

NOTE

OF POWER AND FOLLY

Bharat Jhunjunwala writes :

Power Minister Sushil Kumar Shinde has declared the objective of adding 80,000 MW (Megawatt) electricity generation in the 11th Plan. He is confident that electricity consumption will increase in this measure. But investors are, thankfully, not entirely convinced. At the time of writing, shares of Reliance Power had declined below their offer price. Part of the reason is the global meltdown. Other part of the reason is that projected increases in electricity consumption may not materialize.

The Central Electricity Authority (CEA) established by Ministry of Power has estimated that demand for electricity will increase from 94,000 MW in 2007 to 153,000 MW in 2012. The projected increase is 60,000 MW. Mr Shinde has whimsically increased this to 80,000 MW. Truly, the increase of 60,000 MW forecast by CEA is equally *bloated*. This becomes clear when one looks at the trend in power consumption during the last ten years. According to Ministry of Finance the generation of electricity in the country increased at an average annual rate of 5.8 percent in 1997-2001 and at a rate of 4.7 percent in 2001-06. On this basis the increase in generation in 2007-12 is likely to be only 4.0 percent. The generation in 2006 was 94,000 MW. This will increase only by about 20,000 MW. CEA is forecasting an increase of 60,000 MW without taking the declining trend into consideration.

It must be noted that this decline in generation has come along with an increase in rate of economic growth from 5.9 percent in 1997-01 to 6.9 percent in 2001-06. Just as a car running at the speed of 40 km per hour consumes less petrol than one running at 10 km per hour, likewise Indian economy is consuming less electricity as the rate of growth is increasing. The reason for this happy situation is that most economic growth is coming from the service sector where the consumption of electricity is less. According to this trend, an increase in growth rate from 6.9 percent to 8 percent will yet see a decline in growth of consumption of electricity.

Figures given by CEA itself tell that increase in electricity consumption is likely to be much less than 60,000 MW that is forecast. CEA accepts that growth rate in last 30 years was 6.87 and in last 5 years it was 4.30. These two figures, when solved by algebra, tell that rate of growth in 1975 was 9.9, in 2000 it was 4.8 and in 2005 it was just 3.8. Accordingly the rate of growth will be about 3.3 percent in the next five years or only 17,000 MW.

Ministries of Power are notorious for such excessive forecasts world over. Patrick McCully writes in *Silenced Rivers* that this is a regular pattern : "Electricity demand forecasts consistently overestimate future needs for electricity. In more than 100 national demand forecasts used by the World Bank, actual demand seven years after the forecasts were made was on the average one-fifth lower than that had been projected. The economic justification of Yacyreta Dam used assumption that Argenti-nean electricity demand will grow at a rate of 8-10 percent during the 1980s. In fact demand grew by an annual average of just

over 2 percent so that when the first turbines of the \$11.5 billion mega project came on-line in 1994, the country already had a sizable surplus of generating capacity. Between 1970 and the mid-1980s, the World Bank and Inter-American Development Bank together lent Colombia a total of \$3.8 billion for 12 large hydro dams. Yet when these dams had mostly been completed, electricity demand in Colombia was one-third lower than forecast when the dams were planned."

CEA bureaucrats appear to be leading India at a similar breakneck speed into excessive generation of electricity far more than the demand with attendant loss of India's sovereignty, environment and investor wealth. □□□