

India's power sector is witnessing remarkable growth with billions of dollars in investments pouring into new plants, as the sector gears itself to meet the planned target of 78,000 MW of new capacities by 2012, says **R Nagesh**.

POWER IN



G AHEAD

FOR an economy growing at over six per cent, even in the face of a global economic slowdown, India's power requirements are huge. Demand for power is soaring.

And the energy scenario is set for a major change, as for the first time in recent years new capacities are being added at a furious pace, even as public and private sector power majors unveil plans to invest billions of dollars in setting up new plants.

Independent power producers (IPPs) are on a fund-raising drive, as they roll-out ambitious new expansion plans. According to Sushil Kumar Shinde, Union Minister of Power, IPPs will account for 25 per cent of the total capacity addition during the Eleventh Five Year Plan (2007-2012).

The government has set a target of 78,700 MW of new capacity additions during the five-year period. "The capacity target of IPPs is 20,000 MW by the end of the Plan, out of which 3,700 MW has already been commissioned," says Shinde.

The government is confident of IPPs achieving the target of 20,000 MW over the next three years, as three units of 800 MW each of ultra-mega power plants (UMPPs) are expected to be commissioned by then, besides several mega power units and mid-size ones.

S. Seshadri, member, Central Electricity Authority – the government agency that plans power capacity additions – points out that the first two units of Tata Power's UMPP in Mundra, Gujarat, are expected to go on-stream by 2012. Similarly, the first unit of Reliance Power (at Sasan in Madhya Pradesh) is also expected to be commissioned during the current plan period.

The setting up of UMPPs is one of the most ambitious projects ever undertaken in the electricity sector in India. The government aims to promote over a dozen UMPPs, each of 4,000 MW capacity.

Currently, India has an installed power capacity of 147,000 MW; thermal (mainly coal-fired) accounts for 93,000 MW and hydro over 36,000 MW. Capacity additions



have trailed targets in the past, but things have begun to improve dramatically of late.

For instance, during fiscal 2008-09, over 3,400 MW of new capacity was added. In the current fiscal, the figure is expected to jump to 7,700 MW of new capacity, according to the Centre for Monitoring Indian Economy (CMIE), a leading Mumbai-based think tank.

According to CEA figures, during the first six months of the current fiscal (April-September), 4,433 MW of new capacity was added. The capacity addition equalled two-thirds the target for the period, which is the highest during the current Plan.

Analysts believe that the coming years will see rapid acceleration of power generating capacities, as both public and private producers are ramping up their resources.

The capacity target of Independent Power Producers is 20,000 MW by the end of the Plan, out of which 3,700 MW has already been commissioned.

Sushil Kumar Shinde,
Union Minister of Power

“In the power sector we should not look at things in a short-term perspective,” remarks B K Chaturvedi, member, Planning Commission. “The capacity that is coming up now was planned during the Tenth Plan (2002-07), when the target of 78,000 MW was not set. Thus, the pace is bound to be slow for some time.”

Private sector participation has also taken off only now; during the Tenth Plan period, it was just around 10 per cent, whereas during the current Plan, it is expected to touch 35 per cent. Planning Commission member Saumitra Chaudhuri expects private players to exceed their targets during the current plan. “They have an incentive – if they finish early, they can start production and generate revenues,” points out Chaudhuri.

Private sector players are entering the power sector in a big way, sensing the enormous opportunities that are available. Besides the existing majors such as Tata Power – which aims to expand its capacity from 3,000 MW at present to 25,000 MW by 2015 – and the Anil Dhirubhai Ambani Group (ADAG), several other business groups are also unveiling plans for the sector.

RPG Enterprises, a leading industrial conglomerate with diverse business interests, plans to invest over US\$ 4 billion in the power sector over the next five years. Group company CESC – which has been

AMBITIOUS POWER GENERATION PROGRAMME

ONE of the most ambitious programmes to accelerate power production is the Ultra Mega Power Projects (UMPPs) scheme. The Indian government envisages a string of over a dozen UMPPs, each with a capacity of 4,000 MW, to be built across the country, especially near coal pitheads, or near coastal areas to enable the producer to import coal.

A tariff-based competitive bidding model has been developed to select the successful project developer. A special purpose vehicle (SPV) is set up initially to handle regulatory clearances; this is later transferred to the bidder quoting the lowest electricity tariff. Each project is estimated to cost over US\$ 3.75 billion.

Four such projects have already been awarded to bidders by state-owned Power Finance Corporation, the nodal agency for the project. Tata Power was awarded the Mundra UMPP, while Reliance Power (part of the Anil Dhirubhai Ambani Group) has bagged the remaining three at Sasan (Madhya Pradesh), Krishnapatnam (Andhra Pradesh) and Tilaiya (Jharkhand).

