

City of Duluth Natural Gas System



Summary of System

- Highly regulated
 - MNOPS- Minnesota Office of Pipeline Safety
 - PHMSA- Pipeline and Hazardous Materials Safety Administration
- The gas system has been replaced in its entirety since 1959 when Duluth switched from low pressure to high pressure gas.
- 510 miles of pipe
 - Ranging in size from 1 inch to 16 inches
 - Ranging in age from new to 53 years old



8" PE main with 2" branch main

Summary of System

- Approximately 27,000 gas services ranging in size from ½” to 6”
- 16 pressure regulator stations
- 4 Town Border Stations
- The City sells approximately 45,000,000 CCF of natural gas per year. (\$32.4M revenues from 2012 gas sales)
- Rates unchanged since November 2006*



Great Lakes Town Border Station



Apartment complex meter bank

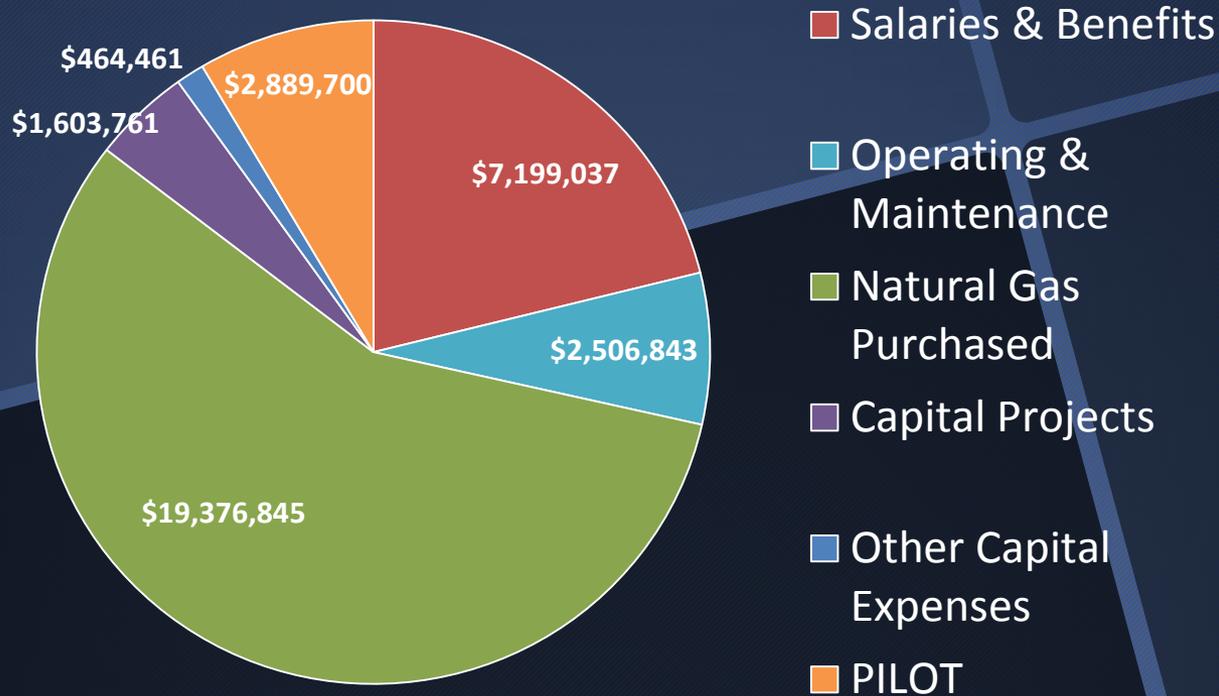
Customers

Rate Classes	Customer Count
Residential small volume	25,000
Residential large volume	15
Commercial / industrial small volume	1,930
Commercial / industrial large volume	15
Commercial / industrial large volume interruptible	7
Commercial / industrial interruptible transport	1
Total Customer Count	26,968

2012 Gas Sold

Rate Classes	Volume Sold (CCF)	% of Total
Residential small volume firm	23,783,306	55
Residential large volume firm	340,583	1
Commercial / industrial small volume firm	11,090,061	25
Commercial / industrial large volume firm	958,093	2
Commercial / industrial large volume interruptible	7,242,996	17
Total Volume Sold	43,415,039	100

2012 Expenses



Total 2012 Expenses: \$34 Million

Capital Improvement Plan

RESOLUTION NO. 13PUC-001

RESOLUTION ADOPTING CAPITAL IMPROVEMENT PLAN FOR NATURAL GAS SUPPLY SYSTEM.

RESOLVED by the Duluth Public Utilities Commission (the “Commission”) that the Commission does hereby adopt and approve the attached “City of Duluth Natural Gas Supply System Capital Improvement Plan” dated January 2013.

