

GURU SPEAK



UMESH AGARWAL, associate director, PwC

Today, due to the transmission losses that are incurred, the distribution companies across the country find it very difficult to access working capital funding



JAGDISH CHELARAMANI, business head, ADF, GTL Limited

The challenges are: widespread theft or pilferage of electricity; commercial losses; and collection efficiency. This is where franchising will play a far better role by investing in technology and in better customer satisfaction



REJI KUMAR PILLAI, president, India Smart Grid Forum

The three states of Maharashtra, Gujarat and Madhya Pradesh have systematically improved their transmission network and invested in technology. Their sub-stations have been modernised and they have better control rooms



ABHIJIT DESHPANDE, executive director, (commercial), MSEDC

As far as tariff is concerned, the onus lies on the regulator, as the consumer has open access, to either stick with the regulator or opt for a private player



JAYANT DEO, director, Deo and Associates and former MD and CEO, Indian Energy Exchange Ltd

The government has corporatised the sector, right from the beginning, and a lot of generation capacity has been added but the power distribution sector needs to be improved substantially, as it is the interface between the consumer and the power companies



Panel discussion From left to right: Umesh Agarwal, associate director, PwC; Jagdish Chelaramani, business head, ADF, GTL Limited; Nisha Poddar, anchor, ET Now; Reji Kumar Pillai, president, India Smart Grid Forum; Abhijit Deshpande, executive director (commercial), Maharashtra State Electricity Distribution Company Ltd (MSEDC); Jayant Deo, director, Deo and Associates and former MD and CEO, Indian Energy Exchange Ltd

Tackling power distribution issues, collectively

With the need to supply power to the millions of houses in India, the power distribution network needs to be strong to withstand the demanding power needs of the country. **Noopur Modi** finds out what the big-wigs of the power sector had to offer, as probable solutions to answer the same

For many years, the onus of power generation, transmission and distribution was under the sole ownership of the government. As a result of this, the growth of the sector was hit badly and the demand-supply equation was the real sufferer. In such circumstances, it became essential to allow private participation, which could change the face of the power industry in the country. The government then, agreed to these demands and opened the doors to private players to come in. With this move, the ultimate winners and beneficiaries are the consumers but the economy, in general is also expected to pick up. Besides this, several problems still persist, especially on the issue of power distribution. In order to further augment the growth of the power industry and to meet the constantly increasing demand of the people of India, it is imperative that the nagging problems plaguing the power distribution sector be addressed immediately. To arrive at a single consensus, a panel discussion was convened which highlighted the key issues such as, the challenges faced by the power distribution sector in India; addressing the demand-supply management issues and tackling the issues of tariff. Here are some highlights of the discussion.



THE BATTLE BETWEEN GOVERNMENT AND PRIVATE PLAYERS

Powering India brings with it the need to generate electricity to the thousands of homes that still lie under darkness. The distribution sector plays a crucial role in this game. Jayant Deo, director, Deo and Associates and former MD and CEO, Indian Energy Exchange Ltd, said: "The government

has corporatised this sector and a lot of generation capacity has been added but this sector of distribution remains to be improved substantially." The franchisee model has been a path-breaking experiment in major cities but considering the fact that 95 per cent of the distribution model is still state-run, Abhijit Deshpande, executive director (commercial), Maharashtra State Electricity Distribution Company Ltd (MSEDC) pointed out, "There has to be a level playing field with equal roles being played by the government and the private sector. The government has de-licensed only generation, so that the private players put in their money and the generation capacity goes up. The other two activities in the power sector of transmission and distribution, are still licensed." In Maharashtra, the distribution companies have invested Rs 9,000 crores to develop the backbone infrastructure in the last three years and will invest another Rs 6,000 crores in the next two years. As a result of these initiatives, in the year 2011-12 the distribution losses went down from 30 per cent to 16.03 per cent and this year, they will be less than 15 per cent. The percentage reduction in loss translates into Rs 350 crores of saving and this is the direct benefit that has gone to the customers.

THE FRANCHISEE MODEL

One of the key concerns is of competition and also tackling the transmission and distribution losses (T&D) losses that are plaguing the power sector. Jagdish Chelaramani, business head, ADF, GTL Limited said, "It is not that difficult. I think we should appreciate the initiatives taken by the state electricity board and the government, to go in for

the franchisee model. The business of the franchisee model is profit from losses. The very fact that there are Aggregate Technical and Commercial (AT&C) and T&D losses, is the reason for the emergence of this model. The challenges are the same that are faced by any other distribution company and this is where franchising will play a far better role by investing in technology and in better customer satisfaction." With the emergence of franchising, the state governments don't seem to have the bandwidth to upgrade the technology. So, the new companies that have entered the market have used the new technology and have invested money for the smart grid and are these the reasons that have led to the success of fran-

An initiative by



chising in many places. Reji Kumar Pillai, president, India Smart Grid Forum agreed, "Compared to state electricity companies, the private companies have invested in technology. In the entire value chain of the electricity business, the distribution side is the most complex and that is where the technology deployment being traditionally used, is very little. The 63 state government distribution companies, when considered, barring the ones in Maharashtra, they do not even have a proper billing system." The smart grid is aimed at covering huge geographical areas and there will be a provision for an IT network for the first time in the distribution companies; automated systems and the availability of real time digital data.

CONCERNS OVER COMPETITION

Umesh Agarwal, associate director, PwC felt, "We had accumulated losses of about 50 billion dollars that stood at the end of 2012 and the losses are only going to increase as the volumetric losses are about 30 per cent. So, whatever is generated, about 30 per cent is lost by the time it reaches the consumer." With such losses, it becomes very difficult to bring in competition or bring in more investment into the sector, as the cost recovery is missing at the end. However, with franchising coming in and with private players taking on the reins, the situation should improve in the times to come.

