SUGAR

Govt plans to boost setting up of biomass power plants

There is a renewed interest in biomass power plants, which can not only generate electricity but also help dispose of — in a carbon-neutral manner — agriculture waste, burning of which in Punjab and Haryana is partly blamed for the alarming levels of pollution Delhi is experiencing.

Minister of New and Renewable Energy Piyush Goyal held a meeting of top officials on Monday to consider increasing incentives to boost this segment. "We are thinking of a scheme to encourage setting up of biomass plants using agricultural waste, but I cannot say anything more at the moment," said Santosh Vaidya, joint secretary at the Ministry of New and Renewable Energy (MNRE), told ET.

The government already provides financial assistance of Rs 20 lakh per MW for setting up biomass power plants, and Rs 15 lakh per MW for co-generation projects by sugar mills (using sugarcane waste left over after juice extraction). Such plants cost around Rs 4.5-6 crore per MW, while generation expense is around Rs 3.25-4.00 per kwH. They are also entitled to concessional import and excise duties while acquiring equipment, as well as a tax holiday for 10 years.

But unlike sun and wind energy, this segment has been languishing in India. At the end of 2015-16, the country's total biomass power installed capacity (along with co-generation units) was 4831.33 MW, with another 1150 MW under construction. Capacity addition has in fact slowed in the past three years, from 465.6 MW in 2012-13 to 412.5 MW in 2013-14, 405 MW in 2014-15 and 400 MW in 2015-16. Barring Karnataka, Maharashtra, Tamil Nadu, Uttarakhand and Uttar Pradesh, no state added any biomass power or co-generation capacity in the last fiscal year. Rather, leading players like Orient Green Power have been trying hard to sell off their biomass power assets, as they are not profitable.

Punjab has an biomass power and co-generation installed capacity of 155.5 MW, of which around 62.5 MW are in operation. In Haryana, the capacity is 45.3 MW. "The Environmental Pollution (Prevention and Control) Authority (EPCA) has been urging the Punjab and Haryana governments to set up biomass power plants since 2008 as one of the solutions to Delhi's pollution crisis," said Polash Mukerjee, researcher at the Centre for Science and Environment. "A target of 600 MW of installed capacity was set for Punjab years ago, but without any timeline. It has since been revised to 500 MW by 2020."

Six more biogas power plants are under construction in Punjab which on completion will raise effective the capacity to 110 MW from 62.5 MW. "But even after these are completed, they will use up only around 1 million tonne of agricultural waste, which is just 5% of the 20 million tonne Punjab produces," said Mukerjee. Haryana has not added a single MW of biomass power for the past three years.

The main reason for biomass power's stagnation is that for many years the feed-in tariff offered by the states for biomass power was too low. Thus banks and financial institutions were wary of lending for biomass projects. Another big hurdle has been the absence of a regular supply chain, since agricultural waste is readily available only during the two or three post-harvest

months after which it becomes increasingly expensive. The fragmented nature of farming in India also makes collection of waste difficult.

"Some states have been offering better tariffs of late, but the industry itself needs to see a revival," said S Venkatachalam, the president of the Indian Biomass Power Association as well the chief executive of Orient Green Power. "More funding is needed to set up new plants. The MNRE had said it would provide subsidised loans for working capital but it needs to be done soon. There also needs to be better aggregation of agriculture waste with more collection centres."

Indeed, an MNRE document briefing for potential investors itself warns that there are "many barriers and risks in project development" in this segment.

Ironically, Punjab and Haryana are among the best-paying states for biomass power today, both having tariffs of more than Rs 5 per kwH. "Today, the tariff for biomass in Punjab is as attractive as for wind and solar," said Mukerjee of the Centre for Science and Environment.

(Source- http://sugarnews.in/govt-plans-to-boost-setting-up-of-biomass-power-plants/, published on 10th November, 2016)

Karnataka: Sugarcane growers seek Rs. 2,700 a tonne

The Kalaburagi District Sugarcane Growers' Association has demanded a minimum ex-field rate of Rs. 2,700 a tonne of sugarcane.

