



**Response to Town Council Meeting Questions about Natural  
Gas Service Expansion**

## **Energy Efficiency**

### **What educational tools and financial incentives does SNG offer to promote energy efficiency?**

Summit Natural Gas (SNG) is committed to helping its customers conserve energy as well as save on the cost to heat their homes.

As part of the Summit Natural Gas tariff, the Maine Public Utilities Commission approved the SNG Conversion and Conservation Incentive Rebate Program. This Program has two parts. One part provides \$500 toward a home energy audit and \$250 for limited air sealing for Residential Customers. The other part provides rebates for conversion to natural gas or replacement of space heating and water heating equipment. These rebates were established with the assistance of Efficiency Maine Trust (EMT) and are structured to encourage customers to replace their existing fuel oil appliances with high-efficiency natural gas appliances. The rebates in the program are greater for higher efficiency appliances and less for lower efficiency appliances. The levels of rebates in this program are also dependent on whether the town in which the home is located has granted a TIF to SNG.

SNG and EMT spent considerable time reviewing this Program, comparing it to other efficiency programs offered by EMT in the past and working to ensure that the SNG program and existing programs from EMT are coordinated. In addition to identifying opportunities to reduce energy use, the energy audit is a pre-requisite for several EMT programs, including the Energy Saver and PACE loans.

SNG is also committed to providing additional assistance to our customers who are part of the Low-Income Home Energy Assistance Program. For these customers, the rebate program is enhanced.

A copy of the Conversion and Conservation Incentive Rebate program from the SNG tariff is attached.

### **Does SNG plan submit to the Systems Benefit Charge for efficiency programs?**

SNG will exceed the 5,000 customer threshold for participation in the Systems Benefit Charge program by the end of the first year of service in Cumberland, Falmouth and Yarmouth, since this will also be our second year of service in the Kennebec Valley area. In our discussions with the MPUC and EMT we made the decision that we would simply follow the normal procedure for joining that program rather than add an early entry into our agreement with them.

## Emissions

### Natural Gas produce less emissions than heating oil, can you please elaborate?

Natural Gas produces around 30% less CO<sub>2</sub> emissions than heating oil. The table below shows the Kg CO<sub>2</sub>/mmbtu emissions per the EIA for each fossil fuel.

Fuel	Kg CO2 / mmbtu	% Reduction
Residual Oil #6	78.8	33%
#2 Heating Oil	73.15	28%
Kerosene	72.31	27%
Propane	63.1	16%
Natural Gas	52.91	0%

Addition to the carbon emissions reduction for fuel switching the customer will benefit from upgrading to a more efficient natural gas furnace, the average heating oil boiler is rated at 70% efficient while a new natural gas furnace will be 95% efficient. Based on the estimated customer count and usage numbers for the Towns the area would see an average reduction of CO<sub>2</sub> emissions of 47%, equivalent of 54,000 tons.

Environmental Impact - Reduction of CO2 Emissions			
	Residential	Commercial	Total
Estimated NG Usage	720,630	339,000	1,059,630
Efficiency Factor	0.74	0.74	0.74
Heating Oil Usage	977,998	460,071	1,438,069
Tons of CO2 - NG	42,031	19,772	61,803
Tons of CO2 - HO	78,863	37,099	115,962
Reduction of CO2	(36,832)	(17,327)	(54,158)
% of Reduction	-47%	-47%	-47%

There are additional air emission improvements available from conversion to natural gas, as natural gas emits about 80% less Nitrous Oxides (NO<sub>x</sub>) than oil. Further environmental benefits may be achieved through the conversion of transportation fleets and other vehicles to natural gas from gasoline or diesel. In addition, the CO<sub>2</sub> emission reductions will be comparable on a gallon of #2 oil basis and even better where the displaced fuel is #6 oil.

### Does natural gas delivery/transmission produce less emissions than delivery of oil via trucking?

Yes. The amount of this difference would be based on the average fuel economy and emissions for the trucking of oil but this calculation would be subject to a fair amount of interpretation depending on whether the construction of the pipeline or the manufacturing of the trucks and tankers is included, as well as other factors.

