

(electricity provides 30% of commercial energy consumption). It is not surprising therefore that with severe shortages of power remaining a serious constraint to the economic growth investment in the power sector is a priority. The financial outlay for the electric power sector has been approximately 20% of total projected plan outlay in each of the last three Five Year Plans.

Achievements of additional capacity have varied widely under respective Plans — 49.4% in the Fourth Plan, 81.6% in the Fifth Plan and 72.3% in the Sixth Plan. Capacity addition in the Seventh Plan was targetted at 22,245 MW and the actual level attained approximated this level — a record achievement. The breakdown of the capacity added during the Seventh Plan was as follows:

| | Plan | Level Achieved |
|--------------|-------------|-----------------------|
| Hydel | 5541 | 4627 |
| Thermal | 15439 | 15144 |
| Nuclear | 705 | 705 |
| Gas Turbines | 560 | 1926 |

As the above figures reflect, the Government of India (GOI) has recently accorded increased priority on gas turbine plants particularly due to the shorter gestation period in bringing these plants into production.

The present electric power generating capacity of India is about 59,300 MW making it the seventh largest producer of electrical energy in the world. Of this about 39,300 MW (about 66.5%) is in the Thermal area (including Oil & Gas), about 18,500 MW (about 31%) in Hydro and about 1,500 MW (about 2.5%) in Nuclear power generation systems. State Government-owned State Electricity Boards (SEBs) accounted for about 68% of the total installed capacity while the Central Government-owned Corporations contributed about 28% and the private sector only a nominal 4%.

The generating capacity has maintained an average growth rate of about 10 percent annually over the past five years, though the yearly growth rate has fluctuated.

Growth in capacity has been achieved despite numerous obstacles. However, few experts in the sector are optimistic that India can expect to approach the ambitious capacity addition targets which have been set for the next decade. The capacity addition target for the Eighth Plan is 38,000 MW or over 60% of current installed capacity.

c) Demand Projections

The demand projections for electric power are phenomenal. Some studies project an incremental requirement of as much as 110,000 MW in the decade 1990-2000.

In order to meet a higher proportion of demand, improve the quality of supply and further extend rural electrification, the Government of India is planning to install 100,000 MW of capacity by the turn of the century. This would cost about US \$ 150 billion at present prices and claim between 25% and 30% of total allocations in the Eighth and Ninth Plans (as noted earlier the allocation was about 20% in the Seventh Plan).

The industrial sector in India is the largest consumer of commercial energy, accounting for 60.8 percent; followed by agriculture (22.7 percent); and the domestic sector (16.5 percent). Within the industrial sector, the engineering industry accounts for the bulk of the total power consumption. Power intensive industries like iron and steel account for 15.9 percent and aluminium for 8.7 percent.