

Fuelling power generation

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Efforts are being made to minimise the suffering of electricity consumers through quick increase in generating capacity both in private and in public sector. This is a laudable effort. Investments and continuation of essential industrial production cannot be expected if adequate electricity supply at a reasonable price cannot be ensured. The country is investing a huge amount of resources to that end.

Electricity is a very capital-intensive industry demanding large investment within a short time, and the rate of return is generally lower than it is in speculative trading activity in this country. There are other constraints also. To make progress there is no alternative but to make every effort to increase electricity production, transmission, distribution and profitable sale.

Problems requiring attention

One of the biggest requirements is to ensure uninterrupted supply of fuel to produce electricity. Until now, natural gas has been the main fuel for producing electricity. But this may not be possible for many years unless a big new discovery of gas is made.

In August 2009, total gas production was recorded at 1,932 million cubic feet per day (mmcf). During the same period in 2010, 1,986 mmcf of gas was produced – a rise of only 54 mmcf. Now there is a constraint in the shape of limitation in gas transmission line capacity at some strategic locations. Therefore, the available small quantity of additional gas from the gas fields cannot be delivered to the required consumer locations.

Coal as a fuel for power generation

Problems in exploration and mining of coal are quite common even in a fast developing country like China. So far we have only one operating coalmine supplying fuel to a lone power plant.

After 95 days of work suspension following an underground accident on May 11 this year – estimated to cost Tk.257 crores – coal production at Barapukuria was started on August 15.

In a densely populated country with a large quantity of underground water it is not easy to explore for and extract coal. Any imposition on the modality of

extraction of coal may not produce the desired result. Procurement and supply of liquid fuel for power generation

This is probably the main option left for substantial addition to the generation capacity. As such, meticulous planning and execution for creation of adequate infrastructure and facility is needed to ensure additional power production.

Uninterrupted supply of liquid fuel like furnace oil and HSD requires a recurring expenditure of foreign currency. It may be recalled that only a few years ago we had severe shortage of foreign exchange. The present comfortable position of foreign exchange reserve may not last for long.

Timely execution of supply contract when international price level of oil is optimum is necessary. This requires very quick high-level decision-making. Availability of tankers, discharge of oil, storage at suitable locations, construction of oil pipelines, unloading, subsequent transportation primarily through river routes during all seasons, unloading and safe storage are gigantic tasks. Ensuring uninterrupted supply of fuel to numerous smaller power plants in the private sector using reciprocating engines is not an easy.

The thermal efficiency of any reciprocating engine using liquid fuel for power generation is rather low compared to other forms of prime movers like combined cycle gas turbine or high efficiency steam power plant. Reciprocating engine plants are also not very environment-friendly.

Recovery of investment within a reasonable time period along with an attractive rate of return to investors would dictate charging of a much higher electricity tariff. In a democratic setup it may not be possible for the government to enhance tariff at a stiff rate. Most industries with low level of productivity probably cannot afford to pay such a high price for electricity and still remain competitive in international market where giants like China and India are already well established.

Most of the probable investors in the power sector are intelligent entrepreneurs, and pure philanthropy is certainly not one of the priorities for considering investments. One of the priorities of a poor developing country is to encourage creation of a young generation of entrepreneurs. Scientific

distribution of wealth is social need for stability.

Investment by indigenous entrepreneurs in the power sector is a rather recent phenomenon. It is essential to encourage this trend through policy decision and benevolent implementation. In future, the private sector would be required to produce electricity for their consumption.

Demand by the industries and commercial establishments need to be made by the sector itself. The public sector needs to concentrate on under-privileged customers in the domestic sector, and on other social sectors demanding special attention. It is about time that such a policy is developed in consultation with all organised groups like BGMEA, Chamber of Commerce etc., and a final framework is established and adopted.

Short-term thinking

For many years the sector has been trying to cater only for the immediate demand for electricity. Reducing load shedding is our priority. But every year the demand of electricity is increasing at a compounded rate.

there is no alternative but to plan for additional supply of electricity over the next two decades or so. Continuity of a particular government need not dictate our priority and planning in the power sector. The country is ours, and we need the best possible solution to supply electricity to industry and agriculture.

Financing and finding resources

The sector cannot be subsidised for a long time. It must stand on its own feet. This will only be possible through more efficiency and productivity. Proper leadership at every stage is a must to improve the financial position through technical and other improvements.

PDB, PGCB, DPDC, Desco, and Reb need to provide knowledgeable leadership. This is perhaps not the case at present. A war is not won by huge amount of arms and ammunitions only. It is the generals in the field who win or lose the war. At present, there is no comprehensive plan to make this sector financially viable to meet the ever-increasing demand.

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