Addressing a press conference here on Wednesday, association president Dattatreya Kulkarni said the meeting of sugarcane growers and sugar mill owners held at Kallur village in Jewargi taluk on Tuesday failed to reach a conclusion on the price. "Five hundred farmers and representatives of five sugar mills, including three from Maharashtra, participated in the meeting. While the sugar mills from the State offered a maximum of Rs. 2,000 a tonne, those from Maharashtra offered up to Rs. 2,500. But, the farmers were persistent on Rs. 2,700," he said.

'Reasonable demand'

Mr. Kulkarni reasoned that Rs. 2,700 a tonne was very reasonable, considering the amount of sugar produced from a tonne of sugarcane and the better sugar price in the market. "By crushing a tonne of sugarcane, 110 kg of sugar, worth Rs. 4,180, can be produced. The mills can earn money by selling the by-products as well. Our demand of Rs. 2,700 is reasonable," he said.

Mr. Kulkarni demanded that the Deputy Commissioner intervene in the issue by calling a meeting of cane growers and sugar mill owners.

He also said sugarcane growers were reluctant to sell their produce to mills in Maharashtra, considering the payment and transportation issues. "Maharashtrabased mills are trying to lure sugarcane growers in Kalaburagi by offering a little more than the mills in Karnataka. They are also giving written undertakings to buy the crop for the next three years at the market rate. But our farmers are reluctant as they may have to suffer in the event of crop loss during transportation and delay in payment," he said.

Terming the Gulbarga Electricity Supply Company's arrangement of supplying power to rural areas for four hours during the day and three during the night as an inconvenience, Mr. Kulkarni demanded for continuous three-phase power supply for seven hours. He also pointed out to wastage of water at Kallur bridge-cum-barrage owing to poor maintenance, and demanded that the authorities concerned fix it.

Farmers' leaders Narahari Patil, Shanthaveerappa Kalaburagi, Shanthaveera Patil Dastapur, Rajashekhar Peddi and others were present.

(Source-http://sugarnews.in/karnataka-sugarcane-growers-seek-rs-2700-a-tonne/, published on 10th November, 2016)

Co-gen/Power

Karnataka Government to buy 500MW power from sugar mills

Energy minister D K Shivakumar said the department will be purchasing 500MW of power from sugar factories with immediate effect.

Speaking to reporters here on Wednesday, the minister said the proposal has been approved by the cabinet which met in Bengaluru on Wednesday.

"We are able to supply 600 MW to 700 MW of power at present as against the demand for 1000 MW. Following failure of monsoon, the generation from hydel power plants has come down drastically. But the government is making all out efforts to ensure proper power supply in both urban and rural areas," he added.

The minister was in the city to inaugurate a convention of the Karnataka Rajya Grama Vidyuth Prathinidhigala Okkoota (Karnatka State Village Electricity Representatives Federation), attended by over 3,500 delegates.

Later the minister was felicitated by former chairman of KSIC D Basavaraj. Former APMC chairmen Mudegowdra Girish, Thuruchaghatta Basavarajappa were also present.

(Souce-http://sugarnews.in/karnataka-government-to-buy-500mw-power-from-sugar-mills/, published on 10th November, 2016)

Power sector's debt woes may continue for 18 months

The country's narrowing power deficit and increased coal production may not be indicators of the end of stress in the industry

The country's narrowing power deficit and increased coal production may not be indicators of the end of stress in the industry. There has been a negligible change in the power sector's stressed capacity and debt.

According to data published by the Reserve Bank of India (RBI), the infrastructure sector's share in gross non-performing assets of banks was 13.90 per cent in June 2016, higher than 12.69 per cent in December 2015, and the power sector's contribution to these numbers was 5.97 per cent and 4.99 per cent, respectively.