## Fracking

### Can SNG provide information on the concerns about hydraulic fracturing?

SNG does not operate as a natural gas producer thus is not involved in fracking. It should also be noted that the gas being supplied for the Towns will be from conventional drilling primarily from Canadian offshore production. Two great sources of information on the subject would be the EIA and the AGA (American Gas Association) – ([www.aga.org](http://www.aga.org) or [www.eia.gov/naturalgas/](http://www.eia.gov/naturalgas/)). SNG is a member of the American Gas Association, which is the advocacy organization for the natural gas distribution industry. AGA has issued a Position Statement which we have attached concerning Responsible Natural Gas Resource Development. Below is a diagram that shows the fracking process as well as environmental issues that the EIA produced.

### What Are the Environmental Issues Associated with Shale Gas?

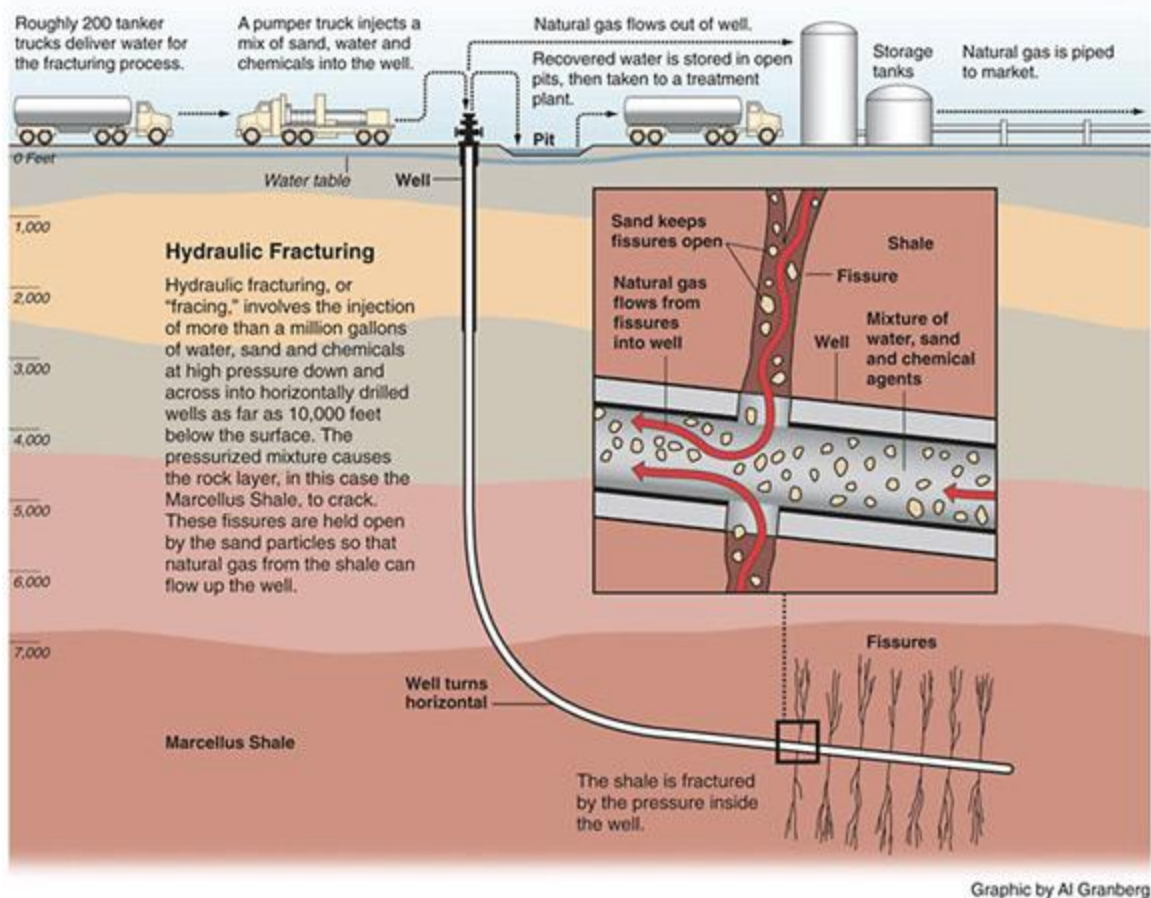
Natural gas is cleaner-burning than coal or oil. The combustion of natural gas emits significantly lower levels of carbon dioxide (CO<sub>2</sub>) and sulfur dioxide than does the combustion of coal or oil. When used in efficient combined-cycle power plants, natural gas combustion can emit less than half as much CO<sub>2</sub> as coal combustion, per unit of electricity output.

