High gas prices make fert units unviable

After holding out threats for a couple of years, the onslaught on users of natural gas has finally begun with the Government having already hit twice in just about three months and yet another blow is in the offing shortly. To assess the impact, let us first lok at the cost of gas to users prior to October 1, 1997.

Prior to October 1, the basic price of offshore gas at landfall point/on-shore gas was Rs 1,850 per thousand cubic metre linked to calorific value (CV) of 9000-9500 k cal. Of this, the price to the producer, primarily Oil and Natural Gas Corporation, was Rs 1,500 per thousand cubic metre, while the balance Rs 350 per thousand cubic metre going to the Gas Pool Account (GPA). Royalty at 10 per cent and CST at 4 per cent, both levied on producer price, worked out to about Rs 216 per thousand cubic metre. The delivered cost to these plants at factory tap was thus, 1850 + 206 (sales tax about 10 per cent) or Rs 2,272 per thousand cubic metre.

The plants along the HBJ pipeline get gas at CV of about 8500 kcal due to LPG extraction facilities owned by Gas Authority of India Limited. In view of this, they got a rebate as per formula (1500 + 216) (9000 - 8500) /9250 or Rs 93 per thousand cubic metre. Additionally, they paid transport charge of Rs 850 per thousand cubic metre. The delivered cost at the factory tap to them was thus 1850 + 216- 93+850+141 (sales tax on an average 5 per cent) or Rs 2,964 per thousand cubic metre.

With effect from October 1997, the basic price was raised to Rs 2,150 per thousand cubic metre linked to CV of 10,000 Kcal. Of this, the price to the producer was Rs 1,800 per thousand cubic mere. Royalty and CST worked out to Rs 259 per thousand cubic metre. The landfall/onshore plants get gas at CV of about 9000 K cal. Since they got a rebate as per formula (2150 + 259) (10,000 - 9000)/10,000 or Rs 241 per thousand cubic metre. The delivered cost to them at factory tap was thus, 2150 + 259 - 241 + 217 (sales tax) or Rs 2385 per thousand cubic metre.

The plants along HBJ got a rebate as per formula 2150 x (10,000-8500)/1000 + 259 x (10,000-900)/10,000 or Rs 348 per thousand cubic metre. They, however, paid transport charge at the enhanced rate of Rs 1,150 per

thousand cubic metre linked to 8500 k cal. The delivered cost at the factory tap was thus, 2150 + 259 - 348 + 1150 + 161 (sales tax) or Rs 3372 per thousand cubic metre. With effect from January , 1998, basic price has been further raised to Rs 2,411 per thousand cubic metre. Of this, price to producer is now Rs 2,003 per thousand cubic metre. On this, royalty and CST work out to Rs 288 per thousand cubic metre. To landfall point/onshore plants, rebate is (2411 + 288) x (10,000 - 9000)/10,000 or Rs 270 pe thousand cubic metre. The delivered cost at factory tap is thus 2411 + 288 - 270 + 243 (sales tax) or Rs 2672 per thousand cubic metre or Rs. 297 per million K cal.

For plants along HBJ the rebate is 2411 x (10,000-8500)/10,000 + 288 x (10,00-9000)/10,000 or Rs 390.5 per thousand cubic metre. The transport charge remains unchanged at Rs 1150 per thousand cubic mere. With these changes, delivered cost at factory tap is 2411 + 288 - 390+ 1150+ 173 (sales tax) or Rs 3632 per thousand cubic mere or Rs 427 per million K cal.
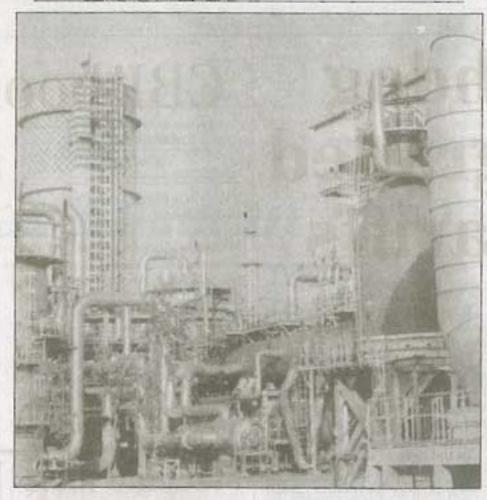
Due to unilateral curtailment in supply of gas resulting in shortage, almost all gas-based plants are forced to use alternate fuels i.e., naphtha, to the full extent in captive power and steam generation facilities; some even have to use these for meeting fuel requirements in the main process plant. Generally, of the total energy requirement, about 75 per cent is met from gas and 25 per cent from naphtha.

Even a plant using most preferred feedstock i.e. gas cannot survive despite efficiency level comparable to the best in the world

Thus, on a weighted average basis, cost of energy to landfall point/onshore plants is about Rs. 448 per m Kcal (297x0.75 + 900 x 0.25) and that to HBJ plants about Rs 533 per m kcal (427 x 0.75 + 850 x 0.25). Taking a fairly tough energy use norm of 6 m Kcal for producing one tonne of urea lower than the average achieved by plants in US, cost of

energy alone would be Rs 2688 per tonne for landfall point/onshore plants and about Rs 3,200 per tonne for plants along HBJ.

The ball does not stop here. In terms of the principle already laid down at the time of hiking price with effect from October 1, 1997, during 1998-99, basic price of gas is proposed to be linked to 65 per cent of the international price of a basket of fuel oils. At present, the former at Rs 2,411 per 1000 cubic metre being on 55 per cent linage, the latter would be about Rs 4,383 per tonne (2411/0.55). On this basis, taking 65 per cent linkage, with effect from April 1, 1998, basic price of gas would be about Rs 2,850 per 1000 cubic metre (4383x0.65).