Four more UMPPs – two in Orissa and one each in Tamil Nadu and Andhra Pradesh – are being planned and the 'request for qualification' forms for these are expected to be issued soon, says H S Brahma, the union power secretary.



active in power generation and distribution for over a century in West Bengal – is now going in for geographical diversification as it plans to expand its capacities.

"We are looking at acquiring companies in the power sector if we get an opportunity," explains Sanjiv Goenka, vice-chairman, RPG Enterprises. "We recently acquired a firm in Maharashtra and are setting up a 600 MW plant in Nagpur." CESC acquired the project from Dhariwal Infrastructure Pvt Ltd.

Engineering giant Larsen & Toubro, which has tremendous expertise in power equipment and engineering, is also planning a foray into the power generation business. Y M Deosthalee, chief financial officer, points out that the company may invest in power plants with a capacity of 1,000 MW to 2,000 MW, ultimately building up capacity of 5,000 MW in about five years.

Adani Power, part of the Adani Group – which is also active in ports and infrastruc-

ture – is building two plants in Gujarat with a total capacity of 6,600 MW. Other private players planning to set up power plants include leading infrastructure group GMR, Sterlite Energy (part of the UK-based Vedanta Group), Indiabulls (in which NRI entrepreneur L N Mittal has an over 10 per cent stake) and JSW Energy.

Looking at the overwhelming response from the private sector, the union government, in consultation with state governments, has been fine-tuning its policies



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member, Planning Commission



MEGA FUNDING NEEDS OF THE POWER SECTOR

FUNDING India's ambitious power generation capacity expansion programme is a humungous task. The Planning Commission – which has set a long-term target of power generation capacity of 950,000 MW by 2030 – has estimated a requirement of US\$ 130 billion to meet the Eleventh Five Year Plan (2007-12) target of 78,000 MW.

The Ultra Mega Power Plants project alone would cost over US\$ 50 billion over the next five years. Power generating companies, both state-owned and private, are looking at various sources to fund such an ambitious scheme. These include borrowings from financial institutions and banks, private equity investors and also the option of tapping the capital markets.

Recent months have seen a series of Initial Public Offerings (IPOs) by power producers, hoping to tap into the buoyant capital market. And considering the enormous opportunities that are apparent in the sector, the investing public has responded overwhelmingly to these issues.

State-owned National Hydro-Power Corporation (NHPC) saw its issue being over-subscribed by 23 times, while the

Adani Power issue was over-subscribed by nearly 22 times. The two companies raised over US\$ 1.8 billion through their IPOs. The recent Indiabulls Power issue was also over-subscribed by 22 times.

Other power majors are also planning to come out with their offers. GMR Energy, part of the GMR Group, which will be investing over US\$ 1.7 billion in its expansion project, is expected to come out with an IPO. It is also planning to raise over US\$ 200 million through a preference share issue.

The Indian government has also approved the sale of stake in two state-owned companies – National Thermal Power Corporation Ltd (NTPC) and Satluj Jal Vidyut Nigam Ltd (SJVN). The sale could fetch the government about US\$ 1.8 billion.

The government, which has an 89.5 per cent stake in NTPC at present, plans to sell a five per cent stake to raise NTPC's market value and to enable it to raise resources internationally at competitive rates. Similarly, it will off-load a 10 per cent stake in SJVN, a joint venture with the Himachal Pradesh government.



relating to investments in the power sector.

The government recently tweaked its 'mega power policy,' to encourage private companies to set up plants with a capacity of 1,000 MW. The rules have been relaxed to attract private players to set up such plants and even sell the power within the state where it is generated.

The CEA has also suggested to the government to waive import duty on machinery that will be used to produce super-critical equipment (those with a capacity of over 660 MW).

The CEA is keen on promoting a super-critical power programme to accelerate power production.

The authority is also planning to promote ultra super-critical power plants of 800 MW capacity. These plants, which are becoming popular in many developed countries, are super-efficient and enable reduction of emissions. Eight such plants are being planned to be set up in the initial stage by the government.

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The CEA has also initiated measures to encourage captive power producers to sell electricity through an open access system. In the past, companies with

generating capacity could sell 25 per cent of their production to the power grid after getting a special licence.

The power can also be sold through the Indian Energy Exchange. There are thousands of units – ranging from large, processing units and steel mills, to smaller factories – that have their own generators. They can now sell the power to the local grids or through the energy exchange.

Merchant power producers – those who set up power plants without entering into power purchase agreements with state government owned utilities – are also stepping up their capacities thanks to the vibrant demand for electricity across the country.

India's electricity industry is powering ahead to meet the escalating demand from industries and consumers. And the government is unveiling a slew of initiatives to attract entrepreneurs to set up generating units and to bridge the demand-supply gap, lighting up the fortunes of the sector. 🌟