

NRP spells doom for coal-based fert plants

The normative referral price recommended by the Hanumantha Rao Committee on fertiliser pricing fails to take into account the energy cost, and if the report is implemented, it would render naphtha-fuel oil- and coal-based plants unviable, feels Dr Uttam Gupta

The high-powered fertiliser pricing policy review committee under the chairmanship of Dr C H Hanumantha Rao, former Member, Planning Commission, which submitted its report to the Government in April 1998, would make us believe that the policy package recommended by it would enable old vintage plants - majority of these based on naphtha, fuel oil and LSHS - generate surpluses for undertaking revamp and modernization.

Indeed, the objective is laudable as without timely revamp, it would be virtually impossible to keep the plants in a healthy state and maintain production at optimum level.

Under the existing dispensation i.e., the retention pricing scheme (RPS) which the committee dubs as backward looking, this is severely constrained by woefully low capital-related charges (CRC) - return on networth and depreciation - due to price fixation being on historical cost basis. In fact, depending on the vintage, in some cases the CRC is as low as Rs 400-700 per tonne.

While recommending dismantling of the RPS, the committee has proposed a uniform normative referral price (NRP) of Rs 6,050 per tonne - computed on the basis of long-run average cost (LRAC) of the newly commissioned gas-based plant along the HBJ pipeline - for all existing gas-based units w.e.f. 1.1.1998.

For all naphtha/coal-based plants, the recommended NRP is Rs 7,800 per tonne and for plants based on fuel oil/LSHS, this is Rs 7,350 per tonne. The excess over the NRP for gas-based plants i.e., Rs 1,750 per tonne for the former and Rs 1,300 per tonne for the latter - called by the committee as feedstock differential cost reimbursement (FDCR) - is to compensate for the inherent handicap of these feedstock in terms of conversion efficiency and their higher delivered cost vis-a-vis gas.

The NRP of Rs 6,050 per tonne for gas-based plants includes about Rs 2,400 per tonne towards energy cost, Rs 884 per tonne other operating cost (conversion cost, bagging, marketing cost and working capital) (OOC) and bal-

ance Rs 2,766 per tonne towards CRC. Correspondingly, for naphtha/coal-based plants and FO/LSHS-based plants, even as OOC and CRC are the same, the energy cost is Rs 4,150 per tonne for the former and Rs 3,700 per tonne for the latter.

Thus, looking at CRC alone i.e., Rs 2,766 per tonne, all old depreciated plants would get a substantially higher contribution - for instance, a plant currently getting only Rs 700 per tonne under RPS, would get a whopping Rs 2,066 per tonne more.

In regard to OOC, however, at Rs 884 per tonne, there will be an under-recovery of at least about Rs 400 per tonne as old vintage plants invariably require heavy expenditure towards repairs and maintenance due to the sheer age factor. On a net basis thus, taking CRC and OOC together, there would be gain of about Rs 1,666 per tonne.

On this basis alone, the committee has concluded that these plants would reap a big bonanza, thus meeting their long-felt need for undertaking revamp and modernisation that even the sick plants would be able to generate enough cash to be utilised for funding rehabilitation programme. With these big promises, the committee takes pride in describing its package as forward looking.

But, what matters to the unit is the ex-works price in totality and not just the OOC and CRC. For this, we need to take a look at the energy cost and compare the reasonable actuals of the plant vis-a-vis the number proposed by the committee.

For a naphtha-based plant using FO/LSHS and coal in offsite facilities i.e., captive power (some plants use power supplied from the grid) and steam generation, actual energy cost despite efficient operations is substantially higher than the provision of Rs 4,150 per

tonne under the NRP. In some cases, it is in the range of Rs 7,500-8,000 per tonne, thus leading to huge under-recovery of Rs 3,350-3,850 per tonne.

Thus, despite the potential gain of Rs 1,666 per tonne under CRC and OOC, the plants will lose to the extent of Rs. 1684-2184 per tonne. Far from helping them generate surplus, adoption of the recommended NRP would make these plants unviable. For several plants, with variable cost (energy cost plus bagging) alone exceeding the ex-works price, they will run out of money to even pay for raw materials leading to immediate closure. The sick plants will go further deep into the red jeopardising the contemplated plans to rehabilitate them.

