## FEATURE

### INTERACTION

# 'There is a need to evolve a robust energy security policy for the country'

In a freewheeling interview, Anil Sardana, Managing Director, Tata Power, speaks on his company's recent initiatives, and addresses a few problems facing the Indian power sector today.



Tata Power has always placed emphasis on its strength as an integrated power player, with interests in generation, distribution and transmission. What is your opinion on the pace of reforms on the distribution front? Will the current state of affairs impact your plans?

The power sector is facing several challenges today. For a nation with a population of 1.24 billion the demand for power supply is expected to surge to 335 GW by 2017. However, this appears to be a far cry from being met, due to the demand-supply gap in terms of fuel sources and thereby the power generation. As of January 2013, India grappled with a peak power shortage of 8200 MW. Eyeing a target of power supply of 335 GW, India will require a generation capacity of approximately 440 GW. This implies that we need to have an annual addition of 20 to 40 GW. This is a challenge to sustain.

Despite huge coal reserves in India, the domestic power sector is facing coal shortages and has resorted to imports to meet its requirements. This shortage may result in increasing non-utilisation of assets that are already built and this would also distract new capacity additions thereby leading to targets not being reached. At the same time, policy changes in Indonesia and Australia have significantly escalated the price of imported coal. Since IPPs import coal from Indonesia and Australia, the sudden spike in price has caused imported coal-based power projects to become economically unviable. Another major challenge to the sector is the

shortage of natural gas in India. This shortage has stranded gas-based power projects with a combined capacity of around 18,903.5 MW, accounting for only 9.13 per cent of the total generation capacity. There is a need to evolve a robust energy security policy for the country so that guidance be given to all State regulatory commissions to plan bulk supply procurement in line with the basket of fuels that meet Indian's energy security needs.

Besides fuel, slow pace of distribution reforms is another key concern. Power distribution still remains a segment that needs significant reform-intervention and a combination of tariff increases to reflect the increasing cost of fuels & depreciating rupee, competition & open access and enforcement of the 'obligation to service', going forward. The distribution segment caters to 200 million consumers with a connected load of 400 GW, comprising one of the largest customer bases in the world. However, high financial losses and the debt burdens of the distribution companies are hampering not just the electricity distribution but is almost becoming a question mark for generation capacity addition in India. Also, creation of regulatory assets in the books of distribution companies is another serious development and has dried up ability of discoms to source incremental bulk power, nor can they pursue capital investments to meet growth and reliability aspects. The new trend of giving subsidy may be a political gravy but would impact the State-owned discoms or gencos to get their

due budgetary allocations for expansion, etc.

In addition to fuel, distribution reforms, the third key impediment to growth is the commitment of States to support the developers in obtaining clearances, land acquisition free of encumbrances, etc. Without State engagement, developers would find it difficult to bring to fruition, their investments on the ground.

#### How has the CAG audit in Delhi progressed?

While Tata Power Delhi Distribution Limited (TPDDL) is fully co-operating with the CAG, their claims are factually incorrect. Out of the 65 requisitions by the Auditor, TPDDL has already responded to 57. These 65 requisitions consists of 296 queries out of which 204 have been responded to and 14 requisitions are partially answered as further queries have been raised by the auditors. For the pending queries, owing to the voluminous nature of data of the requisitions, some amount of time is needed to compile and respond.

Apart from this, till date 43 special meetings have been scheduled to provide them info regarding IT, Technology, Billing, Regulations, Capitalisation etc. and we have also shared 90 documents related to Tariff petitions, Tariff orders, Financials, Regulations, Supreme Court orders, Supply code, CEA guidelines, PPAs etc. for clarifying their queries. TPDDL is committed to extend full cooperation to the CAG and continues to respond to any query by the Auditor. In fact, TPDDL is putting in extensive man-hours to cater to the queries raised by the auditors. Tata Power Delhi Distribution has a strong track record of ethical practices and is committed to this. Tata Power Delhi Distribution has been following all stipulated norms and best practices and always keeps consumer interest at the focus of its business.

## Are you convinced about the PPP model in power distribution, or is total privatisation the answer?

Tata Power believes that the PPP model is the best model for bringing in distribution reforms in the country. PPP model in the distribution of electricity encompasses all functions and obligations relating to distribution of electricity in a license area. The concessionaire, selected through competitive bidding, would be responsible for maintenance, operation and upgradation of the distribution network and the supply of electricity to the regulated consumers. Reduction of AT&C losses, improvement

in quality of power supplied, strengthening of distribution network, improved customer satisfaction and introduction of competition through open access are some of the salient feature of this model. Public Private Partnership (PPP) has been implemented by the way of privatisation and appointment of distribution franchisee in some States. A successful execution of Public Private Partnership can be seen through the functioning of the Tata Power Delhi Distribution Limited (TPDDL). The organisation is a joint venture between the Tata Power Company and the Government of Delhi and has bought tremendous value by bringing down AT&C losses to 13 per cent from 52 per cent in record time.