However, there are some potential environmental concerns associated with the production of shale gas. The fracturing of wells requires large amounts of water. In some areas of the country, significant use of water for shale gas production may affect the availability of water for other uses and can affect aquatic habitats.

Second, if mismanaged, hydraulic fracturing fluid — which may contain potentially hazardous chemicals — can be released by spills, leaks, faulty well construction, or other exposure pathways. Any such releases can contaminate surrounding areas.

Third, fracturing also produces large amounts of wastewater, which may contain dissolved chemicals and other contaminants that could require treatment before disposal or reuse. Because of the quantities of water used and the complexities inherent in treating some of the wastewater components, treatment and disposal is an important and challenging issue.

Finally, according to the [United States Geological Survey](http://www.usgs.gov), hydraulic fracturing "causes small earthquakes, but they are almost always too small to be a safety concern. In addition to natural gas, fracking fluids and formation waters are returned to the surface. These wastewaters are frequently disposed of by injection into deep wells. The injection of wastewater into the subsurface can cause earthquakes that are large enough to be felt and may cause damage." The injection wells typically discharge the wastewater into non-potable salt-water aquifers.



## Experience

### Please describe the technical capabilities of Summit.

The Summit Executive Management Team boasts nearly 100 years of combined experience in the natural gas industry and consists of five officers, including: Michael Earnest, President and Chief Executive Officer; Timothy Johnston, Executive Vice President and Chief Strategic Officer; Eric Earnest, Vice President and Chief Operations Officer; Rick Lawler, Chief Financial Officer; Kevin Stocker, Vice President of Human Resources; and Kenneth Wolfe, Vice President and General Counsel. Under the oversight of the Executive Management team, Summit has a diverse and successful track record of identifying, marketing, constructing, and operating new natural gas transmission and distribution systems.

Summit and its subsidiaries have successfully developed and executed a business model specializing in serving communities with limited or difficult access to natural gas. SNG is currently developing a major

natural gas distribution system in the Kennebec Valley region of Maine that is expected to serve 17,000 customers in 17 communities within four years. In its 15 years of operation, Summit has designed and constructed 13 projects in Colorado and seven in Missouri totaling 400 miles of high pressure steel main lines, approximately 1,500 miles of polyethylene gas main lines, and has also installed service lines to over 37,000 residential, commercial and industrial customers. Summit will typically bring natural gas service to over 90% of the residences and commercial establishments within in its service territories

Summit's construction experience includes installing systems in dolomite, limestone, and granite, as well as other rock and mixed soils, at elevations up to 11,000 feet with construction seasons as short as five months. The Company has successfully completed horizontal directional drilling ("HDD") installations along highways, under rivers and lakes, and under multiple railroad crossings. This experience is directly relevant to the type of construction activities anticipated for developing a natural gas distribution system within the Towns.

In Maine, SNG is currently engineering a significant gas distribution system in the Kennebec Valley. That system includes 12" high-pressure steel transmission mainline, as well as lower-pressure plastic transmission and distribution lines to serve individual customers throughout the Valley.

In 2010, Summit completed construction of a 50-mile, 8" steel pipeline to serve the tourist destination of Branson, Missouri. This line was constructed through limestone and dolomite rock, and the project required several major directional bores, the longest of which ran 4,500 feet under Lake Taneycomo, near Branson.

