

Interview with J.P. Chalasani

“The wind segment is likely to grow at 10 GW per year after 2020”



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Group Chief Executive
Officer, Suzlon

At a recent *Renewable Watch* conference on “Wind Power in India”, J.P. Chalasani, group chief executive officer, Suzlon, spoke about the emerging trends in the Indian wind power space, the current and potential challenges, the ways to address them and the future outlook for the segment. Excerpts from his answers to key questions...

How has the wind power segment evolved over time?

The wind power market gained traction in the country with the support of government policies. Commercial support from the government, such as through the accelerated depreciation and generation-based incentives (GBIs) along with renewable purchase obligations incentivised developers to invest in this segment. However, the significant improvement in capacity addition and investor confidence has been due to a fall in tariffs.

The government's commitment to reduce the country's carbon footprint by 30-35 per cent with respect to the 2005 levels and its target of taking the share of renewable energy in the total installed capacity to 40 per cent by 2030 will drive wind power growth. This segment has grown with the help of the aforementioned policy initiatives. During peak months, 9 per cent of the country's requirements are met by wind power. We now have the advantage of a national grid with the capacity to handle over 330 GW of capacity, which helps evacuate wind power conveniently.

Going forward, all efforts should be made to convert renewable energy to round-the-clock power. Affordable energy from renewables, coupled with the development of wind-solar hybrid projects with storage facilities like pumped hydro, will help us achieve this goal. Hybrid projects are important as they flatten the generation curve. Looking ahead, hybridisation will gain traction with the use of primary, secondary and tertiary reserves.

What is Suzlon's current project portfolio and in-pipeline capacity?

Suzlon has 35 per cent share in the total

installed renewable capacity in the country. We were able to maintain this share last year as well, when the markets were down. Apart from being an equipment supplier, we also provide operations and maintenance (O&M) services for a large number of projects. With an installed capacity of 12 GW in the country for various developers, we are the second largest operator after NTPC. As we move ahead, O&M will prove to be a sunrise area.

What is the capacity addition outlook?

The year 2018-19 will be a transition year, like last year. The market will start growing from 2020-21 as more bidding takes place. I believe the wind segment is likely to grow at 10 GW per year after 2020.

What is your view on SECI's recent tenders?

India is still not a mature market for competitive bidding. We have seen that in other sectors of the economy like roads, metros and conventional energy. The main issue is that the government, developers and regulatory authorities do not work in sync. We act first and then think. The bidding process took place without considering the transmission infrastructure. The 2.5 GW tender of the Solar Energy Corporation of India (SECI) will see a good response once these issues are resolved.

What were the factors that lowered wind power tariffs in the past one year?

Initially, all the projects were developed at high-potential sites located in Gujarat and Tamil Nadu. These sites were closer to the central and state transmission utilities, which made transmission easier. Tariffs came down as the per MW generation increased, while the costs

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remained the same.

Plant productivity is increasing with the use of larger machines and hubs. The blade size of turbines has increased from 90 metres to 120/140 metres. The incremental yield is much more than the incremental cost of the new technology.

In addition, developers considered the tenders issued by SECI to be less risky than the states' tenders. A number of states had defaulted on payments. With respect to state tenders, the uncertainty regarding power purchase agreements and GBIs persists.

It must be noted that tariffs were low for the initial bids. Sites with high potential have been used up and the transmission infrastructure is saturated. As we move towards sites in states like Karnataka, tariffs will go up. We have already seen this in the recent NTPC bids.

Will Suzlon consider bidding directly for these projects?

We do not intend to do it. Our job is to have pre- and post-bid tie-ups with developers. The company will continue to provide engineering, procurement and construction (EPC) and O&M services.

Do you see continued opportunity in the non-utility wind space?

Our strength has been in the retail segment. However, this segment has become less attractive after the widespread use of the reverse bidding. To rekindle interest in this segment, the system of feed-in tariffs (FiTs) for projects of less than 25 MW should be reintroduced. The Ministry of New and Renewable Energy has been advocating this. We are also looking at the captive wind power market. Last year, we installed 12 MW of captive projects. For these projects, grid tariff is used, which will go up or remain the same. Also, the cost of installing these projects is coming down. This will attract a lot of investors to the segment. We also do EPC projects for public sector undertakings.

What is the size of the captive wind power market in India?

The size of this market is 400-500 MW. Our market share in the captive wind power space is 40-45 per cent.

What is your view on solar-wind hybrids and what is your outlook on storage?

Earlier, we used to face the issue of fluctuating demand from consumers. Now, with renewable energy, we are seeing variability on the supply side as well. In this situation, hybrid projects with battery storage are necessary. The plant can be clubbed with pumped hydro or gas stations. These projects can compete with conventional sources of power if a plant load factor (PLF) of 60-70 per cent is to be achieved. There are different aspects to storage. One is pure battery storage. Significant work is happening globally on this front. Domestically, it does not seem viable at this point in time.

Is offshore wind a realistic possibility for India? Is there a need for subsidies for this segment?

We will see growth in this segment only when tariffs for these projects come down. However, tariffs go down only when the market starts growing in size. This segment will mature in the next five to six years. Subsidies will definitely be required as tariffs are going to be higher and the difference between offshore and onshore wind is not much in India.

What has been your experience in project execution in terms of clearances and land acquisition?

Execution will only become tougher. Wind turbine sizes are increasing. This will put pressure on the transportation and erection infrastructure. Moreover, right-of-way issues are becoming complex. Project execution capabilities have increased but broader infrastructure development still remains a hindrance.

Will solar power tariffs go down further? If so, will that impact wind power development?

I believe wind and solar power will play a complementary role in achieving round-

the-clock power. The wind segment will not face any threat from the solar segment. A higher PLF, low cost per kWh and easier land management make the wind segment more attractive.

Has reverse bidding done any good in the wind segment?

The reverse bidding mechanism in India needs to evolve further. We do not have mature players in the market, and their aggressively low bids in the recent tenders will likely make the projects unviable over a 25-year period.

Will there be consolidation among turbine manufacturers?

I do not see consolidation happening on the manufacturers' side. However, consolidation on the independent power producers' side will continue to take place.

What is your advice on connectivity issues?

The stakeholders in this sector should consider all aspects before going in for bidding. For the SECI Tranche III and IV tenders, there was a gap between the day of bidding and the substation coming online. This should be avoided. However, the risks are now slowly stabilising.

Is the 60 GW target for wind power achievable?

In my opinion, the target is definitely achievable. Tariffs are low. But we need to simultaneously attend to the issue of variability of power.

What is your view on the future resource mix?

I started my career when interstate transmission was impossible as the frequencies in different states did not match. The only link between the states was high voltage direct current. But now we have moved towards a national grid. When a larger geographical area is covered, different sources of power are automatically balanced. Also, managing renewable energy within the states and at the national level is different. At the national level, variability is adjusted to a certain extent. In terms of outlook, we are more confident now than last year. ■