We are witness to the fact that even though the franchisee models in the power business are flourishing and helping the discoms/ SEBs as well as the consumer on many fronts (i.e. modern infra, better services etc), it is proving to be a costly affair for the private franchisee companies who require a huge amount of capex at the start of their term and have to face a lot of problems to keep up the agreement norms and consumer expectations and acceptance as well as to improve the distribution infrastructure initially.

You have decided to sell stake in your Indonesian subsidiaries due to under-recoveries at your Mundra UMPP and cash-flow concerns. When do you expect the scenario to improve? Does Tata Power plan any further stake sales?

Spread over a number of pits in South Kalimantan, Indonesia, the Arutmin mine had started posing production and cost viability challenges in its operations. Thus Tata Power, through its wholly-owned subsidiaries signed an agreement to sell its 30 per cent stake in Arutmin and associated companies in coal trading and infrastructure, to a Bakrie Group entity. The aggregate consideration for Tata Power's 30 per cent stake was approximately \$500 million, subject to certain closing adjustments. The sale is subject to certain conditions and restructuring actions, which the company targets to complete soon. However, the company continues to hold its equity stake in PT Kaltim Prima Coal ("KPC"), which owns one of the largest thermal coal producing mines in the world. KPC will also continue to be a part of the supply chain for Tata Power Group's coal offtake requirements.

The current coal price scenario has presented a challenge to the entire coal mining sector and

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the only viable option is an increase in the power tariffs that can assure an uninterrupted power supply to the procurer states.

Development of geothermal energy is still in its nascent stages in India... What are Turkey and Iceland doing right that India is not? Again, since capital costs for geothermal energy have dropped drastically in the past few years, will this factor propel Tata Power to aggressively expand its geothermal plans?

Geothermal energy is a key focus area for us, as it has the potential to create large-capacities co-existing with a much lower carbon impact and is available 24x7 unlike other renewable energy sources. Tata Power is pursuing this through an investment of \$50 million for a 10 percent stake in Australian company Geodynamics. Recently, Tata Power along with its consortium partners, Australian company Origin Energy and PT Supraco Indonesia, won the bid for a 240 MW geothermal project in Indonesia which is under development.

Geothermal energy has the potential to generate and deliver sustainable supplies of clean, renewable base load. A number of government and private sector companies are exploring the opportunities to develop this valuable resource. Various geothermal prospects have been identified in the Himalayan belt, Cambay basin and Central India. However, the sector has its share of challenges that act as a major bottleneck in developing the industry. The main disadvantages of building a geothermal energy plant mainly lie in the exploration stage, which can be extremely capital intensive and high-risk.

Last year, Tata Power picked up a wind farm in Gujarat from AES Corp. Your company had commented that this deal had generated a lot of interest from solar and wind players who are looking to exit their investments. Can we expect any more such deals in the future, or will your current cash flow hiccups make your inorganic growth plans take a backseat?

Tata Power Renewable Energy Limited (TPREL), a 100 per cent subsidiary of Tata Power has recently signed an SPA for acquisition of 100 per cent shareholding in AES Saurashtra Windfarms Pvt Ltd (ASW), a 100 per cent subsidiary of AES Corporation. ASW owns and operates a 39.2 MW wind farm near Dwarka in Jamnagar district of Gujarat. The project, which is fully operational since January 2012,

has executed a power purchase agreement with GUVNL for sale of the electricity at a tariff of Rs 3.56/kWh for the duration of the project. The project is registered with UNFCCC as a CDM project and is eligible to receive CERs. The project is also registered under the Generation Based Incentive (GBI) scheme of MNRE.

What are the major factors that helped the accelerated schedule of the Mundra UMPP?

The 4000 MW Mundra UMPP is the first of the UMPPs that heralds the entry of 800 MW supercritical boiler technology in India, which is environment friendly and efficient. The total power generation capacity of Tata Power currently stands at 8560 MW, reinforcing its position as the largest integrated power company in India. We are proud and privileged to contribute the "Monument of Technological & Project Management Excellence at Mundra" to the nation. The project completion within record time of one year from the commissioning of the first unit reinforces Tata Power's commitment to bridge the energy demand supply gap in India and reinforces our group's commitment of "A Promise is a Promise". The project management and operational expertise employed in executing the power project ahead of schedule with predictable, cost, quality and safety are now being implemented in operating the plant in an effective and efficient manner.

Also, Tata Power used in-house ordering and co-ordination to prevent any delay in the Rs 18,000-crore project. Moreover, it moved with a collaborative approach of inducting and training staff to operate the station in sync with the completing of units. The supercritical status of a power plant depends on the temperature and pressure at which the boilers operate. The efficiency level of Mundra power plants is 42 per cent. The steam generators are supplied by Korea's Doosan, while the turbine and generators package are supplied by Japan's Toshiba. Synchronous types of turbines and generators are designed to operate on supercritical steam parameters to produce 830 MW at 26 kV at 50 Hz.

In addition, the reason behind the fast commissioning of the plant located in the Kutch region of Gujarat, was the overall project management and co-ordination done by Coastal Gujarat Power Limited (CGPL) itself.

— Devarajan Mahadevan