

TECA – NEWS CLIPPING

(Energy Conservation : It Doesn't Cost. It saves)

10.01.2019

Uday scheme: Modi government may miss target due to states' non-compliance

Financial Express : January 10, 2019

Rising number of open access consumers—mostly industrial users buying power directly through generators or power exchanges, bypassing the discoms—has significantly impacted the revenue stream of the state-owned entities.

With the chances of meeting the UDAY target to limit the aggregate technical and commercial (AT&C) losses of electricity distribution companies (discoms) to under 15% by FY19-end virtually nil, the government has cited factors such as inadequate hikes in power tariffs, incremental rise in 'open access' transactions and outstanding dues accumulating from state government departments as the main hurdles.

In its latest note on the progress of the revival scheme for discoms—launched in November, 2015 —the power ministry said that outstanding dues from state government departments have jumped by 22% annually to Rs 35,603 crore in FY18, severely hurting cash flows for discoms.

The ministry has also pointed out that Andhra Pradesh, Assam, Chhattisgarh, Maharashtra, Telangana and Uttar Pradesh have not raised electricity tariffs according to the trajectory agreed while signing into the UDAY scheme, making it difficult to narrow the gap between the costs of supply and revenue realised. These states consume more than 35% of the country's electricity.

Rising number of open access consumers—mostly industrial users buying power directly through generators or power exchanges, bypassing the discoms—has significantly impacted the revenue stream of the state-owned entities. The size of the bilateral and power exchange market increased by 38% annually in FY18 to Rs 30,427 crore. An expert familiar with discom operations told FE that since open access electricity consumers frequently revise their power procurement schedule on the basis of their daily load requirement, discoms are compelled to deviate from their energy drawl schedule, incurring heavy penalties. There were 4,248 open access consumers in the Indian Energy Exchange in FY18, recording a 9.5% compound annual growth rate since FY14.

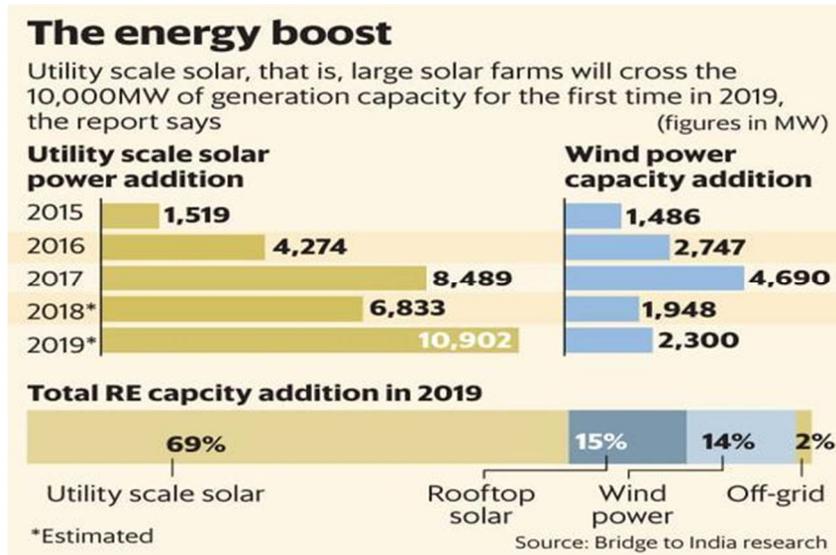
Additionally, the power ministry is also sceptical about the capacity of the market to absorb UDAY bonds worth nearly Rs 37,000 crore. At the end of September 30, AT&C losses — the jargon for electricity units for which revenue is not realised on account of pilferage — suffered by the discoms in 27 UDAY states/UTs stood at 20.6%. The government's new proposed tariff policy suggests that AT&C losses above 15% won't be compensated through tariffs after FY19, which means that discoms would not be reimbursed for their inefficiencies through higher consumer bills.

Financial losses of UDAY discoms fell to Rs 15,049 crore at the end of FY18 from Rs 37,877 crore in FY17, according to provisional data. Audited data are publicly available only till FY16. Apropos, discoms' outstanding dues to power generators surged 150% annually to Rs 32,071 crore in FY18. In a recent interview power minister RK Singh told FE that currently a new version of the UDAY scheme is being formulated, which would focus its target on AT&C losses through cutting down pilferage and shortcomings in billing and collection.

Renewable capacity addition may surge by 50% in 2019

Livemit : January 9, 2019

Total renewable energy capacity addition in 2019 will be 15,860 MW, 50% higher than what was in 2018



Large solar farms will cross the 10,000MW-mark in power generation capacity for the first time in 2019. Graphic: Mint

After a year of relative lull, renewable energy will be back on track in 2019 with new plants being set up and the introduction of the much anticipated policy on battery storage. This will also be the year when floating solar projects will add significant capacity to the country's generation scene, according to the *India RE 2019 Outlook* published by renewable energy consultancy Bridge to India.

