

# Perils of inequitable supply

The fertiliser industry, the biggest user of natural gas, is in the midst of an unprecedented crisis caused by substantial curtailment in supplies and their unrealistic pricing. The one-sided, discriminatory and inequitable conditions incorporated in the gas supply contracts signed by ONGC/GAIL with fertiliser manufacturers have further aggravated the seriousness of the problems confronting the industry, says Uttam Gupta.

THE fertiliser industry uses about 50 per cent of the total production of natural gas (net of flaring and internal utilisation by ONGC/GAIL). Until a few years ago, i. e., up to 1992-93, the industry's requirements were being met in full, consistent with the optimum utilisation of installed capacity. The problems began to surface in 1993-94 when KRIBHCO's plant at Hazira was denied its requirements of gas for running the steam generation and captive power facilities and supplies were reduced from the contracted 3.9 million cubic metres per day (mcmpd) to about 3 mcmpd.

There are six plants along the HBJ pipeline, of which, as of now, five have already been commissioned and one, i. e. Bindal Agro at Shajahanpur, is likely to be commissioned towards the end of the current year. Towards the latter part of 1993, the supplies of gas to these plants were reduced to 1.47 mcmpd from the originally contracted quantity of about 1.8 mcmpd each. Subsequently, in July 1994, this was further reduced to 1.37 mcmpd.

At the presently reduced levels, far from covering the total requirements of the plant, including running the steam generation and captive power facilities, the supplies do not even fully cover the feed requirements in the process plant. At 1.37 mcmpd, the supplies would have been adequate if the gas supplies had a calorific value of 9200 K cal per cubic metre.

On the basis that about 9.2 million K cal of energy is required to produce one tonne of ammonia, and assuming that 9,200 K cal are present in one cubic metre of gas, about 1000 cubic metres of gas is needed to produce one tonne of ammonia. For 1,350 tpd ammonia at 100 per cent capacity utilisation, the total requirement would thus be about 1.35 mcmpd which, indeed, is about the present level of supply.

In actual practice, however, the calorific value of the gas supplied is much less i. e. about 8200-8400 K cal for the majority of the plants. On this basis, about 1121 cubic metres of gas will be required as feed for producing one tonne of ammonia. For 1350 tpd capacity, the requirement of gas for a plant along the HBJ pipeline will, thus, work out to about 1.5 million cubic metres as against a supply of 1.37 million cubic metres.

Other plants located nearer the landfall point have also been affected because of the unilateral decision of the ONGC/GAIL to cut the gas supply. More recently, there has been substantial curtailment in the gas supplies to IFFCO-Kalol from the contractually committed quantities of 0.82 mcmpd to 0.52 mcmpd. Reliance Industries is one of the beneficiaries of the cut in supplies to IFFCO-Kalol as it has been allocated 60,000 cubic metres of gas per day.

These cannot be viewed in isolation from the monopolistic nature of the gas industry and

consequently, lack of equal opportunities to the fertiliser plants, leading to signing of one-sided, discriminatory and inequitable gas supply contracts by ONGC/GAIL with fertiliser units.

Besides, during February and March 1995, due to the modification work at the ONGC platforms, the gas supplies to the fertiliser units were reduced by a further 25 per cent. This was despite the increasing urea shortage in the country and the Government's expressed commitment to maintain gas supplies to fertiliser plants at steady levels to ensure optimum utilisation of the production capacity. But for this, the industry would have produced an additional 1.6 lakh tonnes of urea during 1994-95 and, to that extent, the additional outgo of foreign exchange and extra payment of fertiliser subsidy could have been avoided.

The reduction in gas supplies on account of modification work at the ONGC platforms was, no doubt, a temporary feature. However, the problems on account of denial of gas for steam generation and captive power plants, as the situation stands today, is going to be a permanent feature. That indeed is the policy decision taken by the Ministry of Petroleum and Natural Gas (MPNG) which is being implemented by the ONGC/GAIL. Consequent to this, the plants have been forced to use alternate fuels such as naphtha, fuel oil, NGL, etc. However, even the supplies of these fuels are uncertain and unreliable and would affect uninterrupted plant operations and production. Besides, continuous use of alternate fuels will, in the medium- to long-run, also affect the reliability and life of the equipment.

