



THREE D'S GOVERN THE DISRUPTION IN THE ENERGY SECTOR: PRAVEER SINHA

Every sector is going through disruption caused by digitalisation, power is no exception. But there are two more factors that are driving disruption in the power sector, stated **PRAVEER SINHA, MD and CEO, Tata Power** during a webinar organised by FPJ-NMIMS, in association with Tata Power.



The webinar was part of a series of talks on 'THE FUTURE OF ENERGY'. It was followed by an interaction with Professor Sharad Mhaikar, Pro Vice Chancellor, NMIMS and RN Bhaskar, consulting editor, FPJ. Sinha elaborated on the three Ds that were driving the disruption in the energy sector. Given below are edited excerpts curated by Jescilia K of FPJ:

Overview

For the first time after 100 years, the power sector has witnessed a huge disruption and transformation. More than 100 years back, Thomas Alva Edison invented electricity. Post that, large generation and transmission lines were set up. These lines brought energy to distribution companies and that in turn supplied energy to the consumers. But today the power sector is undergoing the biggest disruption the world has ever seen.

Wave of disruption

There are three Ds - Decentralisation, Decarbonisation and Digitalisation - They are driving the disruption in the power sector.

Decentralisation: The sector is moving from a large generation station to distributed energy generation. Due to decentralisation, the power companies will not have to set up large power plants in remote locations to meet power demand. But facilities can be set up on a rooftop of a house or next to a house. There is a paradigm shift from centralised operations to distributed generation. It means the sector is empowering not just itself, but consumers too. In this system, consumers can generate power themselves and the additional power can be sold to the discoms.

In this case, consumers do not depend on the government for their needs. In a decentralised mechanism, each community can have its own network and distributed generation. Through this system, you can supply power within the locality and within the area. The number of new solutions that are coming up in micro-grid offerings is usually used in rural areas. In India, we have more than 6 lakh villages. They are in far-flung areas. The losses that are incurred to take power and maintain those lines in such far-flung areas is uneconomical for the distribution companies. Micro-grid is an opportunity for villages to generate electricity and use it. This is empowering consumers in urban and rural areas. This is the first big change that is happening. It is changing the way business is done.

Power sector in India has been monopolistic in nature - companies provide power when they feel like, do not give power when they do not feel like, and they give less power to the consumer. Now, the sector is at a stage when a consumer or a cluster can decide the units to consume, generate and the cost of that. This means existing utility companies will have to change because there will be multiple suppliers of electricity.

This will bring in competition for the first time. Competition is the best as it brings down cost and improves the quality of service along with providing electricity. This is a huge enabling opportunity that is provided to the consumer.

Because of this the concept of expensive peaking plants also becomes redundant. That further reduces the cost of power for the consumer.

Decarbonisation: For a long period of time, we haven't taken care of nature. We have used coal-based plants to meet our energy needs, even while they have toxic emissions - whether it is air or gas or solid emissions. There is now an opportunity that one can generate power through renewable sources like wind, solar, biomass etc. This also allows migration from the large generating units to small units. Thereby, you can reduce carbon emission and become a zero-carbon company in years to come.

Globally, there are a number of countries that are emphasising on the need that there should be a sunset for coal-based plants. European countries like Austria, Switzerland and others have already moved in that direction by moving away from coal-based plants. This is largely possible for them as they are small countries.

In the case of countries like Germany, France and Italy, they are talking about having sunset in the near or long-term future. In India, we have the opportunity to take leadership in this way and say in future we will be able to meet our needs through renewable sources. There are challenges in this space. The load will determine the generation of power; however, our

requirement of power is not 24 hours. So, there is an opportunity there. During the peak time, we can use solar energy as we are blessed with abundant sunlight and the rest of the day, one can depend on other renewable energy.

Digitalisation: Today with the flow of energy, flows data. Unlike earlier times, today the data is available on a real-time basis. Now, digital technology is helping management of the network to make power more reliable, to ensure that your requirement, generation, and load matches. There can be a situation when all of a sudden there is a cloud cover and the generation of solar reduces, in that case, you can get information on a real-time basis today. Based on the information, you can send the signal to the consumers that they can reduce their consumption.

There is data analytics and data management to understand the impact of climate change on the power sector as well. The flow of data will help manage the load in an effective manner.

Another technology that is enabling consumers is that they are getting access to home automation solutions. This is one of the services that is provided by us. We enable the consumer to control their electric appliances in their home through their mobile phones.

