surplus of 8.3 percent and peak period shortfall of only 2.3 percent by 2002.

India requires massive investments in power generation in the next ten years to reduce the power shortage. Government projections for additional capacity are very optimistic. The Ministry of Power cites a need of an additional 57 000 MW by 2002 and another 67 000 MW by 2007 to ease the power crisis to acceptable levels.The government expects 65 to 70 percent of this new capacity, worth US$100 billion, to be installed by the private sector.

To attract private-sector involvement, the government has established a set of new norms, which include a provision for higher debt capital, higher allowance of depreciation charges and recovery of fixed costs, including post tax return on equity of 16 percent at 68.5 peak load factor (PLF). Incentives are prescribed beyond the PLF in the form of additional return on equity (ROE) (up to 0.7 percent) for each 1 percent rise in PLF. Additional ROE is to be negotiated with respective state electricity boards (SEBs). Promoters have to bring in at least 11 percent of the total cost.

The private sector has expressed interest in approximately 200 power projects with a total capacity of 90 000 MW valued at US$10 billion. Fifty-two of these proposals are from foreign investors, for a capacity of 37 503 MW, worth US$4 billion. Forty-one of these projects (20 490 MW) are on a competitive-bidding route. The central government has classified eight private power projects as "fast track" to serve as models for further investment and to facilitate quick capacity augmentation. The new government has awarded counter-guarantees toward projects from Enrol, GVK Reddy and Mangalore Light and Power Company. They have recently decided that no more counter guarantees will be awarded other than to the "fast-track" projects. In addition, future projects are to be awarded by the SEBs based on a competitive bidding route.

Development of private power projects offer some of the best opportunities for Canadian companies. Foreign MNCs and Indian companies have expressed keen interest in projects ranging from small (3 MW) to medium/mega projects (1000 MW). Canada is becoming actively involved in the development of India's power sector; currently, a number of Canadian companies are participating in power projects aggregating to about 10 000 MW. There are also ample opportunities for Canadian companies to upgrade and modernize old power plants.

There are also good opportunities for Canadian companies to take up captive power plant development as the Indian government has removed the requirement of Central Electricity Authority (CEA) clearance for power projects up to 25 MW. Mini- and micro-hydro and alternative power sources such as biomass, wind, ocean and solar energy are also gaining profile.

While the government has a massive program for HVDC transmission, the overall system is plagued by inadequate links and national networking. Given the high transmission and distribution losses, higher investment is expected for the transmission sector — one estimate puts this as high as US$2.7 billion in the next seven years. This offers good potential for Canadian companies to assist India in putting together its national grid. Major investments in the expansion of power-transmission facilities will be required over the next few years, as new generation stations begin to feed into a system that is already overloaded and subject to heavy losses.

India's power sector promises to be one of the fastest-growing in the world and international equipment manufacturers are very keen to position themselves to take a share of this huge market. The Indian market for major electrical equipment such as large generators, turbines and transformers is estimated at over US$5 billion.

OIL AND GAS

India has increasingly relied on oil imports in recent years. Energy demands have grown rapidly, and India's limited oil reserves have not been able to satisfy this demand. India's energy consumption is growing by 6 percent annually as compared to the world average of 1.5 percent. Petroleum product consumption in FY96 was significantly higher at 74.6 million metric tonnes, while domestic production was only around 54.8 million metric tonnes. The country imported crude and processed oil and lubricant (POL) products valued at