"The primary reason for stressed assets in the power sector is weak demand. Demand has been weak due to muted industrial activity, resulting in ready capacity not finding long-term contracts, existing contracts running at low plant load factors and abysmally low spot power rates. Low asset utilisation is making it difficult for power producers to service debt," said Debasish Mishra, partner at Deloitte Touche Tohmatsu India. According to Central Electricity Authority data, the plant load factor in September nationwide was 58.13 per cent .

Legacy policy issues over coal allocation, low demand and banks' unwillingness to take haircuts in acquisitions are some of the other reasons for the obstinate stressed debt in the system.

"Coal production has increased, but the distribution and usage policy continues to be restrictive. The delay in announcing a new policy framework is leading to uncertainty," said Ashok Khurana, director-general, Association of Power Producers.

Khurana estimates the stressed power capacity at more than 50,000 MW, stating not much has changed in this number in the last couple of years. This capacity, Khurana said, lacked long-term power purchase agreements and fuel-supply agreements. "Around 18,000 MW faces under-recovery of fixed or variable costs due to various reasons and different stages of litigation," he said.

(Source- http://www.business-standard.com/article/companies/power-sector-s-debt-woes-may-continue-for-18-months-116110702018_1.html, published ion 8th November, 2016)

Renewables Are Outpacing Coal in India

In the race to fully energize India, renewables are beating coal.

That is one of the most surprising findings in the new report *Financing India's Clean Energy Transition*, which was researched and written by Bloomberg New Energy Finance with support from the David and Lucile Packard Foundation. According to the report, released earlier this month, renewable capacity (not including large hydro) is being added at a quicker clip in India than that of its dirty competitor. In fact, renewables have posted a cumulative compound annual growth rate of 15 percent, compared to 12.5 percent for coal power plants between fiscal years 2013 and 2016.

In some respects, the rapid deployment of clean energy in India -- particularly solar, which is besting wind and other renewables -- shouldn't be a huge surprise. After all, India's clean energy goals are so ambitious that fast growth is absolutely necessary if the nation has any chance of achieving them. Indeed, Prime Minister Narendra Modi's government has targeted the construction of 175 gigawatts of renewable energy by 2022. In addition, the government has mandated the rapid electrification of more than 18,000 villages. At the end of fiscal year 2016, India had a total of 42.6 gigawatts of installed clean energy capacity, which amounts to 14 percent of the country's overall generation capacity.

Ambitious targets that provide over 300 million people the many benefits that come from reliable access to clean electricity is clearly an important starting point. But as the report's authors point out, there are important challenges to overcome, particularly around financing this clean energy revolution, which is estimated to represent a $150 billion investment

opportunity. While government policy is vital for India to reach its clean energy goals, the country's financial markets and outside investors will need to play a major role.

Financial challenges and opportunities

To untangle the financing challenges and opportunities in India, the report's authors divided the clean energy sector into four distinct categories: utility-scale projects, which are defined as 1 megawatt and larger; small and rooftop solar, defined as ranging between 1 kilowatt and 1 megawatt in size; small energy grids between 100 watts and 50 kilowatts; and solar home systems and lanterns 100 watts and smaller. Some of the issues raised by the report in each category are outlined below.

Utility-scale projects

Put simply, large clean energy installations are already being financed and built in India at a fairly rapid pace. Driven largely by the government's goal to install 175 gigawatts by 2022, investments have flowed in from foreign and domestic sources to support construction. The report's authors note that asset financing has grown by nearly $4 billion -- from $6.6 billion to $10.5 billion -- between fiscal years 2014 and 2016. Despite that vigorous level of activity, the financing required in the years ahead is substantial.

The report's authors believe it will require a total of $100 billion in asset finance, including $30 billion in equity capital, between 2016 and 2022 for India to reach its target of 135 gigawatts of installed utility-scale projects. The financing challenges involved with reaching this goal include the fact that India has the highest cost of capital in the Asia-Pacific region. Reducing those costs will be critical in order to encourage the scale of investments necessary. Also important, particularly to foreign investors, is improving the ease of doing business in India. Domestically, policy changes and innovations that make it easier for institutional investors to back renewable energy are important.