Whether or not the Government will raise the producer price cannot be said now. Assume that this would continue at the existing level i.e, Rs 2,003 per thousand cubic metre. Royalty/CST would be Rs 288 per 1000 cubic metre. The rebates allowed to landfall/onshore plants will be (2850 + 288) x (10,000 - 9000)/10,000 or Rs 314 per million K. cal. To plants along HBJ, rebate would be 2850 x (10,000- 8500)/10,000 + 286 x (10,000-9000)/10,000 or Rs 456

per 1000 cubic metre. For them delivered cost at factory tap would be 2850 + 288-456+1150+192 (sales tax) or Rs 4024 per 1000 cubic metre or Rs 473 per million K cal.

With these and no change in gas to naphtha mix, cost of energy to landfall/onshore plants would be Rs 483 per million K cal (345 x 0.75 + 900 x 0.25) and to HBJ plants Rs 567 per million K cal (473 x 0.75 + 850 x 0.25). The corresponding cost of energy per tonne urea would be about Rs 290 for the former and about Rs 3400 for the latter. Add bagging cost about Rs 300 per tonne, while variable cost (VC) alone would be a minimum of about Rs 3200 per tonne and Rs 3700 per tonne, respectively.

Currently, selling price of urea to the farmer is Rs 3660 per tonne. After deduction of distribution margin of about Rs 150 per tonne and at least Rs 250 per tonne towards freight, this would give an exfactory realisation of only Rs 3260 per tonne. At this level, for landfall/onshore plants, VC barely gets covered and for HBJ plants, this would remain uncovered by a substantial margin.

Thus, if present selling price is

all that farmers can afford, then, on a stand alone basis without subsidy support from Government even a plant using the most preferred feedstock i.e gas, cannot survive despite efficiency levels comparable to the best in the world.

Let us hope a moment that selling price would increase. By how much? This is decided not on economic merit, but by politics. During 1980s, the price was maintained at Rs 2350 per tonne all through. In August 1991, it was raised by 30 per cent to Rs 3060 per tonne, only to be followed by a 10 per cent reduction in August 1992 to Rs 2,760 per tonne. In June 1994, price was increased by 20 per cent to Rs 3,320 per tonne and then, in February 1997, by 10 per cent to Rs 3,660 per tonne.

One may say that 1980s was an era of control so we should not look at it for guiding future course. The experience of the 1990s may be a better indicator. Even on this basis, to expect an increase of more than 10 per cent per annum at the outer limit is totally unrealistic. That is what the Ninth Plan Working Group on Fertilisers recommended. With this, the price would increase to about Rs 4850 per tonne by the year 2000-01 i.e., an increase of Rs 1200 per tonne over the existing level.

Even this will be of no help as it will be offset by increases in production cost due to the decision already in the pipeline. For instance, by 2000-01, basic price of gas would be linked to 100 per cent of cost of fuel. In other words, this would be Rs 4,400 per thousand cubic metres, i.e., an increase of Rs 1,550 per thousand cubic metres over the April 1, 1998, level. Delivered at factory tap, increase would be about Rs 1,534 per thousand cubic metre or Rs 170 per million K cal to landfall/onshore plants and about Rs 1383 per thousand cubic metre or Rs 163 per million k cal to HBJ plants. That would increase energy cost and, in turn, VC by about Rs 765 per tonne for the former and about Rs 733 per tonne for the latter, thus neutralising a major chunk of incremental realisation from increase in selling price.

Think for a moment that VC gets fully covered, say, by ensuring higher increases in selling price. Can the plant run on this basis alone? What about the fixed cost including capital-related charges (CRC)? How will new plants meet

huge burden of CRC? Depending on investment cost, financing pattern, this alone ranges from Rs 4500-5000 per tonne. Can producers afford to default in repayment of loans and interest to FIs/banks? Can they perpetually deny dividend to shareholders? Even old/fully depreciated plants have substantial liabilities by way of conversion cost and interest on working capital, etc. All these have to be met on a reasonable basis if plant is to remain viable.

For too long have our policymakers confined themselves into a make-believe world. They have not allowed required increases in selling price, thinking this would affect their vote banks. At the same time, they have raised prices of inputs including feedstock, utilities i.e. power and water and services, ad railway freight by leaps and bounds to give more money Government-owned and controlled companies/agencies. So far, this inherently unsustainable situation has been sustained by increasing subsidy which plugs the growing gap between cost and selling price.

Many armchair economists do not let this dangerous mindset change as, without even analysing the underlying factors, they keep on religiously saying that subsidy money goes into industry coffers. Had it been so, industrialists would have made lot of money from investment in fertilisers, and investors would have been only too keen to invest. The ground reality is just the opposite in that no investor, including foreign companies, wishes to invest in fertilisers. Top rating agencies like Crisil have warned about risk of investment in this industry and that existing units have started diversifying into other areas.

The Government should change its ways before it is too late. Instead of shutting its eyes on its unjustified actions, viz., sustained and steep increase in administered prices of feedstock and other inputs, railway freight, power tariff etc., it should focus on what can be done to prevent such increases and, in fact, bring about reduction in line with the JPC recommendations. With regard to selling price it should shun populism and bring it up to a reasonable level. This way alone can the vital industry can be saved from turning sick.

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