In 2009, Summit constructed a 45-mile, 6" steel line to serve Warsaw, Missouri. This line interconnects with Southern Star Central Gas Pipeline system, and currently operates at 350 psig. The line was designed to be operated at 1440 psig and to eventually provide service to the Lake of the Ozarks region in Central Missouri. This line was successfully designed and constructed in four months.

In 1998, Summit constructed a 28-mile, 6" high-pressure steel line to serve the mountain area of Cripple Creek, Colorado. This line extends from a meter station on a line owned by Black Hills Corporation, and operates at a pressure of 600 psi. Much of this line was constructed through granite and over challenging terrain. The pipeline route gains 3,000 feet in elevation over its course and includes several slopes approaching 35 degrees.

### **Please describe Summit's customer service and marketing experience.**

SNG believes that our customer service and marketing programs are a significant part of our competitive advantage. Most natural gas distribution companies grow only by growth of the customer base in their service territories. SNG has grown from zero to 37,000 customers in 15 years through the extension of new natural gas mains into areas that were previously not being served.

## Safety

### Can SNG address customer safety concerns?

SNG will offer an extensive customer outreach program that will address any and all customer concerns including safety. SNG personnel will work with customers to explain how a conversion to natural gas will impact their appliances, what a typical bill will include, and safety regarding their new fuel. As part of the partnership SNG envisions with the Towns, SNG will work collectively with the Towns to share information about programs available to aid in conversion costs and how to contact Dig Safe. As residential and commercial customers sign-up for natural gas, an SNG representative will work with each household to understand what appliances the homeowners have and provide education on the benefits of natural gas as well as costs of conversion and monthly usage, and what type of service can be expected. SNG plans to hold public forums that will allow the public to have a voice throughout the process. We will plan to work with the Towns to coordinate such meetings.

### How are SNG's personnel trained?

Safety is taken very seriously at SNG, as it is at all Summit subsidiaries. The Company has developed multiple in-house programs that ensure all employees are prepared for work in the field. Summit provides in-house OSHA 10-Hour and OSHA 30-Hour training courses for all employees. The Company overall maintains a total recordable incident rate ("TRIR") of 1.39, whereas the industry average is currently 4.22. In addition, all Summit subsidiaries combined had no OSHA-reportable incidents in 2011 and only three in 2012.

As part of its standard operating procedure, all employees in the field are provided with and trained to adhere to the following policies and procedures: (1) Summit Operating and Maintenance Manual, (2) Summit Safety Manual, and (3) Summit Emergency Procedure Manual. These manuals were developed internally with input from the Colorado Public Utilities Commission Safety Staff as well as the Missouri Public Service Commission Safety Staff. The Company provides updated manuals to the various regulating entities as updated versions are produced. Summit is currently working with the Maine PUC Safety Staff to develop Maine-specific manuals and procedures, and all will be provided to the Commission at minimum two weeks prior to commencing any construction in Maine.

SNG will implement an Operator Qualification ("OQ") program in Maine, similar to that in place for Summit's Colorado and Missouri affiliates. The OQ program contracts with a third-party to develop position-specific testing to ensure that operating personnel are qualified to safely operate the natural gas system in both normal and emergency situations. Employees are required as a condition of employment to pass all applicable tests every three years, to ensure employees stay knowledgeable on existing and emerging procedures. These tests ensure that any personnel in the field have the necessary tools and knowledge to complete their job in a safe, reliable manner. In addition to employees, all contractors working on SNG pipelines must also pass job-specific tests through the OQ program.

## **Will the SNG natural gas system be reliable?**

Summit has an excellent track record of system reliability. In its 15 year history, Colorado Natural Gas, Inc. has experienced only two outages of 600 customers or less that were caused by third-party damage to CNG's facilities. Both of these incidents were repaired within hours of the occurrence, and service was quickly restored to customers. In addition, the Company has successfully managed natural disasters, including blizzards and forest fires without noticeable impact to customers. Missouri Natural Gas, Inc. has only experienced one minor outage, which was the result of a tornado that hit the Branson service territory in 2012. Technicians in the area responded quickly to the emergency thereby ensuring customers were safe and taking inventory of the damage. After the tornado, customers to whom service could be restored were back online within 24 hours of contacting the Company.