Considering the higher price as well as the lower efficiency of conversion vis-a-vis natural gas, this would also increase the cost of production and, in turn, result in higher subsidy outgo from the exchequer under the retention pricing and subsidy scheme (RPS). Moreover, with the MPNG seeking to raise the prices of these fuels by charging such supplies on a non-concessional basis, there is a cascading effect on the cost of production.

The emerging problems are primarily the consequence of recent distortions in the priorities for allocation of gas amongst various users. Less than optimistic projections about

the availability of gas in the 1990s have made matters worse. In this context, it is important to recall the priorities as these evolved over the years.

All along in the late 1970s and throughout the 1980s, fertilisers received first priority in the allocation of gas. This was by no means an accident. It was, in fact, the conscious policy of several high powered working groups. In 1976, a Working Group under the Chairmanship of Mr. Lovraj Kumar, the then Advisor in the Planning Commission, was constituted to examine the optimum use of natural gas on the basis of economic cost benefit analysis, keeping in view the availability of natural gas at that time.

The Group concluded that "the use of lean gas i. e., after extraction of C<sub>2</sub>, C<sub>3</sub> and C<sub>4</sub> fractions in the manufacture of fertilisers, would fetch the maximum benefit to the national economy". Gas was found to be the most expensive option for generating power so long as the quantity available could be utilised in the manufacture of urea required to meet the domestic demand. The Group had identified recoverable gas reserves of 87 billion cubic metres and recommended four fertiliser plants to be set up.

In March 1979, the Ministry of Petroleum, Chemicals and Fertilisers set up another Working Group under the Chairmanship of Mr. Satish Chandran, the then Adviser (Energy), Planning Commission, to recommend the most economic and optimum utilisation of off-shore gas, keeping in view the production of crude/associated gas and free gas. This Working Group concluded that the opportunity cost of the C<sub>1</sub> fraction of the gas would be maximum when the gas is used for the production of nitrogenous fertilisers. The Group estimated recoverable gas reserves of 265 billion cubic metres and recommended the setting up of six additional fertiliser plants besides gas cracker and LPG extraction facilities.

In fact, the two giant fertiliser complexes at Thal (Maharashtra) and Hazira (Gujarat) each of 1.5 million tonnes urea capacity per annum, as also the six gas-based projects along the HBJ pipeline, were conceived of on the recommendations of these two Working Groups and a consistent policy adopted by the Government

on that basis. Specifically, the projects along the HBJ pipeline were designed for using gas as part of the overall planning done by the Government for utilisation of gas from the HBJ pipeline to meet the pressing requirements of fertilisers.

So much so, the work on the HBJ pipeline was conceived, planned and executed to synchronise with the setting up of fertiliser projects along the pipeline and after careful evaluation of the various alternatives by another Working Group (also under the Chairmanship of Mr. Satish Chandran) constituted by the Ministry of Petroleum, Chemicals and Fertilisers in the Department of Fertilisers and Chemicals in 1979.

Thus the Government not only recognised the overriding significance of fertilisers in terms of getting the maximum economic value for gas and in subserving the goal of the country's food security, but, there was also perfect harmony between development of the fertiliser industry on the one hand and setting up of the infrastructure (including the laying of HBJ pipeline) for supply of gas and its distribution on the other.

It is ironical that, in the matter of a few years, all this has been ignored with impunity; priorities for allocation of gas have been almost completely obliterated and the fertiliser industry is now being denied even its legitimate, contractually committed requirements, even for running the existing plants, let alone for making more gas available for the development of the industry.

Where have we gone wrong? Scanning the somewhat scattered literature/documents on the subject, one could get some clue, in the recommendations of a Group set up by the Planning Commission in 1984.

The mandate of this Group was to examine the possibility of earmarking some gas for power generation against the backdrop of the projected additional availability of gas in the early 1980s. In fact, this Group had identified recoverable gas reserves at 475 billion cubic metres (210 million cubic metres more than the Satish Chandran Group).

While endorsing the setting up of fertiliser plants as recommended by the previous two Groups, this Group also recommended the setting up of three gas-based power plants in the western and northern parts of the country with a total capacity of 1500 M. W. It should, however, be clarified that even this Group approved the feedback allocation policy indicated by the earlier two Groups and that the recommendation with regard to power plants was only to use the surplus gas that was expected to be available.

(To be continued)

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