The number of new technologies that are coming up is enabling the consumer to take a call and help the utilities to optimise the capacity of generation based on the requirement of consumers. These are provided as bundled services by utilities globally. In the case of Tata Power, it offers these services in Mumbai and Delhi. I am sure other utilities will also join in for providing such services to their consumers.

Balancing act

There will be a paradigm shift in the way electricity can be utilised. So, the emphasis is moving from the supply side of electricity to the duration of the use of generation plant.

Statistics show that many of the plants are being used for very little time in the

year (500-600 hours). This is not the case with baseload plants but other plants which are used for peaking purposes. From the 8,760 hours in the year, 500-600 hours utilisation is just 5-6 per cent utilisation of these plants. To meet the peaking of power requirement which is 5-6 per cent, the unique solutions like storage, demand response and others should be utilised. To manage peaking of power, engagement with consumers will be useful.

In our case, we went to Metro rail and tried to find out what is the peak in terms of footfalls. Based on the feedback, we suggested options whereby they could reduce electricity consumption. We did the same exercise with a few of the shopping malls as well.

Through this process, we were able to reduce 5 per cent of peaking power that was there. If we expand this initiative further, we will be able to reach 6-7 per cent of peaking power requirements. That is the unique solution that is there. Today, we have the technology to support this.

Contribution of Renewables

In terms of megawatts, we are producing 35 per cent energy from renewables in Tata Power. Meanwhile, the country's overall power generation in terms of megawatts is 25-27 per cent. In terms of real energy, it is not even 10 per cent as the effective generation is much less. However, in the country, we are seeing targets of 175-450 gigawatts in renewable capacity by 2030.

By 2030 as per the Paris Accord, India will have 40 per cent of energy coming from non-carbon sources. The country will achieve a lot more than that.

By 2030, Tata Power plans to have 75 per cent of the energy coming from renewable sources. By 2050, Tata Power will be 100 per cent non-carbons.

Divest overseas to invest in India

In the last two years, we have taken a call that we will consolidate in our country. So, we are divesting from all the investments made outside the country. We want to bring back the money so that we can grow here.

We are very clear. In the case of power, it is not completely a commercial business but a public utility. There is public service involved in this. When you supply power there is no discrimination between rich and poor: We have a universal service obligation to fulfil. We realise this and we are cognisant of our responsibility.

Thus, we are very clear that we will be adding capacities and fresh investments in our country and most of it will go into renewable business.

Govt, RBI support has not reached many NBFCs: NAFA

While there has been huge disbursement under the Rs 20-lakh-crore package to Non-Banking Finance Companies (NBFCs) routed through banks, there are still many NBFCs— small and medium— still waiting for the benefit to reach them. NBFCs with good ratings have been able to enjoy the benefit, but small and medium ones are still struggling, according to **Prabhat Chaturvedi, CEO, NAFA**. With banks still cherry-picking when it comes to lending to NBFCs, players like Netafim Agricultural Financing Agency Pvt. Ltd. (NAFA) turn to foreign investors to stay in business. The company has been able to raise USD 40 million from an Israeli company, revealed Chaturvedi in interaction with FPJ's Jescilia Karayampambil.



Edited Excerpts

What is the position of NBFCs today?

■ Before the arrival of COVID-19, most NBFCs were already struggling due to the IL&FS crisis as the cash flow was hit. Most banks were apprehensive in lending money to NBFCs as they were unsure about the financial health of the NBFCs.

Only because some large NBFCs defaulted, the smaller ones that were efficient had to suffer. While this whole struggle was on, the other crisis struck— COVID-19.

Presently, it is a double whammy for us. While we extended a moratorium to all our farmers, all our lenders barring one or two did not pass the benefit to us. On the one hand, the inflow of capital is hit; on the other hand, outflows which include our repayment obligations and other expenditures continue. But our recovery has been impacted as we have given moratoriums to our farmers.

Due to this, we are evaluating our cash flows daily. In our case, we can tide over only till December 2020. We are hoping before that the situation will subside and the economic activity will restart. While we want to lend, we do not have the money to lend to farmers today. We are conserving our liquidity with the hope the situation will improve.

How much capital will the new investor infuse? What is the tenure for this investment?

■ The investor will infuse USD 40 million, equity plus debt, by September-October.

At present, this large reputed Israeli company is coming on board for two years. But it has assured us that it is not looking at exiting even after two years, and is ready to invest further if they are happy with the return on equity (ROE) and other criteria are met.

This company is investing in India for the first time by investing in NAFA.

Do you see this crisis as an opportunity?

