

# The economics of importing gas

Optimum utilisation of indigenous gas reserves has to receive top priority, says Uttam Gupta

**E**VEN as one quarter of the gas production in the country is being flared and the existing infrastructure for its transportation remains substantially underutilised, the government has already unfolded plans to go global. A memorandum of understanding has been signed with the Oman Oil Company (OOC) for supply of 56.6 million standard cubic metre per day through a 2,300-km long gas pipeline.

The sudden enthusiasm for imports seems to have stemmed from the now estimated inadequate domestic availability of gas. The demand by the end of the eighth five year plan, estimated on the basis of requirement registered with the Gas Authority of India Ltd (GAIL), is 260 million cubic metre per day as against a likely domestic production level of 80 million cubic metre.

However, inherent dangers in this somewhat simplistic approach should not be ignored. OOC has already given an indication of the price — about \$3.5 per million Btu may have to pay for the imported gas. One million Btu contains about 27 cubic metre of gas related to the calorific value of 9,000 Kcal. This price would, therefore, translate to about Rs 4,000 per thousand cubic metre. In sharp contrast, the plants located at Hazira, the landfall point, are paying about Rs 2,000 per thousand cubic metre for domestic gas. To the plants located in the hinterland, the imported gas will be costing about Rs 5,000 per thousand cubic metre whereas the units along the HBJ pipeline are paying about Rs 3,000 per thousand cubic metre for domestic gas.

Even at the prevailing prices for the domestic gas, the user industries are finding it difficult to maintain economic viability. In fact, the Joint Parliamentary Committee on fertiliser pricing found the gas price charged to fertiliser plants (which consume nearly 40 per cent of the total gas production) to be high and recommended a 35 per cent reduction.

To get an idea of what this would mean in terms of the production cost and selling prices, let us consider the case of urea — about 45 per cent of the installed capacity of urea in the country is based on gas. Taking a conversion efficiency factor of 700 cubic metre of gas needed to produce a tonne of urea, at a price of Rs 5 per cubic metre, the expenditure on

gas alone would be Rs 3,500 per tonne. However, the current controlled selling price of urea is just Rs 2,760 per tonne which the government is reluctant to raise for fear of adverse reaction. The position in power sector will be no different as the cost of generation will increase by leaps and bounds.

Our negotiators might be feeling happy that India has no investment obligation in this project and that the pipeline will be laid at OOC's own expense. But, would the latter undertake a massive investment of \$5 billion (being the estimated cost of

this case, considering that the project requires a colossal investment of Rs 4,500 crore and that the work is yet to commence, it is unlikely that the grid would be set up by the deadline. The petroleum minister's expectation that the indication of the likely time of gas availability from the pipeline would force timely completion of the grid is optimistic to the point of being utopian.

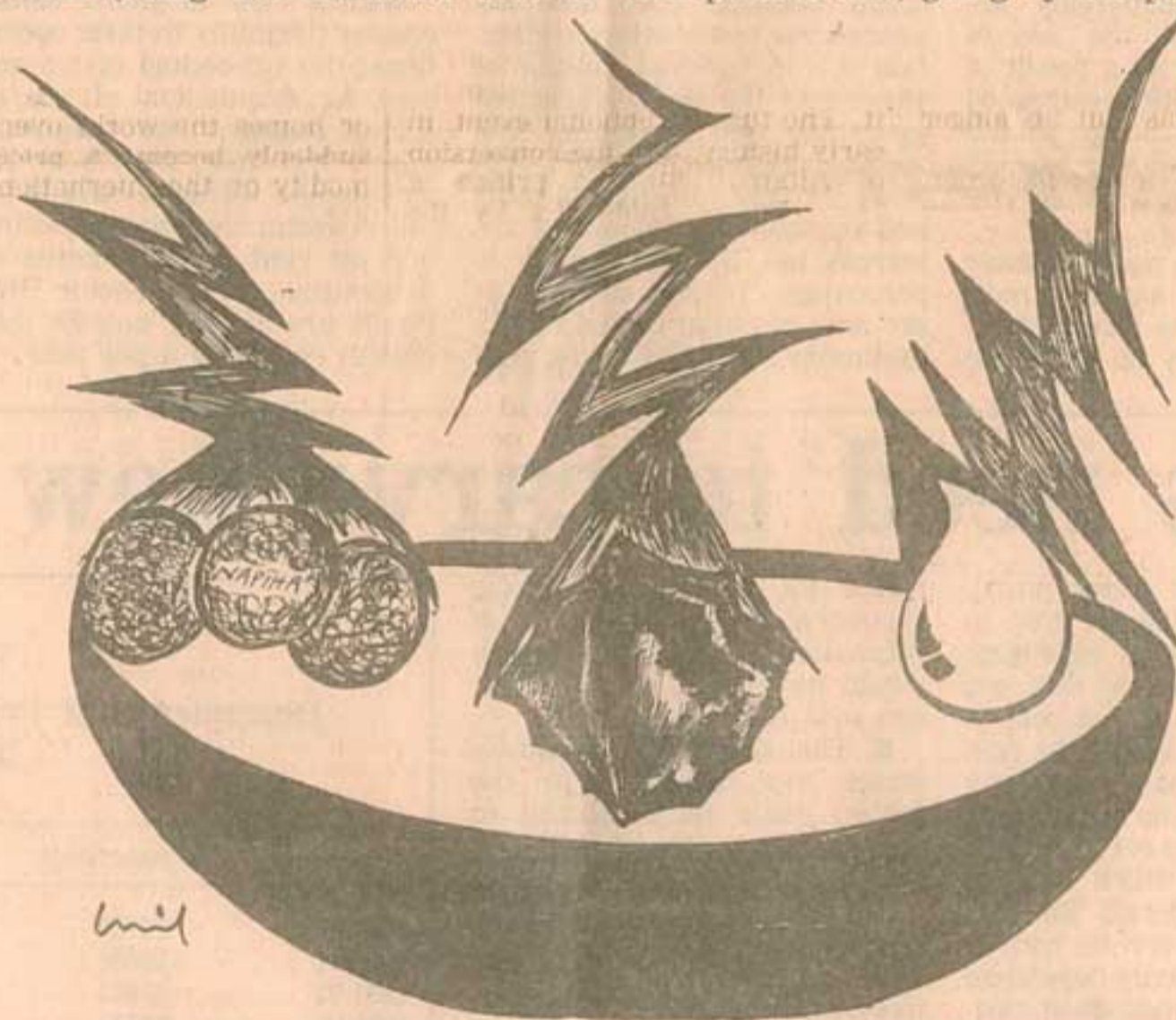
Moreover, fertiliser, power, petrochemicals, and sponge iron industries, which need gas, are highly capital intensive involving long gestation periods and, going by the past

