12/17/2015	36	52.0	11.41	\$ 56.27	19.66	44.32	0.85	46.0	0.388449	2.0	0	47.33	0.02	0.010268	3.21	0.219423	0.219423	0.54	44.32
1/20/2016	34	131.0	28.31	\$ 87.04	19.66	57.39	0.44	46.0	0.388449	81.0	0.116708	126.33	0.020534	0.010268	3.77	0.216107	0.332815	1.34	57.39
2/19/2016	30	128.0	27.01	\$ 84.39	19.66	56.10	0.44	46.0	0.388449	78.0	0.116708	123.33	0.021016	0.010268	2.92	0.211016	0.327724	1.28	56.10
3/18/2016	28	62.0	12.60	\$ 58.79	19.66	45.59	0.74	46.0	0.388449	12.0	0.116708	57.33	0.018065	0.010268	2.84	0.203226	0.319934	0.60	45.59
4/19/2016	32	73.0	16.25	\$ 63.04	19.66	46.02	0.63	46.0	0.388449	23.0	0.116708	68.33	0.016575	0.010268	1.76	0.222603	0.339311	0.77	46.02
Totals		541.0	\$ 120.65	\$ 562.62	235.92	\$ 436.24	0.806354	297		196.0		485.0			25.96			5.73	436.24
Average/CCF			\$ 0.223	\$ 1.040	\$ 0.436	\$ 0.806										0.223013			
Increase			0.0	\$ 59.20	49.6	\$ 59.20						0.0							
Percent Increase			0.0%	0.0%	11.8%	26.6%	15.7%					0.0%							

Table 4

Proposed National Fuel Gas Rates, April 28, 2016

Reference: PSC #9, 4/28/16, Case 16-G0257
 SC-1 Pending Tariff Section 0, leaf 124

	Existing	Proposed	Increase	% Increase
First	400 cubic feet	15.54	19.66	4.12
Next	4600 cubic feet	0.372554	0.388449	0.015895
All over	5000 cubic feet	0.100813	0.116708	0.015895

Number of Residential Customers

Source: Slides #28 and 29, June 2, 2016

	No. of Cust.	Increase	Annual Bill % Increase	Existing Annual Bill Total	Annual Bill % Increase per Customer
SC 1	326,933	\$ 22,589,568	7.16%	\$ 315,217,430	69.03
HRAS	43,871	\$ 1,533,165	3.30%	\$ 46,459,545	34.95
EBD-LIRA	117	\$ 7,203	6.50%	\$ 110,815	61.56
LICAAP	9,901	\$ 760,282	7.34%	\$ 10,358,065	76.79
SC 1 Transportation	84,994	\$ 5,386,951	13.40%	\$ 40,201,127	63.36
HRAS Transportation	14,226	\$ 446,644	7.49%	\$ 5,963,204	31.40
Total	480,042	\$ 30,703,813		\$ 418,310,188	Close to C33

107.6 mcf per average residential customer
 480,042 residential customers
 51,652,519 mcf sold per year to residential customers
 10 ccf per mcf
 516,525,192 ccf sold per year to residential customers

Source: Graph on Slide #5, June 2, 2016

480,042 customers
 \$ 851.00 average bill per customer
 \$ 408,515,742 Residential revenue / yr.

Source: NFG bill insert

5.75 monthly increase per customer
 \$ 12 monthly increase
 \$ 69 annual increase per customer
 480,042 customers
 \$ 33,122,898 Increase in residential rates

Source: Insert in Gas Bill

Table for Equal Prices for All Residential Customers

Revised 6/23/16 with data from National Fuel Gas.

Data	480,042 residential customers	Source: Slides 28 & 29 & IR Ford 01 001	\$ 196,589,548 total delivery charges to residential customers
	107.6 MCF / residential customer	Source: NFG IR Ford 01 002	519,883,073
	1,076.0 CCF / residential customer		\$0.38 average delivery price per CCF
	\$ 519,883,073 CCF Sold to Residential Customers	Source: NFG IR Ford 01 003	
	\$ 196,589,548 Revenue from residential customers	Source: NFG IR Ford 01 004	

Additional

Revenue Allowed from Residential Customers	Total Delivery Charges	CCF Sold to Residential Customers	Delivery Price per CCF	Percent Increase in NFG Fees	
\$ (10,000,000)	\$ 186,589,548	519,883,073	\$ 0.358907	-5.1%	0.697 my delivery cost/CCF
\$ (5,000,000)	\$ 191,589,548	519,883,073	\$ 0.368524	-2.5%	\$0.38 average delivery price per CCF
\$ -	\$ 196,589,548	519,883,073	\$ 0.378142	0.0%	\$0.32 difference
\$ 5,000,000	\$ 201,589,548	519,883,073	\$ 0.387759	2.5%	\$0.32 difference
\$ 10,000,000	\$ 206,589,548	519,883,073	\$ 0.397377	5.1%	\$0.38 average delivery price per CCF
\$ 15,000,000	\$ 211,589,548	519,883,073	\$ 0.406994	7.6%	84% higher than average
\$ 20,000,000	\$ 216,589,548	519,883,073	\$ 0.416612	10.2%	
\$ 25,000,000	\$ 221,589,548	519,883,073	\$ 0.426230	12.7%	
\$ 30,000,000	\$ 226,589,548	519,883,073	\$ 0.435847	15.3%	
\$ 30,703,813	\$ 227,293,361	519,883,073	\$ 0.437201	15.6%	per slides 28 & 29
\$ 33,122,898	\$ 229,712,446	519,883,073	\$ 0.441854	16.8%	per \$5.75 / customer in bill insert

Table for a Small But Reduced Customer Charge

Customer Charge \$1.65

Additional Revenue Allowed from Residential Customers	Total Delivery Charges	CCF Sold to Residential Customers	Revenue from Customer Charge	Additional Revenue Needed	Delivery Price per CCF	Percent Increase in NFG Fees
\$ (10,000,000)	\$ 186,589,548	519,883,073	9,504,832	177,084,716	\$ 0.340624	-5.1%
\$ (5,000,000)	\$ 191,589,548	519,883,073	9,504,832	182,084,716	\$ 0.350242	-2.5%
\$ -	\$ 196,589,548	519,883,073	9,504,832	187,084,716	\$ 0.359859	0.0%
\$ 5,000,000	\$ 201,589,548	519,883,073	9,504,832	192,084,716	\$ 0.369477	2.5%
\$ 10,000,000	\$ 206,589,548	519,883,073	9,504,832	197,084,716	\$ 0.379094	5.1%
\$ 15,000,000	\$ 211,589,548	519,883,073	9,504,832	202,084,716	\$ 0.388712	7.6%
\$ 20,000,000	\$ 216,589,548	519,883,073	9,504,832	207,084,716	\$ 0.398329	10.2%
\$ 25,000,000	\$ 221,589,548	519,883,073	9,504,832	212,084,716	\$ 0.407947	12.7%
\$ 30,000,000	\$ 226,589,548	519,883,073	9,504,832	217,084,716	\$ 0.417565	15.3%
\$ 30,703,813	\$ 227,293,361	519,883,073	9,504,832	217,788,529	\$ 0.418918	15.6% per slides 28 & 29
\$ 33,122,898	\$ 229,712,446	519,883,073	9,504,832	220,207,614	\$ 0.423571	16.8% per \$5.75 / customer in bill insert

Revenue from Customer Charge

480,042
 15.54
 \$7,459,853
 12
 \$89,518,232