## **How has the natural gas system been designed from a safety perspective?**

As far as safety issues concerning the construction and operation of the pipeline, Summit and its subsidiaries complete all projects in accordance with the U.S. Department of Transportation's Title 49, Parts 191 and 192 of the Code of Federal Regulations and state commission rules regulating safety, construction, and operations. The design standards for the piping system to be installed in the Towns are very conservative. The steel mainline is designed to operate at a pressure less than 20% of the specified minimum yield strength (SMYS) of the pipe. The polyethylene (PE) mainlines and the service lines from the street to the house will operate at a pressure of 60 psig or less. The DOT standard maximum pressure for this pipe is 100 psig, but the SMYS is 320 psig, again yielding a safety factor of more than five to one.

The materials used in modern natural gas systems are great improvements over the systems installed in the mid-twentieth century. The extensive use of PE pipe has eliminated the risk from corrosion on our lower pressure distribution systems, and the institution of cathodic protection systems has done the same for the higher pressure steel pipelines. New regulations now require the installation of automatic valves on every service line to every building that will automatically shut off the gas to the building in the event of a break in that line. The regulators installed at each meter to reduce the pressure of gas where it enters a building are required to have safety devices that limit the pressure that can enter the building even in the event of a failure.

Operational and regulatory improvements over the years have also contributed to making our systems as safe as possible. Most natural gas line breaks are caused by excavation around our systems. All PE pipes are now required to have a wire buried with the pipe in order to allow us to locate the lines, and the accuracy of this locating equipment has increased over time to the modern standard of 18" either side of the pipe. The institution of programs like DigSafe has also improved this situation.

Contrary to a first impression, PE pipe contributes to safety by actually being easier to damage than steel. In the past, an excavator could damage a small diameter steel line without causing it to rupture. Such damage might not become obvious until years later when the damaged area would finally break. PE pipe, on the other hand, breaks when hit by digging equipment. The excavator then calls SNG and we send out a crew to repair the damage to our system and investigate the surrounding area to ensure that



no additional problems were caused by the incident. This also gives us the opportunity to provide training for the excavator on the correct way to work around our pipes.

### **How safe is natural gas? Are there differences between natural gas and other fuels that make it a safer alternative?**

All fuels used in residential and commercial heating applications in the US are regulated to ensure safety, and the number of accidents each year from all sources is very low. Among the alternatives, natural gas is one of the safest ways to heat your home, provide hot water and cook your food. Part of the reason for this is based on the characteristics of the fuel. Natural gas will only burn at concentrations of 5% to 15% in air. Propane will burn at a concentration of only 2%, and fuel oil fumes at about 1.2%. Natural gas is also lighter than air. In the very unlikely circumstance that a leak occurs, natural gas will rise. Outside of a building, this causes the gas concentration to become quickly diluted below the minimum required to support combustion. Inside a building, gas will seek to find a way to escape upwards, dissipating and minimizing the chance of ignition. Both propane and the fumes from fuel oil are heavier than air, and can tend to pool in depressions in the ground if outside, and in basements or at floor level inside a structure.

From a very technical perspective, natural gas is also safer because it burns at a slower speed than heavier compounds. This helps minimize the number and severity of injuries in natural gas accidents because the force of any ignition is more of a “push” and less of a concussion. Most injuries in natural gas accidents are actually caused by flying debris.

## **Construction**

### **Can Summit explain its designed construction plan and pipeline route? Is it designed to service all of the towns along with expected future growth? Might there be changes from the current map?**

SNG will work with the Towns and with potential commercial and residential customers over the next year prior to construction to make sure that the final system design will reach all interested parties. We will also work with the Planning departments in each community to ensure that future needs are considered. Our plan is to offer service to all potential customers, and our hope is that at least 80% of those homes and businesses will convert to natural gas.