Already, there is some important movement to scale up the required investment, including the use of green bonds to raise debt and refinance projects. The report's authors also note that infrastructure investment trusts -- a version of the YieldCos used in the U.S. market -- are advancing as well. "The idea is that investor interest is protected and developers can quickly recycle equity in large commissioned projects by selling it to long-term institutional and retail investors seeking lower, but stable, returns," wrote the authors. "These structures have started to attract increased interest after a series of regulatory amendments made them more palatable, and could be crucial for the estimated $30 billion equity that the utility-scale projects need."

Small and rooftop solar

Only a few years ago, there was essentially no small and rooftop solar development in India whatsoever. But demand from commercial and industrial customers has led to an annual CAGR of 92 percent over the past four years and cumulative installations of 500 megawatts. This rapid deployment has a straightforward explanation: compelling economics. Commercial and industrial customers that have sufficient cash have embraced solar as a replacement for expensive diesel generators many use for backup power in places where grid-tied electricity is spotty. The short payback time that comes with making the switch to solar has been the primary driver of small and rooftop solar, although the implementation of net metering in most Indian states could also contribute to more installations.

But in order to reach the government's 40-gigawatt solar target, India will have to have a cumulative CAGR of 108 percent over the next six years. Unlocking third-party financing will be critical, as will an overall maturation of a financing industry able to meet the demand for small and rooftop solar. There is some movement in this direction, the report's authors say.

"Various international agencies are committing new funding for the small solar segment to their partner banks/non-banking financial companies in India," according to the report. "The following steps can go a long way toward ensuring further growth in the sector: educating long disbursement agencies and creating standardized loan application review processes; establishing and propagating norms for quality controls of products; pilot studies to measure the technical and commercial impact of high penetration of rooftop solar on host power distribution companies; creating intermediation platforms to raise awareness and reduce transaction costs; and time-bound clearance of subsidy applications."

Small energy grids

The Indian government has made it a priority to provide electricity to the 73 million rural households that either have no connection to the power grid or are not reliably served by it. According to the report, small energy grids (SEGs) -- most of them based on solar PV -- are now being used by 75,000 households. Installations in fiscal year 2016 were nearly 300 percent higher than in 2013, albeit from a small starting point. Financing for small energy grids is both haphazard and at a relatively miniscule level.

According to the report, the 11 companies pursuing small-grid development raised $16 million in equity and $6.26 in debt finance between fiscal year 2013 and 2016. "Financing for the SEG segment happens in fits and starts and is tied to the fortunes of a small number of companies," the authors wrote. "Bank loans, venture capital and private equity, occasional funds from corporate social responsibility mandates, and crowdfunding are all being tapped as sources."

One important change that needs to take place in order for small grid financing to increase and become more systematic is policy certainty about what happens when the grid is extended somewhere an SEG has been established. The worry investors in SEGs have is that competition from grid-supplied electricity will strand their investment. Addressing that question through policy can help.

Solar home systems and lanterns

According to the report's authors, around 5.5 million lanterns and solar home systems have been sold in India. The sector's growth potential, however, is limited by a number of factors, including a lack of access to financing for solar kit companies, because banks and investors consider the industry too high-risk. The report's authors highlight ways the sector can grow in a more robust way.

"As the market grows, new models like pay-as-you-go are gaining ground," they wrote, also noting that the Reserve Bank of India has taken steps to increase banking services in rural, underserved areas. "Besides this, a unified payment interface has been launched that will allow money transfer from a bank account to different merchants, both online and offline, without the hassle of typing in credit card details."

(Source-https://www.greentechmedia.com/articles/read/Renewables-Are-Outpacing-Coal-in-India, published on 10th November, 2016)

Quote of the day

'Plant seeds of happiness, hope, success, and love; it will all come back to you in abundance. This is the law of nature.'- *Steve Maraboli*