

Interview

'SOLAR GRIDS CAN HELP IN RURAL ELECTRIFICATION'

The future of the cities will be decided by the way they use and manage their energy requirements. A visit to Tata Power's Smart Grid Lab in Rohini, one of its kind in the country, can be an eye opener. A home to several pilot projects, the lab showcases how IT and operational technologies can be applied to bring transformational changes in the lives of ordinary consumers. Praveer Sinha, Managing Director of Tata Power DDL, talks to **Anuradha Shukla** about the changes that are happening in power sector and the smart transition of the company towards smart way of distributing and managing power



gies but also to serve as a forum to demonstrate advanced technologies to national and regional regulators. We allow our partners to use the Smart Grid lab to showcase their products and solutions to other Indian utilities.

It also talks about the important role that technology is going to play in the future by making the power usage and distribution more efficient and smart.

Tell us something about the idea behind the smart grid lab?

This is one of its kind in the country. The power sector has made huge advancement in terms of technology. There is a sea change in the way power will be generated, distributed and monitored in the future.

Smart Grid Lab demonstrates new technologies, products and operations for different organisations and institutions, including utilities. The purpose of TPDDL's Smart Grid lab is to not only test and operationalise the implementation of advanced technolo-

How successful the company has been in implementing the technologies that are showcased here? When is the company going to implement smart meters?

For a technology to become smart, the upgradation needs to be gradual. For example, if we are talking about smart metres one cannot just leapfrog into smart metre without the proper preparation, without a sound communication, which is connected to the main control room. If the metre is not connected in a seamless network, then the whole exercise will be-



15 LAKH

Smart Meters will be installed by the company. In the first phase TPDDL will install 2.5 lakh meters

come futile. The server must be able to locate where the metre is installed.

Also, it can work more efficiently only when you have your own communication system in place. For example, if the communication system fails, then the whole system will be stalled. So the planning for the infrastructure has to be smart, seamless and well connected.

Another factor is to recognise the consumption pattern of the consumers and various industrial units so that the distribution is seamless.

How has company been able to deal with transmission loss?

AT&C losses have been brought down to 8.8 percent from 53.1 per cent in 200. The achievement makes the company an industry leader in this regard. That's what our transformation journey is about. We targeted AT&C losses through concerted efforts in process orientation, customer centricity, strategy

and leadership.

Tata power made a significant shift towards solar grid. How efficient is the shift from conventional energy to solar?

We embarked on the Grid Connected Roof Top Solar journey way back in 2008 and till date has set up 15 Grid Connected Solar Plants with a total capacity of 1.77 MW in our own premises.

The energy ecosystem is changing very fast and there is global focus on maximising the use of the renewable energy. So the shift to solar power is something which is inevitable. In fact, solar grids can play a very important role in rural electrification. Tata Power Delhi Distribution (TPDDL) has partnered

with Massachusetts Institute of Technology, Center for Energy and Environmental Policy Research, General Electric and Tata Trust to establish two smart solar micro-grids in Bihar to support rural electrification.

We are also engaged in the Smart Model Villages under which we have selected five villages in Haryana. At present, we are engaged in analysis and improvement of distribution network system in these villages. We intend to enhance system reliability in these villages and smart micro-grid can be one proposed solution for the purpose.

When will the company start the process of installing smart meters?

By the mid of next year, we will be able to install our own communication systems and start bidding for smart metres. In the first phase, we will install 2.5 lakh meters and in second and third phase we will install 5 and 7 lakh meters respectively to take the number to 15 lakh. ■