SUMMING UP

With the acceptance of the franchising model, the private players will expand their network in India. Due to the losses in distribution, a huge liability has been built up for the State Electricity Boards (SEBs) and to tackle this, the government had come up with a reform to re-package those liabilities and the banks would have intervened in order to restructure the loans. A key initiative here would be to increase the tariff to meet the cost and recover the debts. The ability of Indian consumers to accept the increase in tariff is the main point of contention and to answer this problem, the tariff should be non-regulated.



Catch the coverage of the ETIG Knowledge Forum on ET NOW on March 30, 2013 (Saturday) at 4:30 pm and repeat telecast on March 31, 2013 (Sunday) at 5:00 pm

Focus Franchising

While franchising is the buzzword for the power distribution network today, there are many loopholes that need to be plugged for this model to succeed



Captive audience An insightful discussion leaves the audience spell-bound

The power distribution franchisee model is fast growing and there are already over 23 deals getting initiated in this space, out of which about eight are in-progress. All stakeholders in the franchisee model are actively engaged and are positively looking at the growth of this model. Umesh Agarwal, associate director, PwC, said, "There has to be restructuring of the liabilities and a solution to take care of the problems at hand. The big issue of cost recovery of services has to be answered. The fundamental

change would be to keep the tariffs at par with the cost of the services."

It is essential to have a clear roadmap in order to reduce the transmission and distribution (T&D) losses. They possible solutions are - performance improvement, in terms of Aggregate Technical and Commercial Losses (AT&C) loss reduction; a trajectory for increasing the tariff, so that it is not left out. With the restructuring in place, the onus will lie on the distribution companies to increase the tariff rates on a regular basis. Abhijit

Deshpande, executive director (commercial), Maharashtra State Electricity Distribution Company Ltd (MSEDC) explained, "A regulator has to balance and look into the interest of a cross section of consumers and that is not an easy task. There are two parameters that need to be carefully looked into, when it comes to increasing the tariffs - distribution loss levels and collection efficiency. When these two aspects are met, the distribution is close to perfection. As far as the tariff is concerned, the onus lies

on the regulator, as the consumer has open access, to either stick with the regulator or opt for a private player." Tariff increase, no matter how short term in nature, is required. When on the issue of open access to consumers, it does give a certain amount of de-regulation, as far as pricing is concerned.

According to statistics, 95 per cent of consumers are consuming hardly 30 per cent of the power, whereas, the remaining five per cent are getting the balanced 50-60 per cent of power for consumption. With the population of the country, being estimated to touch around 1.5 billion, by the year 2050, the power needs of Indians are bound to increase. With regards to that, one of the main concerns of the people is the issue of load shedding and power failure. As consumers, one of the darkest times in India, was when the grid failure occurred in 2012, with the grid failing in 19 states of India. Reji Kumar Pillai, president, India Smart Grid Forum, said, "The use of better technology definitely could have averted that mishap. The three states of Maharashtra, Gujarat and Madhya Pradesh have systematically improved their transmission network and invested in technology. Whereas, in areas like UP and others, the KV lines that were built in the 70s and 80s still lie in the same state and are in a very dilapidated condition."

On a concluding note, with the franchising model coming into the forefront and with the introduction of private players into the arena, the power sector is poised towards a bright tomorrow.

Compiled by Noopur Modi

Many doubts, all answered under one roof

There were many questions that were raised during the course of the discussion and the panelists left no stone unturned to answer them

With the growing power needs of Indian consumers, there are a lot of issues, concerns and doubts that came up during the ETIG Knowledge Forum on 'Powering India: Role of distribution networks', that was held on March 19, 2013, in Aurangabad. In order to cater to the ever increasing power demand of the country, the biggest problem that still plagues the country is the availability of electricity. In the state of Maharashtra, load shedding is next to zero, however, there are power cuts that still exist and they measure upto about 500-700 MW. This, however, is not due to the non-availability of power but because of the losses in some areas, which makes it unsustainable to supply electricity. The country's infrastructure was earlier very weak but now, there is a proposal that it will take care of 25,000 MW of power supply by the year 2020 (currently, we are at 15,000 MW).

The first concern that was raised was that typically, in the manufacturing industry the customer is the main focus point. So, with the introduction of the franchising model, will it help the small customer get better options and also, will it improve the quality of electricity, in terms of frequency, voltage fluctuation and harmonics? Jayant Deo, director, Deo and Associates and former MD and CEO, Indian Energy Exchange Ltd answered this query while explaining each factor, "According to the standards by the National Grid, the frequency had high

dispersion levels of upto 48.5-50.5, this has been reduced to around 0.2-0.3 now. As far as voltage is concerned, there are regulations in place but the consumer will have to choose, when it comes to implementation, by calculating the standard variations v/s the wide variations." More than consumer satisfaction, one of the biggest priorities of the power sector in the country is to provide electricity to the 400 million people who are still not connected to the grid, 79 million households that are in darkness and 88,000 villages that are yet not electrified. The primary concern is to first electrify these sections and in continuation to this aspect, when it comes to the providing power to the homes in India, the query on the implementation of a pre-paid electricity card was raised, to which Reji Kumar Pillai, president, India Smart Grid Forum, promptly responded, "Today, as smart metering has become more economically viable, nobody is looking at a prepaid system and establishing a pre-paid vending mechanism is more expensive, as there is an authentication mechanism that gets directed to the control centre, thereby, increasing the cost."

With the many concerns that surround the power distribution sector in India, it will take a long time for things to fall in place. Yet, with hope, there is widespread consensus towards a brighter future.

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