Approved by the DPUC:

Feb. 19, 2013
(date)

Capital Projects

2014	
Gas main extensions and services	\$700,000
Michigan Street - 10 inch steel replacement	\$500,000
Third Street phase 3	\$750,000
Copper risers phase 2	\$750,000
Bollard contract	\$50,000
Airpark flow meter	\$50,000
Stora flow meter	\$50,000
Riveness flow meter	\$50,000
I-35 crossing at 26th - 6 inch PE	\$30,000
Total 2014 capital projects	\$2,930,000
2015	
Gas main extensions and services	\$500,000
1st Street - 14th West to 16th West	\$500,000
Building at Stora, Riveness and Great Lakes regulator stations	\$200,000
Bollard contract	\$50,000
Total 2015 capital projects	\$1,250,000
2016	
Gas main extensions and services	\$500,000
58th Avenue West replacement	\$200,000
Bollard contract	\$50,000
London Road main replacement	\$300,000
Woodland Avenue 6 inch steel	\$500,000
Total 2016 capital projects	\$1,550,000
2017	
Gas main extensions and services	\$500,000
Steel pipe replacement	\$500,000
System control project	\$200,000
Total 2017 capital projects	\$1,200,000
Total 2014-2017 capital projects	\$6,930,000

Capital Projects



Above: Steel main in cast casing.
Right: Steel in steel main replaced with PE on 3rd Street, to be continued in 2014 (Third Street Phase 3).



Capital Projects



Above left: Service with copper riser. Above right: New anodeless riser installed.
Below left: Holiday Center alley, no bollards. Below right: Government Service Center alley with bollards.



Capital Projects



Above Left: Gary Regulator Station (upgrade from 2" to 6" regulator in 2013). Above Right: Stora Enso Regulator Station (building enclosure here and at two other regulator stations in 2015). Below: "Dresser" style coupling at 11th Ave W & 1st St.



Current Natural Gas Rates

Rate Class	Fixed Monthly Charge	Commodity Rate per CCF
Residential Firm:		
Rate 10 Small Volume	\$7.50	\$0.920
Rate 15 Large Volume	\$200.00	\$0.819
Commercial / Industrial Firm:		
Rate 20 Small Volume	\$40.00	\$0.836
Rate 30 Large Volume	\$200.00	\$0.803
Commercial / Industrial Interruptible:		
Rate 50 Large Volume	\$450.00	\$0.684
Commercial / Industrial Interruptible Transport (First Year Rates):		
Rate 80 Small Volume	\$40.00	\$0.1881
Rate 90 Large Volume	\$450.00	\$0.1661

Purchased Gas Adjustment (PGA)

- The adopted rates include a fixed charge and a commodity (volume) charge.
- The cost to purchase natural gas changes on a daily basis.
- The volume charge is adjusted monthly based upon the actual cost of gas purchased.

Example: July 2013 Actual Gas Charge

Published Rate	- PGA	= Actual Cost/CCF
\$0.920	- \$0.160	= \$0.760

Current Average Monthly Bill

Rate Class	Avg. Volume (CCF)	2012 Avg. Rate	Avg. Variable Rate Charges	Current Fixed Rate Charge	Total Monthly Charges
Residential small	80	\$0.732	\$58.56	\$7.50	\$66.06
Residential large	2,800	\$0.631	\$1,766.80	\$200.00	\$1,966.80
Commercial / industrial small	470	\$0.648	\$304.56	\$40.00	\$344.56
Commercial / industrial large	5,200	\$0.618	\$3,213.60	\$200.00	\$3,413.60
Commercial / industrial interruptible large	30,100	\$0.496	\$14,929.60	\$450.00	\$15,379.60

