

Transformation of Power Sector in Uttar Pradesh

Electricity has become the lifeblood of the modern world, without which the world will come to a virtual standstill. Any sluggishness in the growth of the power sector can throw the region far behind other regions in industrial, economic and social growth. Thus, power has been recognized as one of the key factors of infrastructure for a sustained growth of the state economy. Electricity is a primary input factor for the progress of the economy of the state. Full utilization of other input factors, such as manpower, land including irrigation and capital-related resources heavily depend upon the uninterrupted availability of electricity. Electricity has therefore, become the most essential factor in improving the social conditions and welfare of people.

Over a period of time, Industrial growth has been so fast that the increase in energy supply could not maintain an equal pace. The major problems faced worldwide are fast depletion of non-renewable energy sources, increasing costs for energy, and inability to create sufficient returns for investment for growth. These problems have created a shortage of power in both quantity and quality. Power sector was mainly treated as a Government business worldwide, considering its importance as a vital infrastructure for the growth of the state. But growth in this sector, however impressive it was, looked insufficient to cope with the impulsive growth in industrial and other sectors.

In UP's perspective, there had been no substantial augmentation in the state power generation capacity till the 1990s. Power has been the bane of UP's industry, with the current demand-supply gap widening to almost 3,000 MW. The current demand in the state is estimated at 10,000 MW.

Taking it as a cue, the Government of UP has formulated UP Power Energy Policy 2009 for increasing the role of public private partnership in generation, transmission and distribution, in addition to the work already being carried out under State sector. The Government is slowly but surely inching ahead towards the development of Power sector with the help of private sector through Public Private Partnerships (PPPs), joint ventures, memoranda of understanding and co-generation by sugar mills.

In this backdrop, during the fiscal 2011-12, the Government has proposed budgetary provisions of Rs. 8,227 crore towards various projects in the power sector. Out of this amount, Rs. 1,267 crore has been earmarked for augmenting the generation capacity in the state. An amount of Rs. 200 crores has been proposed to be set aside for thermal power project being set up at Ghatampur, Kanpur in a joint collaboration with Neyveli Lignite Corporation Limited.

The Government has envisioned to meet out the power demand fully across the state by the year 2014, and to increase the annual per capita consumption power up to 1000 units, the Government has taken many pro-active measures in Generation, Transmission and Distribution sectors.

GENERATION

During 11th Five year plan, many initiatives have been taken, which includes :

- Power plants of 600 MW in Rosa and 600 MW in Anpara (Unit-I) have already been commissioned
- Several other Power plants of the aggregate of 3030 MW are scheduled to be commissioned by March 2012 which include
 - 2 x 250 MW Harduaganj Extension
 - 2 x 250 MW Parichha Extension
 - First 500 MW unit of Anpara 'D' under state sector
 - 1 x 600 MW Anapara 'C' Thermal Extension (Unit-II)
 - 4 x 82.5 MW Shri Nagar Hydro
- Power plant of 450 MW co-generation in sugar mills is being commissioned under private sector.
- The work for 3x660 MW Bara Thermal Power Project and 2x660MW Karchhana Thermal Power Project have been entrusted to private developers and work has already commenced.
- The work for 2x660 MW Meja Thermal Power Project (Allahabad) is also underway in Joint Sector with NTPC and UP Rajiya Vidyut Utpadan Nigam Ltd.

By the end of 11th Five Year Plan, it is hoped that the state would get 2000 MW from the state-run projects, 2130 MW from the private sector, 450 MW from MOU route projects and 1571 MW from various projects being implemented by the central agencies.

Under 12th Five year plan (April 2012 - March 2017), the Government of U.P. has planned for 25000 MW capacity additions. This envisage capacity addition of 5000 MW under State/Joint sector, 15000 MW under Private sector and 5000 MW to be procured through competitive bidding, by which power can be supplied from any power project located in any State of the country.

As on date, bid process for 2x660 MW Jawaharpur Thermal Power Project has already been initiated. Consultant has been identified and the bidding process for selection of developer is underway for 3x660 MW Sonbhadra Thermal Power Project. The selection of consultant for 2000 MW Yamuna Expressway Thermal Power is also under process. Department will provide land, coal linkage, water linkage and environmental clearance to the developer and power will be purchased on levelised tariff through competitive bidding. Further, Government of U.P. has signed MOU(s) with the developers for 3x660 MW Lalitpur Power Project and 2x660 MW Bhognipur Power Project (District Ramabai Nagar).

TRANSMISSION

At present UP has a transmission network to cater about 8000-10000 MW of power. To cater the enhanced generation by the end of 11th plan, UP transmission system is being augmented to evacuate 15000 MW of power. Accordingly, transmission development programme has been worked out and numbers of 765 KV/ 400 KV/ 220 KV/ 132 KV sub-stations and associated transmission lines are under construction.

These includes sub-stations of 765 KV (3 in numbers), 400 KV (9 in numbers) along with associated transmission lines under public private partnership model for evacuation of power from 3x660 MW Bara, 2x660 MW Karchhana and 3x660 MW Meja Thermal Power Projects.

Apart from above, sub-stations of 765 KV (2 in numbers), 400 KV (3 in numbers), 220 KV (24 in numbers) and 132 KV (54 in numbers) are to be constructed under State sector.

DISTRIBUTION

In order to improve the performance of the power sector, and for bringing financial and operational independence, besides creating conditions for competitive and self sustainable developments of the power sector, Government of India has enacted "Electricity Act 2003" with effect from June 2003. Govt. of UP has had undertaken an input-based franchisee distribution model in cities like Agra and Kanpur for economizing on power. While the distribution system in Agra has already been handed over to a private partner M/s Torrent Power Ltd. with effect from 01.04.2010, things are moving in a similar direction for Kanpur. The process would soon be rolled out in nine other towns.

With an aim to attract more and more companies to participate in open bid for the selection of input based franchisee, UPPCL will provide the following facilities to the prospective distribution franchisee :-

- Distribution franchisee can use utilities distribution assets
- Distribution franchisee can utilize other services of utilities such as testing facility of HT/LT between switching / sub-stations and distribution transformer and/or other technical assets.
- Utility shall provide inventory of first three months
- Utility shall ensure the supply of power to the distribution franchisee
- Utility shall allow distribution franchisee to purchase power through open access.

To augment distribution system, 202 numbers of new 33/11 KV sub-station are under construction and 174 numbers are under planning stage.

It is certainly not the end here, the Government is mulling all available options and relentlessly striving hard in making U.P. a power surplus state, to create an industry friendly ambience so as to compete in true sense with all the peer states across the

country and also enshrine U.P. among the most developed states within the country and globally as well. The mission may seem difficult but is surely not impossible once the people of the state from all walk of life shall also be determined and join their hands to bolster every initiatives taken by the Government for the better future prospects of the state so that the benefits of development may reach the doorsteps of every citizen of U.P.