The huge under-recovery in energy cost results from a flawed formula that the committee has used for arriving at FDCR. In case of a naphtha-based plant, the formula is $(0.525 \times 8500 - 0.608 \times 3,936) \times 0.85$, where 0.526 is the tonne of naphtha needed to produce a tonne of urea and 8,500 is the delivered cost of naphtha in Rs/tonne; 0.608 is thousand cubic metre of gas needed to produce a tonne of urea and 3,936 is delivered cost of gas in Rs per thousand cubic metre.

At 0.526 tonnes and taking 10.5 million KCal in a tonne of naphtha, the formula thus assumes that 5.523 million KCal are needed to produce a tonne of urea. This is an unattainable number even by a modern, newly commissioned plant incorporating the latest technology. This is even lower than the energy consumption of gas-based plants i.e., about 6.0 million KCal per tonne urea (average of newly set up units along the HBJ pipeline).

This is absurd to say the least, as gas being a superior feedstock, a plant based on it is

bound to have lower energy consumption than a plant on naphtha. This fundamental has been acknowledged by the committee elsewhere in the report, but brushes aside when it comes to determining the FDCR.

That apart, almost all naphtha-based plants - with the lone exception of Ifico, Phulpur, expansion commissioned in December 1997 - are more than 17 years old, several of them even 25-30 years, using old generation technology. With the exception of a few plants in the public sector e.g. Barauni, Durgapur etc., which are sick due to design and equipment problems, the others are operating efficiently and have energy consumption of 8.5-9.0 million KCal per tonne urea.

Despite the above, usage of 5.523 million KCal by the committee results in artificially reducing the FDCR. The situation is made pathetic by taking 85 per cent of the already low differential arrived at in this manner.

While recommending uniform FDCR for all plants, the committee has also glossed over substantial variation in delivered cost of energy depending on plant location. For instance, the cost of naphtha varies from Rs 8,500 per tonne in a plant located in Uttar Pradesh/Rajasthan to Rs 9,400 per tonne in Goa mainly due to high sales tax of 17 per cent against 4 per cent in the former.

We are living in a world of inflation and increase in price of feedstock, utilities and other inputs is unavoidable. The committee recognises this, but, does not recommend any compensation for escalation in cost upto 5 per cent.

Considering already high base price, this alone would work out to about Rs 250 per tonne or about Rs 15-20 crore per annum. Even in regard to escalations beyond 5 per cent, considering the faulty

formula, there would be substantial under-recoveries.

The committee has also recommended that FDCR will be withdrawn at the end of 5 years. This, however, pre-supposes that the plants would have by then re-structured to switch over to better feedstock i.e., domestic gas or LNG. The assumption is totally unrealistic as neither domestic gas is available - the committee itself recognises the constraint on gas supply - nor LNG would see the light of the day at the end of 5 years.

Invariably, in all supply arrangements under long-term contract, the supplier insists that the buyer is a viable entity. In this case, however, adoption of recommended NRPs would have already turned the plants unviable. Consequently, no supplier would even consider these units for supply of gas.

Moreover, considering the huge investment involved in setting up LNG supply and distribution chain, its delivered price, especially to plants in the hinterland, would be on par with naphtha i.e., at least \$5 per million Btu. Hence, the handicap would still remain.

In view of the above and ignoring the ground reality, if the committee's recommendation to withdraw FDCR at the end of 5 years from now is implemented, it will sound the death knell of all plants. In a nutshell, far from helping old vintage plants improving profitability and generating surpluses for revamp and modernization, the package recommended by the committee is the surest invitation to disaster.

While finalising its stand on the committee's recommendation, the Government should take into consideration the energy consumption levels these plants are capable of achieving with due regard to vintage, technology, process design/plant configuration and delivered cost of feedstock. The reasonable allowance for energy cost arrived in this manner alone will help in maintaining their viability and actually realising the contemplated benefit by way of higher CRC.

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