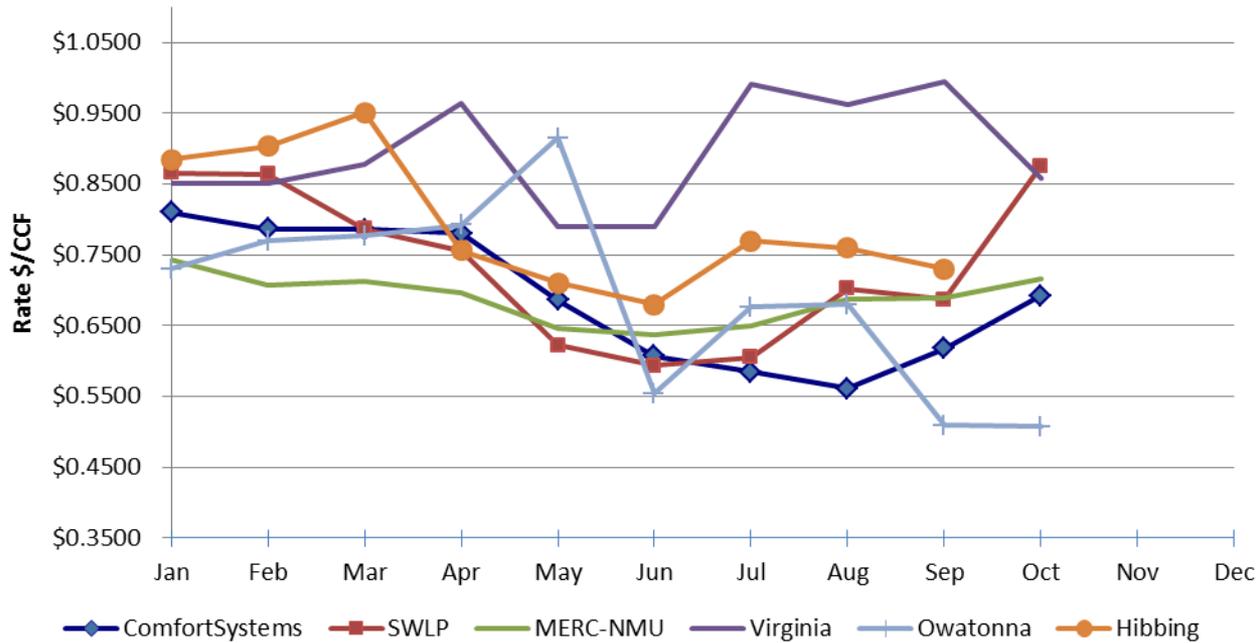
Average Monthly Bill History

Residential Small only:

Year	Avg. Volume (CCF)	Avg. Rate	Avg. Variable Rate Charges	Fixed Rate Charge	Avg. Monthly Charges
2008	80	\$1.3788	\$110.31	\$7.50	\$117.81
2009	80	\$0.8351	\$66.81	\$7.50	\$74.31
2010	80	\$0.8242	\$65.93	\$7.50	\$73.43
2011	80	\$0.8258	\$66.06	\$7.50	\$73.56
2012	80	\$0.7320	\$58.56	\$7.50	\$66.06
Proposed	80	\$0.7460	\$59.68	\$8.63	\$68.31

Rate Comparison

2012 Natural Gas Monthly Residential Rates



	Comfort Systems	SWLP	MERC-NMU	Virginia	Owatonna	Hibbing
2012 Avg Rate \$/CCF	\$0.6912	\$0.7356	\$0.6887	\$0.8932	\$0.6912	\$0.7940
2012 Fixed Monthly Charge	\$7.50	\$7.25	\$7.93	\$9.00	\$9.95	9.29

Projected Cash Flow Balances 2013 & 2014

	2013 Projected	2014 Projected
Unrestricted Cash	\$2,888,700	\$1,231,300
Revenues	\$36,258,700	\$36,034,700
Other Sources of Cash	\$110,400	\$189,400
Total Additions to Cash	\$36,369,100	\$36,324,100
Expenses (incl. Capital)	\$36,907,400	\$37,096,300
Other Uses of Cash	\$1,119,100	\$1,082,800
Total Deductions to Cash	\$38,026,500	\$38,179,100
Estimated Year End Cash Balance	\$1,231,300	(\$623,700)
Total Reserve Needed (Feb Debt Pmt Due)	\$1,120,500	\$1,134,800
Budget Reduction Needed if No Increase	\$0	\$1,758,500

Proposed Natural Gas Rates

Rate Class	Fixed Monthly Charge	Commodity Rate per CCF
Residential Firm:		
Rate 10 Small Volume	\$8.63	\$0.934
Rate 15 Large Volume	\$230.00	\$0.833
Commercial / Industrial Firm:		
Rate 20 Small Volume	\$46.00	\$0.850
Rate 30 Large Volume	\$230.00	\$0.817
Commercial / Industrial Interruptible:		
Rate 50 Large Volume	\$517.50	\$0.698
Commercial / Industrial Interruptible Transport (First Year Rates):		
Rate 90 Large Volume	\$517.50	\$0.1661

Proposed Average Monthly Bill

Rate Class	Avg. Volume (CCF)	Avg. Rate	Avg. Variable Rate Charges	Fixed Rate Charge	Total Monthly Charges	Monthly Increase
Residential small	80	\$0.746	\$59.68	\$8.63	\$68.31	\$2.25
Residential large	2,800	\$0.645	\$1,806.00	\$230.00	\$2,036.00	\$69.20
Commercial / industrial small	470	\$0.662	\$311.14	\$46.00	\$357.14	\$12.58
Commercial / industrial large	5,200	\$0.632	\$3,286.40	\$230.00	\$3,516.40	\$102.80
Commercial / industrial interruptible large	30,100	\$0.510	\$15,351.00	\$517.50	\$15,868.50	\$488.90

Proposed Percent Increases by Class

Monthly % Increase on Total Charges by Rate Class

Residential Small Volume	3.40%
Residential Large Volume	3.52%
Commercial / Industrial Small Volume	3.65%
Commercial / Industrial Large Volume	3.01%
Commercial / Industrial Interruptible Large Volume	3.18%

Total Estimated Additional Annual Revenue

\$1,083,000

Adjusted Projected Cash Flow Balance 2014

Projected Year End Cash Balance	(\$623,700)
Total Reserve Needed (Feb Debt Pmt)	\$1,134,800
Projected Budget Reduction Needed	\$1,758,500
Additional 2013 Revenue from Increase	\$270,800
Additional 2014 Revenue from Increase	\$1,083,000
Delay Copper Risers Project	\$750,000
Year End Cash Balance with Increase	\$1,480,100
Adjusted Cash Balance (less Feb Debt Pmt)	\$345,300

Summary

- Highly regulated utility
- No rate increase since 2006 (almost 7 years)
- Modest increase now (3.01% - 3.65%)
- Competitively priced by market comparison

Questions?