■ We are bullish about this space. So, after the COVID-19 crisis, the players that are still

standing will have enough and more business. With fewer NBFCs around and the reluctance of banks to lend, we see that as an opportunity. This is because NAFA has an intent, the focus is on agriculture and rural India, and we will have funds from external borrowing routes as well. So, we are set to gain from this crisis.

At what rate were you expecting to grow pre-COVID-19? What is the expectation post-COVID-19?

■ Due to IL&FS debacle, our liquidity was getting choked. So, we were not looking at more than 10 per cent growth. But with this moratorium game, we are still closely monitoring the space. We are not looking at growth either are our promoters or shareholders. We are focused on consolidation, survival and tiding over the phase. We will be happy if we have positive growth and do not degrow.

Has the Rs 20-lakh-crore economic package percolated to NBFCs like yours?

■ While some large NBFCs gobbled up the entire amount meant for the entire industry, the government and the Reserve Bank of India have announced more measures to support small and medium NBFCs during the announcement. Despite the measures, the support has not reached many of these NBFCs. We are still waiting for it.

There is a lot of emphasis on the agricultural economy at COVID-19 times. What is your take on this sector?

■ Even when the country's economy is expected to contract, agriculture in the country is expected to grow at 3-3.5 per cent. While it is true that agriculture consumption has not been impacted during the lockdown, it is not all hunky-dory in the sector. In the case of pesticides, most of the active ingredients in pesticides were imported from China, which has been impacted.

In the case of fertilizers, only urea is produced domestically and for other fertilizers, India is dependent on the United

States, Mexico and other countries. The impact on the global supply chain can be felt here. While agriculture continues to grow, it cannot be denied that this sector is hit too.

What is happening in the case of credit offtake?

■ The credit offtake has slowed down. There are two kinds of expenditures farmers incur in agriculture and its allied activities — one is working capital to buy seeds, fertilizers, other activities to sustain the operations, etc, and second is long-term capital needs such as the investment in machinery, drip irrigation, tractor, etc. While the former will continue to grow, the latter capital needs will be deferred by the farmers. It is estimated that 70-75 per cent of agricultural loans are raised to meet the working capital needs or to fund Kisan Credit Card. This is where all banks are present. This will not be largely impacted as farmers will need working capital to grow crops. Due to the impact on cash flows, the farmers will rely more on such borrowings to harvest and sell.

A major impact will be seen on long-term lending. We as NBFCs operate in that space. We finance term loans for drip irrigation systems. So, the disbursement for the equipment has come down. The farmers are aware of the market condition, so they are deferring from the long-term financial commitment.

What are the new opportunities that NAFA is looking at tapping?

■ Until recently, NAFA was Netafim captive. But now the board has agreed on expansion in the agriculture-rural domain which is beyond micro-irrigation. So, we will be able to work with many Agtechs. These agtechs can be anyone, it could be the ones involved in aggregating demands for farmers, or developing mechanisms that will go beyond micro-irrigation.

Are there specific provisions for these Agtechs?

■ There is no specific provision for them.

But some banks and NBFCs look at them favourably. We are trying to work with Agtech and trying to provide them with working capital or funding farmers who are associated with them.

We want to work with these agtechs mainly because a lot of mechanisation and digitisation will happen in agriculture in the next three to five years.

We think it is an opportunity especially in the times of crisis. We are in touch with a few of these agtechs to help them with the working capital requirements. Without taking undue equity risk, we are trying to lend to these agtechs.

Would NBFCs look at Agtech association more in terms of a strategic alliance?

■ Yes, definitely. Some of the agtech we are in touch with are solving the problems which we were addressing at the periphery. We are funding one such agtech which is doing promising work and needs funds for its working capital. So, in their case, they can benefit from our network, where we tell them how many farmers are using drip irrigation. It will be a great fillip for their business.

What will be the most important policy-level changes you are hoping for?

■ First and foremost, the liquidity issue has to be addressed. Actually, RBI, NABARD and others should look at addressing ground-level liquidity issues. It is a matter of survival for most in the industries.

RBI should open up more avenues for NBFCs to raise funds from abroad at a cheaper cost. So that these NBFCs are not dependent on the banking system alone. Bigger NBFCs can raise funds, but smaller and medium NBFCs face challenges to raise money outside of banks. Dependency on banks is hindering growth.

Priority Sector Lending (PSL) guidelines should give some space to NBFCs. The guidelines do not mention how banks should work with NBFCs for the same. NBFCs can either create a PSL pool or work out other solutions.

