

# Gas Supply and Pipeline Industry

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One of the major contributing factors to the living standard enjoyed in this country is the result of utilization of natural resources and energy. This country was blessed with an abundant amount of these natural resources; the fossil fuels—coal, oil and gas supply practically all of the energy of this nation. This country uses more energy per capita than any other country in the world. It is taken for granted that there will always be an abundant supply of electricity and gas to cool or heat homes, simply by adjusting the thermostat. It is a shame the amount of energy wasted each day in this country. A time is approaching when there may no longer be sufficient energy to waste. The day of cheap energy is gone. A critical energy supply period now exists. If this country is to continue to grow and expand, a way must be found to supply its additional energy requirements.

Oil and gas supply seventy-five per cent of the energy used in the United States; nearly one-third of the energy used is supplied by natural gas. It is estimated that by the year 2000 the demand in this country for petroleum will be doubled. The over-all demand growth for energy for the past ten years has been a little over four per cent. It is imperative that the energy needs of this country be supplied.

Natural gas makes its way to the energy market through pipeline, either interstate or intrastate. The Phillips case in the mid-fifties ordered the Federal Power Commission to regulate the producers who sell gas into interstate commerce. The most important facet of this regulation was the price the producers could charge for gas at the wellhead. The interstate pipeline industry lost control over the price it could pay for its raw materials. The Federal Power Commission began to try to find a workable way to regulate these prices. One of the complications of this situation was

that price regulation applied only to gas going into interstate commerce; intrastate companies, which operate solely within the boundaries of one state, were exempt. Transmission companies supplying gas nationally were restricted in what they could pay for gas, whereas intrastate companies were not. From a consumer or even intrastate company standpoint this might sound like a good situation; the intrastate company could bid only slightly higher and be in a favorable buying position. This is not the case. The producer does not receive what his gas is worth. Low profitability has forced many of the major producers to explore in areas outside of the United States and has brought on the impending shortage of gas. This certainly is of no benefit to the consumer. Even today some senators and consumers think this, the critical gas shortage, is a farce. To believe that there is an abundant supply of gas being held off the market is sheer fantasy.

Most of the major interstate pipelines obtain the biggest part of their gas from a five-state area—Kansas, New Mexico, Oklahoma, Louisiana and Texas. In the past, these supplies have been purchased under long term Gas Purchase Contracts. Almost all communities of the United States are presently served by natural gas. There have been many articles written for the newspapers and trade journals of the pending shortages and the imminence of curtailment throughout the nation. Most of the major interstate pipeline companies have been forced to turn down increased sales, because of gas shortage. In late 1969, one of nation's largest natural gas distributors reported to the Federal Power Commission that it was unable to conclude contracts with any of its five major suppliers, because of gas shortages. Five transmission companies were so handicapped that none could supply this distributor. The distributors are faced with turning down new

business and refusing to increase service to old customers simply because they cannot contract for additional gas. It is estimated that in 1970, unsatisfied demands will total in excess of 500 million cubic feet per day. This shortage will be compounded in the future by air pollution problems, since natural gas is the most desirable fuel from an air cleanliness standpoint.

A review of data reported to the Federal Power Commission by 12 major interstate pipeline companies reveals that in the four-year period between 1964 and 1968, only one of the 12 companies was able to increase its reserves by as great a per cent as its increase in purchases. Several of the companies actually showed a decrease in reserves over that period. Indications of the impending shortage have been evident for some time. Based on the American Gas Association and API Annual Reports, the reserve life index has decreased from 22 years in 1954 to 13.3 years in 1969 and will probably be lower in 1970. During the period from 1957 through 1967 the new reserves added annually were approximately constant; however, the gas produced during this same period almost doubled. In 1969, the country experienced a record consumption of approximately 21 trillion cubic feet of gas, but added only 8.4 trillion cubic feet of gas in new discoveries. The results are readily evident should this situation continue.

The Potential Gas Committee estimates that the United States has more than 1200 trillion cubic feet of gas yet to be discovered. Four-hundred thirty-two trillion of this 1200 trillion is in Alaska and 559 trillion are located in the Southwest portion of the United States. Energy needs are critical and nuclear energy is not the answer in the near future. It is estimated

that by the year 1985, only 11 per cent of the energy supply will come from nuclear sources and that 66 per cent of the total energy utilized in the United States will come from gas and oil. Certainly there are large reserves yet to be discovered; however, there must be the necessary incentives to develop these future reserves.

There are some encouraging signs that these incentives will be allowed in that the Federal Power Commission has already admitted that the rates set were too low to encourage exploration in South Louisiana. The Commission has reopened the Permian Area Rate Proceedings and admitted that the gas supply and demand has reached a critical point. Numerous approaches are being used to increase exploration for natural gas. Gas transmission companies are advancing monies to producers to explore for gas in exchange for an interest in the properties and/or a call on any gas discovered. Several transmission companies have formed their own exploration and production companies to search for gas.

It appears that a simple solution is to de-control the price the interstate pipelines are permitted to pay for natural gas at the well-head, and allow the natural gas to compete in the energy market place. There is no doubt that domestic gas is by far cheaper than coal gasification, LNG or gas transported from the Northern Slope of Alaska, but all of these and more will be needed. The frightening facts are that the problem cannot be cured quickly; it will take time and a large amount of money. The growth of the use of energy is staggering, but with cooperation of the producer, the pipeline industry, the consumer and the Federal Government, the needs of this country can be met.