Interview with Anil Sardana

"Tata Power aims to have a significant contribution from clean power sources"

Greater private participation, larger contribution of renewable energy to the fuel mix, stronger regulatory processes and an integrated national grid – these are some of the biggest strides that the power sector has taken in the past two decades, believes Anil Sardana, managing director and chief executive officer of private power major Tata Power. As for the biggest challenges faced by the industry, he singles out the poor health of discoms resulting in weak demand. Excerpts from a recent interview...

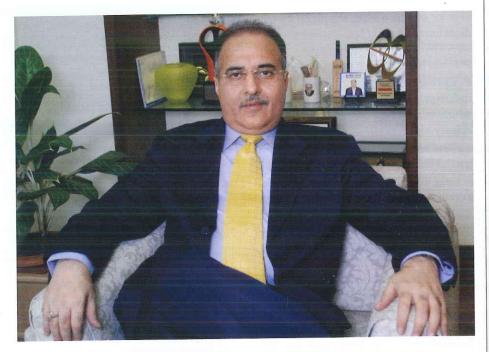
What is your view on the current state of the generation segment?

The generation segment has witnessed drastic changes in recent times. Great interest has been shown for power generation through renewable energy sources. This is in line with the government's target of 100 GW from solar and 60 GW from wind. Since renewable capacity can be added to and integrated with the grid relatively faster, it has seen tremendous interest from developers.

While the sector has witnessed a spurt in private sector investments in the past 10 years, the road ahead is challenging. The major challenges are lack of demand, poor financial health of discoms and high fiscal losses. This is a matter of great concern, as the buyer has to be solvent and efficient, failing which the fiscal health of all associates in the value chain would get impacted. This would lead to a vicious circle of uncertainty. The power distribution segment still needs significant reform intervention. Going forward, a combination of tariff increases, distribution reforms, open access and enforcement of the "obligation to serve" is required. In addition, power generators have been facing issues of no clarity on coal linkages and changes in tariffs, particularly in cases where captive mines were cancelled. Besides, the power purchase agreements of many generators are unviable.

Do you think the Ujwal Discom Assurance Yojana (UDAY) will help state discoms achieve a turnaround?

UDAY attempts to create efficient state discoms through a permanent resolu-



tion of past as well as potential future issues. It empowers discoms with the opportunity to break even in the next few years. A critical element of UDAY is that states will take over the past and future losses of discoms in a graded manner. This implies that unlike previous bailout schemes, this time the states will be responsible for discom losses. UDAY can be a torchbearer for the government's Power for All by 2019 agenda. Once the financial position of discoms improves with UDAY, they are likely to draw more power, will lead to higher demand for generation. UDAY is a promising initiative. However, one has to wait and see if the implementation takes place in the manner conceptualised under the scheme.

What have been Tata Power's most significant

achievements during the past year?

- Tata Power announced its plans to increase non-fossil fuel sources to 30-40 per cent of its capacity by 2025, up from its earlier target of 20 per cent. Further, it has set a target of 20,000 MW of total capacity by 2025.
- The company generated 47,016 MUs from all its power plants and generation sales stood at 43,964 MUs.
- Tata Power consolidated its renewable energy assets under its wholly owned subsidiary, Tata Power Renewable Energy Limited (TPREL) to enhance its focus on clean energy.
- TPREL signed a share purchase agreement to acquire Welspun Renewables Energy Private Limited.
- TPREL acquired Indo Rama's wind assets of 30 MW in Maharashtra.
- Tata Power successfully commissioned

the 120 MW Itezhi Tezhi hydropower project in Zambia (in which it has a 50 per cent stake) and the 44 MW Lahori wind farm project in Madhya Pradesh.

- Industrial Energy Limited (IEL) synchronised two units of 67.5 MW of its 3x67.5 MW IEL Kalinganagar project.
- Tata Power introduced digital interface for all its stakeholders, including employees and consumers in Mumbai and Delhi.
- The company designed and developed the first power distribution centre in India and implemented the country's first natural ester-filled transformers.
- Cennergi (Pty) achieved commercial operations of its 134 MW Amakhala Emoyeni and 95 MW Tsitsikamma wind farms in August 2016.