the flaring of gas at Bombay High, which would also include augmenting the handling facilities at Hazira. That would not only help in coping with the additional demand, but also reduce the selling price — in the cost computations only the production (net of flaring) is used for arriving at the fixed charges including capital related cost.

Another look at the estimates of demand is also necessary. The projected requirement of 260 million cubic metre at the end of the eighth five year plan appears to be fantastic. During 1991-92, actual gas used was only 40 million cubic metre per day. In a span of just five years, we are thus expecting the demand to increase by a whopping 220 mcmd. This sounds totally imaginary, considering that during 1985-86 the use of gas was about 14 mcmd implying an increase of only 26 mcmd up to 1991-92. Even more importantly, while that was the period of rapid industrial growth, the eighth plan period would have a much lower growth.

Planning for gas has suffered a serious setback in recent years. Until the mid-eighties, power plants based on gas was something unheard of even as a number of fertiliser plants using gas as the feedstock were existing since sixties. This was based on the sound logic that in addition to heat value, gas also has chemical value which is best utilised in the manufacture of fertiliser. By contrast, in power generation the chemical value remains unused. These priorities have now been disturbed and the government now proposes to set-up an additional 10,000 mw of power capacity using gas as the source of energy. As a result, other fuels like coal which are best suited for power generation and are largely inappropriate for use in production of fertilisers, are not getting the desired attention. A clear enunciation of priorities for utilisation of gas, based on comparative economic advantage, is thus the need of the hour. This in turn, should be the basis for scrutinising demand from various sectors of the economy. This would not only ensure getting maximum value from gas, additional benefits will also accrue in terms of utilising alternate fuel like coal.

Optimum utilisation of indigenous gas reserves has to receive top priority and creation of the necessary infrastructure for the same speeded up.



the project) without making arrangements for ensuring its recovery within a reasonable time frame.

Clearly, since the project is being taken up for implementation on our behest, we will have to give a commitment to buy the entire quantity of 56.6 million cubic metre and failure to lift the quantity envisaged would invite heavy penalties.

The million dollar question is whether we shall be ready to take gas as and when the pipeline is ready, which as projected by OOC is only by 1998. In this context, except the southern gas grid, for which the requirement has been estimated at 19.4 million cubic metre per day, no firm indication is available in regard to the balance 37.2 mcmd. Even in

experience, need a minimum of six years before the project could be commissioned and readied for receiving gas. The possibility of such projects being abandoned in view of the adverse effect of gas pricing, is also not ruled out.

Therefore, import of gas when our own production is being flared makes little economic sense. More so, considering the outgo of foreign exchange that it would entail. In sharp contrast, in respect of domestic production the liability is limited to servicing the foreign component of investment cost which would be much less and time bound.

We need to concentrate more on expediting the completion of the World Bank financed project for reducing