The gas supply situation in the United States.

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The main thrust of the article was to point out that severe gas shortages in the United States will continue in this decade. The worsening situation was evident in 1968, and is the result of several factors: reduced exploration, burgeoning demand, pollution control, etc. It is not a false crisis or tactical ploy by energy industries, although the situation may be used by such industries for their own profit.

If natural gas use were to increase as in the past, the annual demand is projected to 34.5 and 46.4 trillion cubic feet in 1980 and 1990 respectively. But, annual production is estimated to peak in mid-1970's and decline to 18 trillion in 1990. Supplemental gas supplies are anticipated at about 11.5 trillion cubic feet in 1990. A continuing gas supply-demand imbalance is anticipated. Reserve additions continue to fall short, estimates may themselves be overstated by 10%, and 98% of the proved reserve inventory of gas is presently committed to gas sales customers and not available to new customers. Curtailments to firm customers have been rising over the past 2½ years at the rate of about 100% per year.

Priorities for available gas are basically divided between type of end use and capability to meet requirements with alternate fuels. Users dependent upon gas to meet human needs, with no alternatives, are given preference. Highest preference is to residential and small commercial requirements (less than 50 million cubic feet on a peak day). Lowest priority is assigned to interruptible requirements of more than 10,000 Mcf/day where alternate fuel can be used. The supposition is that small customers are less likely to have the resources and know-how to convert to other fuels and maintain clean-air standards.

The potential supply of natural gas in the U.S. has been estimated between 850 trillion and 1600 trillion cubic feet. If these estimates are good, existing as well as slightly increased demands for gas could be supplied if proper steps toward timely development of the potential are made. However, the resource base and ability to develop that base are not adequate to sustain exponentially increased demands of the last few years. Even if unprecedented additions to the reserves reached 30 trillion cubic feet per year, they could not meet the projected demands of 46.4 trillion cubic feet in 1990. Although technology for liquid natural gas (LNG) is progressing rapidly, importation of LNG as an alternative may be the least secure form of energy import. (Ed. note: oil embargoes by Arab nations serves to emphasize the author's statements made prior to the recent Arab-Israel war.)

In the aggregate, supplemental gas supplies to be anticipated total about 4.6 trillion cubic feet by 1980. Nearly every successful effort to develop supplies will be price related. Current ceiling price for onshore South Louisiana is 26.875¢/Mcf. Applicants under new procedures have proposed to sell gas at prices up to 55¢/Mcf. Cost of pipeline gas from Alaska to the U.S. border is predicted to range from $0.90 to $1.40/Mcf. Algerian LNG to the East Coast may be $0.84 to 0.91/Mcf.

The author concludes that no single action can be expected to rectify the situation. Redoubled efforts on the part of all concerned will be required.