How would you assess the performance of the power sector in the past two decades? What have been the most noteworthy achievements?

The power sector has taken significant strides in the past two decades. Through the Electricity Act, 2003, reforms were ushered into the sector by bringing in competition and encouraging private sector participation. Three-quarters of India's population now has an electricity connection. Generation capacity has tripled, with the private sector playing a substantial role. The government's efforts to promote clean energy have resulted in an increasing share of renewables in the energy mix. Clean energy, which was almost non-existent in India in 1990, now accounts for 14 per cent of the total power generated.

In addition, the regulatory process has got well established in the electricity sector. While the Central Electricity Regulatory Commission, state commissions and the Appellate Tribunal for Electricity (APTEL) have made tremendous contribution, it is time that we move from state commissions to regional commissions. On transmission networks, the sector achieved integration of the regional grid and thus created one of the largest asynchronous AC grids in the world.

The UDAY scheme has been another breakthrough. It is an enabling policy,

which has helped boost investor confidence in the sector. The scheme has given an opportunity to the state electricity boards to ensure that the losses do not again pile up on their balance sheets or profit and loss accounts.

That said, the industry continues to face many challenges, primarily due to structural and systemic issues, which have resulted in financial stress for discoms. Distribution continues to be the weakest link in the country's power sector, with the customer not being at the centre stage of the delivery process and fiscal viability. The aggregate technical and commercial (AT&C) losses in India continue to be one of the highest across the globe. However, we have examples that prove that it is possible to achieve the benchmark of low AT&C losses. The Gujarat State Electricity Board, the West Bengal State Electricity Board, CESC Limited, and Tata Power's networks in Delhi and Mumbai have insignificant AT&C losses. This needs to be replicated across the country, especially in the major power consumption centres, so that the relative impact of the losses can be eliminated.

What is the current level of under-recovery at the Mundra UMPP? Has the APTEL order on the project brought some relief to the company?

The losses at Mundra have eroded approximately Rs 38.17 billion of Tata Power's net worth in the past three years. Between April and June 2015, the company has reported losses of Rs 3.05 billion due to operations at Mundra. While a considerable decline has been witnessed in the coal prices in the international market in the past year, the plant continues to post losses owing to fuel price under-recoveries, that is, the cost of electricity generated at the Mundra plant is more than the selling price. Coal prices are now rising again and have touched \$70 per tonne. Earlier, when coal prices were higher, we at least had some earnings to crosssubsidise due to higher margins between the sale price of coal and the cost of mining. However, for the past two years, mining has also been facing difficulties. The matter is now with the Supreme Court, pursuant to the APTEL order. We look forward to an early resolution of the issue pertaining to underrecovery on the fuel side. This issue has caused the most competitive Mundra ultra mega power project (a national asset) to become unviable.

What is your outlook for the power and renewable energy sectors over the next few years?

During 2015-16, India reported a peak power shortage of only 4,208 MW. The country's total installed generation capacity crossed the 300 GW mark, which includes 42 GW from renewable energy sources. Eyeing a power supply target of 335 GW, India would require a generation capacity of nearly 440 GW. This implies that we need to have an annual addition of 20 GW to 40 GW. Over the next few years, India's focus would largely be on the renewable energy space given the government's intent to promote this segment. According to the International Energy Agency's World Energy Outlook report, by 2040, over 50 per cent of India's new generation capacity will come from renewables and nuclear energy.

Solar power is the key focus area of the government with 100 GW of capacity being targeted by 2022. In line with the government's target, Tata Power also intends to focus on solar. The company has set an aggressive target of 20,000 MW of capacity by 2025. We have recently revised the share of non-fossil fuelbased capacity upwards to 30-40 per cent by 2025, of which solar power will be an important component. As the conventional grid-connected and rooftop solar projects continue at their own pace, the sector needs to look at various innovative technologies to achieve the 100 GW solar target. Moreover, floating solar power plants can help address the problem of inadequate land availability. Tata Power has already achieved proof of concept by installing a small-sized plant on a lake in Lonavla. New technologies in photovoltaic have achieved incremental efficiencies in laboratory tests; we need to look at these technologies in order to have a better output.