SNG will install the line size that is appropriate for the natural gas load to be connected. SNG will finalize the design after a more extensive review of the residential and commercial customers along each street. Along some streets such as Route 1, SNG will install lines in the alleyways behind the businesses rather than impede traffic.

SNG uses a program called GasWorks to aid in the system design. We input all the mainline routes and their lengths, along with the estimated maximum hourly flowrate along those routes based on a 30-year

record cold day, including flows for anticipated future development. The program then solves for the minimum pipe size required to meet this flowrate. SNG does not skimp on pipe sizing. The materials cost for a polyethylene natural gas mainline pipe is a small fraction of the cost of installation, so “upsizing” the pipe is relatively inexpensive and could someday save the company from additional construction costs. We are building a system that we plan to be adequate for at least 50 years.

### **What is the impact on town resources – street opening permits, inspections, customer complaints, inquiries to town staff, public process, public notification etc?**

SNG will team up with the Towns on this project in order to minimize any strain on their resources as well as attaining the needed permits and inspections. Summit’s customer outreach plan should mitigate and preemptively resolve most of the public’s concerns.

### **Will customers have an opportunity to connect in the future at no charge if they opt to not connect in the beginning?**

Customers will have an opportunity to connect in the future if they opt not to connect at the beginning. The PE piping mainline system is easily tapped for future connections. We will try to convince everyone to connect during initial construction, just to minimize system costs and reduce the impact to the streets. The cost to connect in the future will not be different from the cost at the time of initial construction; in most cases the SNG CA will cover that cost, if not, then the CIAC process described below will apply.

## **CIAC Pricing**

### **Can SNG help the Town Council(s) understand the CIAC pricing? Including the following subset of questions:**

**Summit CIAC is based on 400 feet (including lateral connections). What is the CIAC pricing for extending distribution line? How is CIAC calculated for commercial customers or larger consumers (is it still distance or is consumption a consideration)? What happens if a consumer signs an agreement to extend a line or lateral connection based on consumption but later needs less commodity due to energy efficiency or other factors?**

All natural gas distribution rates are designed to recover operating costs, income taxes, other taxes, depreciation expense, interest expense, and a return on the equity portion of the investment. SNG’s rates support \$6,684 of investment for both the mainline and service line to serve each residential customer. In the natural gas distribution industry, this is called the Construction Allowance (CA). Commercial customers have greater usages and therefore generate more revenue and allow the company to invest more in providing service, in other words to have a greater CA. The CA for commercial customers is calculated by multiplying their annual usage in dekatherms by \$78.63.

SNG designed its rate structure around its cost estimates to provide natural gas service in Maine. We

believe that almost all residential and commercial customers within our proposed service areas will be able to be served at a cost equal to or less than our CA. The 400 feet is a rough metric based on the amount of 2" mainline that SNG can install for the cost along a street for each residential customer, while also providing the service line for that customer. SNG structures its construction contracts to minimize the effects of soil conditions or the presence of rock along the mainline route or along the service line by requiring contractors to bid on a unit basis. This reduces variations in our cost per customer, helping us achieve our high penetration rates.

Situations can arise where the CA is less than the amount necessary to construct the system to bring natural gas to a particular customer. In these cases, SNG will estimate the cost to provide service and meet with the customer to determine if an alternative route could be utilized to reduce the cost of construction, or if there is the potential for additional homes or businesses along the route to the property. If neither of these is possible, then SNG will propose a Contribution in Aid of Construction (CIAC) amount that will be the difference between the construction cost estimate and the CA. If the customer decides to have SNG install the line, that CIAC will be placed into a main extension deposit account and the line will be constructed using company funds. SNG will provide the customer with an accounting of the actual cost of construction after that is complete, and if the estimate was greater than the actual cost, we will refund that portion of the CIAC. Should additional homes or businesses be added along the route within the five years after construction, the CA associated with those new customers will be refunded to the original customer, up to the amount of the original CIAC.

