

Citizen Concerns over the Rising Price of Energy

High natural gas bills will be coming this winter. It appears that everyone is focused on the high price of gasoline, but almost completely unaware that natural gas prices are skyrocketing too.

In general the same forces that affect the price of gasoline affect the price of natural gas. Gasoline, in part, skyrocketed in price when the price of petroleum went from the \$40 per barrel range a few years ago, to its current price in the \$140 per barrel range.

The price of a barrel of oil not only affects the price of gasoline, but is closely related to the price of natural gas. This is in part because many companies have the choice of switching from burning oil to burning natural gas. If oil prices rise, factories substitute natural gas for oil. This increased demand causes the price of natural gas to spike. In the long term, the price of natural gas generally runs at “one tenth” that of a barrel of oil, so if oil runs at \$130 per barrel, the price of natural gas will run at \$1.30 per therm.

The wholesale price of natural gas has increased dramatically since the year 2000. In the 1990s, the wholesale price of natural gas hovered in the 20 cent

to 40 cent per therm range. Currently, the price of natural gas is hovering at about four times that, with current prices in the \$1.20 to \$1.40 per therm range. The forward looking price of Natural Gas is about \$1.45 per therm for the month of January. This is over double last year's relatively high wholesale price of about \$.59 per therm.

This price rise will affect a residential customer by about \$350 to \$700 per year. In Illinois, the typical residential customer uses about 900 therms per year. A forty cent per therm increase in price would therefore add about \$360 to a customer's annual natural gas bill.

Most of our citizens are unaware of this upcoming price increase because for residential customers, the price of natural gas usually only becomes obvious during the winter heating season. In the summer most natural gas customers only use small amounts of natural gas to heat water or to cook with.

The issues causing a spike in the price of natural gas are numerous, but mainly focus on "supply and demand", the price of petroleum, increased summer usage, and the value of the dollar.

In regards to the “supply and demand issues”, the United States and indeed the whole world is seeing a dramatic increase in demand for natural gas and oil. In the global market, emerging countries like India and China are consuming more and more natural gas and petroleum. In the United States, consumption is up, with considerable volumes of natural gas being used in the ethanol and electric generation sectors. It not only takes considerable amounts of natural gas to make ethanol, but corn also takes considerably more fertilizer than soy beans do. In the Midwest, considerable acreage is moving from soy beans to corn. This conversion requires considerably more fertilizer per acre. In the end, this affects natural gas prices because most fertilizers are made with a process that requires large volumes of natural gas.

The electric generation markets are using quite a bit more natural gas too.

In the old days, coal was the fuel of choice to generate electricity. With the rise of environmental concerns, few new coal and nuclear power plants are being built. As the demand for electricity grows, many utilities are making up the short fall by building natural gas-fired generation units. This means that in the summer, tremendous amounts of natural gas are being burned to generate electricity.

This impacts the price of natural gas because in the past we could buy natural gas at a lower price in the summer, store it, and then burn it in the winter to heat our homes.

Another factor that is implicit in the price of natural gas is the value of the dollar. As the dollar drops in value, foreign countries require more dollars to sell us oil and natural gas. This causes the price of natural gas and petroleum to rise. Many analysts directly co-relate the relationship of today's lower interest rates to a drop in the value of the dollar, and therefore to the increase in the price of natural gas and oil.

Two other factors are directly causing the price of natural gas to rise. The first is market speculation. In the past, generally utilities and factories were the only market participants that purchased natural gas in large quantities. These entities purchased natural gas for their own consumption and had a vested interest to keep prices low. In today's market, there are many speculators and investors who are buying natural gas, simply to re-sell it at a profit. These investors, many representing giant funds, have been dissatisfied with returns in the stock and bond market, and have focused their investment in the energy and commodities markets. Because of their

investment and speculation, we have an added force that is pressuring the price of natural gas upward.

The final issue that is impacting the price of natural gas is that we are having to expend more money to drill wells. Simply put, all the “easy to tap” natural gas fields have been “played out”. Drillers are now having to go deeper into the ocean and higher into the mountains to drill natural gas. This is more expensive, more risky, and requires more infrastructure to move gas to the existing markets.

We are also advising our customers that they can do several things to conserve natural gas and lower their bills.

Some examples are as follows:

- 1) Lower the thermostat on your heater. Generally, for each degree that you turn back your heater, you can knock one percent or two percent off of your heating bill. Residents can also save by dialing their thermostats back while the residents are sleeping or not at home.

- 2) Another way to conserve natural gas is lower the temperature on your water heater, install a timer on your water heater, or install a water heater blanket. In many instances, the pay back on a water heater blanket is about one year.
- 3) An easy way to reduce your heating costs is to add insulation to your walls and ceilings, and to seal your windows with caulking. Generally, it is recommended that buildings have about 14 inches of fiberglass insulation in their attics and about seven or eight inches in their walls.
- 4) Finally, control your pilot lights. If you have a gas-fired chimney, turn it off, and turn the pilot light off. If you have pilot lights on your water heaters, stoves, or furnaces, check into replacing them with automatic ignition switches that only come on when the unit is in use. For each pilot light that is switched to an automatic ignition, the customer can generally save over \$20 per year.

In summary, natural gas prices are rising, and may possibly stay high into the foreseeable future. We would recommend that our customers do whatever they can to conserve on their natural gas usage and prepare themselves for higher natural gas bills.