The two most common cases where a CIAC may be required are as follows:

- The customer is the only potential customer on a dead-end road and the cost to extend the mainline in the street and the service line to the side of the house is greater than \$6684 (or the calculated amount for a commercial customer based on their annual usage).
- The home or business is located more than 300 feet back on the property, such that the cost of the service line from the street to the side of the house may be greater than \$2350 for a residence or \$3450 for a business. In this case, SNG will work with the property owner to try to reduce the cost, possibly by having them provide the trench; one of SNG's contractors would then install the service line at a reduced unit price and the customer would backfill, with SNG inspecting the work.

SNG strives to minimize the number of cases in which CIAC is required. In 15 years, the total number of mainline-related CIAC situations has been less than 20 for our Colorado and Missouri affiliates, and in most of those cases the customer eventually received refunds from additional customer connections that resulted in a complete return of the original CIAC. SNG will also review the customer usage in CIAC situations as requested by the customer, to determine if the annual usage has changed and a larger CA is warranted.

## Pricing Projection

### What is the applicable spot pricing for the Towns'?

All natural gas pricing uses a base commodity price that is traded on the NYMEX as determined by the average price paid at Henry Hub in LA. Each market has price differential known as basis, this could be either a discount or premium to Henry Hub based on if the region is a producing or consuming area. The basis used in Maine will be Algonquin which is outside of the Boston area. This hub typically trades at a premium over NYMEX. Below is an average over the prior four years of the Algonquin basis by month.

Month	4-year average Per dekatherm adjustment
January	\$ 2.65
February	\$ 2.38
March	\$ 0.71
April	\$ 0.44
May	\$ 0.38
June	\$ 0.39
July	\$ 0.47
August	\$ 0.46
September	\$ 0.34
October	\$ 0.36
November	\$ 0.72
December	\$ 1.87
<b>Annual Average</b>	<b>\$ 0.93</b>

This premium must be added to the NYMEX cost, which may be viewed at:

<http://www.cmegroup.com/trading/energy/natural-gas/natural-gas.html>

An additional fee for transportation on the Maritimes and Northeast Pipeline must also be added to these to get total delivered cost. SNG has estimated that the average total delivered cost will be in the range of \$5.50 to \$6.00 per dekatherm (\$0.550 to \$0.600 per therm) for the 2013/2014 period. This is obviously subject to variation depending on the natural gas market and the basis number.

## Saturation

### What is the projected saturation for residential customers in the Towns?

SNG projects it will be able to serve 80% of the residential customers by the end of the fourth year. We believe this will be attainable because of the interest shown by the communities as well as the 50% fuel savings. SNG intends to be able to serve each of the three towns at the same rate and achieve roughly the same penetration.

### What is the projected saturation for commercial customers in the Towns?

Summit will be able to serve over 90% of the commercial customers by the end of the third year. We project that this percentage of penetration will be approximately the same for each of the three Towns.

## **Was there any consideration for distribution by truck rather than distribution lines?**

SNG believes that distributing compressed natural gas or liquefied natural gas by truck is only a temporary solution until piped gas is available. Since the Maritimes and Northeast Pipeline is adjacent to the Towns, a piped gas solution was the obvious choice.

## **Commercial Customers**

### **Can Summit provide a list of possible commercial customers?**

SNG would like to work with the Towns and other organizations such as the Chamber of Commerce to accomplish this between now and the third quarter of 2013 so that we may complete our final design. Attached you will find a preliminary commercial listing. (Non-Residential Buildings.xls)

### **Will Summit be able to provide calculate scenarios for connection charges, rates, savings, conversion costs and other situations that could impact commercial costs?**

SNG has two commercial rates, one rate for customers using less than 1500 Dekatherms of natural gas (approximately 10,800 gallons of #2 fuel oil) per year and a separate rate for commercial customers using higher amounts. For a typical small commercial customer using about 1500 gallons of fuel oil each year, and based on our current estimate of \$0.550 per therm (100,000 BTUs) for gas delivered into our system from the Maritimes and Northeast Pipeline, the cost of natural gas will be equivalent to buying fuel oil at a rate of \$2.07 per gallon or propane for about \$1.36 per gallon. For a large commercial customer using about 20,000 gallons of fuel oil per year, the cost for natural gas service would be equivalent to buying oil for \$1.70 per gallon or propane for \$1.12 per gallon. We will plan to calculate the estimated savings based on historic fuel oil usage for any commercial customer who requests service.

Conversion costs for commercial customers must be estimated by a qualified HVAC contractor. SNG will help arrange such an estimate upon request if the business does not already have an existing relationship with such a provider.

### **If small commercial users are too small to qualify for the lower commercial rate, are they classified as residential customers?**

All commercial customers will be defined as either large or small commercial customers. The definitions for commercial and residential customers are based on the nature of the service rather than the annual usage.

## Residential Customers

### Please provide conversion costs and fuel savings for the average residential customer.

For an average residential customer SNG estimates, based on numbers from the Maine Energy Dealers Association, that annual usage of heating oil is 850 gallons. If a customer elects to simply convert their existing equipment, at SNG's residential rate of \$0.85/therm plus a monthly charge of \$20, and using the figure quoted above of \$0.550/ therm for natural gas delivered from Maritimes and Northeast Pipeline, the natural gas would be equivalent to buying fuel oil at \$2.23 per gallon or propane for \$1.40 per gallon. For a simple conversion, SNG estimates the cost will only be \$750-\$1,500. The fuel savings will be around \$1,300; they would recoup all their investment cost within the first year. These customers will be eligible for a \$500 rebate under the SNG conversion program.

SNG's base assumption is that the customer will use our rebate program and upgrade to a more efficient natural gas boiler. If the customer elects to do this their average natural gas usage will be reduced from approximately 1120 therms per year to about 850 therms a year. At a current market price of heating oil of \$3.75 per gallon, for a total average annual cost for an average residential customer is about \$3,188/year for heating oil. Based on the rates quoted above, but now including the effect of the increase in the efficiency of the heating appliance to 95%, the cost of natural gas for this customer should be about \$1,430 per year for a savings of \$1750. SNG estimates the average conversion costs for a residential customer to be \$5,000. The residential customer will be eligible for a \$1,500 rebate so net conversion costs will be \$3,500. The customer payback based on the fuel savings will be less than two years. Also available to the residential customer as mentioned earlier is a low interest loan thru Efficiency Maine Trust. The loan is anticipated to be structured as a 5-year 4.99% loan; annual finance costs for a \$3,500 loan will be around \$800. The customer will have \$1,000 a year of fuel savings even with the debt service.

Each home will vary, with total conversion costs and savings from other appliances depending on the type of appliances converted as well as the quality of each conversion or replacement. The SNG Conversion and Conservation Incentive Rebate Program will help with the cost of conversion or replacement, as detailed in the table in our tariff, which we have provided. Propane conversions to natural gas are much less expensive than oil conversions, between \$150 and \$500 depending on the age and type of the heating appliance. Other appliances, such as propane gas dryers, stoves and fireplaces can also be converted for a relatively low cost. The International Plumbing Code does restrict a building from having more than one type of gaseous fuel in service, in order to prevent the installation of propane appliances on a natural gas line or a natural gas appliance on a propane line, for safety reasons.

## **Other Issues**

### **Does SNG require regulatory approval from the MPUC in order to provide service to the Towns?**

Because Unitil / Northern Utilities provides limited service, SNG must make a filing to be a “second utility”. This will be a relatively minor regulatory issue. SNG would welcome a letter of support from the Towns to include with its filing, which we expect to make in the second quarter of 2013. This should be the only regulatory matter affecting this project.

### **Schedule**

SNG will work with the Towns to establish a schedule for any public information meetings. We submitted a project schedule with the RFP response, and we will follow that up with a chart detailing the individual tasks necessary to accomplish beginning construction in the second quarter of 2014 and proceeding to bring service to the three Towns.