Total renewable energy capacity addition in 2019 will be 15,860 megawatts (MW), up 50% compared to 2018, when there was a lack of clarity on goods and services tax (GST), safeguard duty and BIS standards, besides slow construction of large parks and poor grid connectivity. "Dictated purely by tender timetables, capacity addition should jump from 10,560MW last year to 15,860MW in 2019," the report, shared exclusively with *Mint*, estimates. "Most of the uplift will come from utility scale solar although rooftop solar is also expected to register another year of fantastic growth."

The renewable energy sector in India had a sobering year in 2018 with the number of new projects slowing down and investors finding that the sector was generating lower power and financial returns than they had expected, *Mint* had reported in November.

But the tide is about to turn. In fact, the recent report estimates that 2019 will, for the first time, cross the 10,000MW of generation capacity in utility scale solar, that is, large solar farms. More than 75% of new capacity is expected to come up in Rajasthan (over 2,000MW), Andhra Pradesh (1,950MW), Tamil Nadu (1,872MW) and Karnataka (1,555 MW). More than 30 developers are expected to commission utility scale solar projects in 2019, with Azure Power and ACME Solar leading the pack, while Ayana Renewable Power Pvt. Ltd, Raasi Green Earth Energy Pvt. Ltd, Asian Fab Tec Ltd, Think Energy Partners (TEP) and Technique Solar Ltd are expected to commission their first ever projects in India.

Floating solar is expected to make major strides as well in 2019. Recent tender results indicate a sharp dip in tariff premium over ground-mounted plants, while the falling cost and constraints in land and transmission capacity will force policymakers to prioritise floating solar. "We expect a surge in floating solar tenders with an aggregate issuance of up to 5GW. Our estimates include 83MW of floating solar capacity addition (33MW, NTPC Kerala tender and 50MW, SECI Uttar Pradesh tender)."



Rooftop solar capacity addition in 2019 is expected at 2,368 gigawatts (GW), 49% higher than in 2018, while about 290MW will come from off-grid capacity, mostly from solar pump installations. The report estimates that the new year will also witness greater adoption of new technologies such as mono-type modules, micro inverters and storage, with the likely announcement of a national storage mission.

For wind energy, the report expects that projects will be commissioned by Adani, Orange Renewable, Engie, Sembcorp Industries Ltd and Torrent Power Ltd. The sector will add about 2,300MW capacity in 2019, up 18% over the previous year, all of which will come up in Tamil Nadu and Gujarat.

The report, however, warns against overt exuberance by the government in announcing new renewable energy projects. In December 2018, the ministry of new and renewable energy had announced that it plans to issue 80GW (60GW solar and 20GW wind) of tenders by March 2020. "We believe that such large issuance is implausible and not consistent with the overall power demand-supply situation, or actual land and transmission infrastructure available. A pressure to issue more tenders would see a recurrence of problems witnessed last year—lack of planning, poor tender design, arbitrary tariff ceilings—resulting in under subscription and cancellations."

Tariffs in the renewable energy sector will also remain the same, within the current ₹2.50-3.00/kWh range, depending on project location and offtake risk profile, given no major change in input costs, the report added.

Overall, the sector is bound to continue its struggles with GST, safeguard duty, funding availability and transmission connectivity, Vinay Rustagi, managing director, Bridge to India, said in a note.

With the general elections around the corner, "politics is likely to dominate over reforms and the swift resolution of sector problems is unlikely," Rustagi said. "On the plus side, we don't expect any retreat in the push for RE, irrespective of who comes to power."

The Indian government has set an ambitious target of generating 100GW of solar power by 2022 from the existing installed capacity of 21.65GW. However, the likelihood of achieving the target has repeatedly been questioned by industry insiders.

Uttar Pradesh Raises Upper Cap for Net-Metered Rooftop Solar Installations from 1 to 2 MW

Mercom : January 10, 2019

The commission has fixed ₹2/kWh as the tariff for settlement under net-metering arrangement

The Uttar Pradesh Electricity Regulatory Commission (UPERC) has finalized the proposed regulations related to net-metering provisions for rooftop solar projects in the state.

The commission had proposed the draft RSPV Regulations 2019 back in November 2018 after examining various petitions regarding the upper cap of 1 MW for net-metered rooftop solar installations and observing documented as well as oral suggestions from stakeholders.

While reviewing the regulations, the state body observed that Uttar Pradesh had an energy deficit of 1.5 percent in financial year (FY) 2017-18, more than double of the all India average of 0.7 percent. The commission also noted that the DISCOMs in the state have high aggregate technical and commercial (AT&C) losses of around 37.92 percent.

According to the UPERC, encouraging rooftop solar PV installations will lead to reduced demand-supply gap and it will also result in less aggregate technical and commercial losses for the DISCOMs. It also took a cue from the Ministry of New and Renewable Energy (MNRE)'s letter, asking states to increase the upper cap for rooftop solar PV systems' size to 2 MW, and stated that this would help in achieving the target of 4,300 MW of rooftop solar PV capacity in the state by 2022.



The UPERC is of the view that increasing the limit of available distribution transformer capacity to 100 percent will help in decongesting the local distribution by supplying power at consumption side, thereby reducing system losses. After considering suggestions made by stakeholders, the UPERC decided to limit the available distribution transformer capacity to 75 percent as a preventive measure for instances where the injected power can be greater than the transformer capacity.

According to the UPERC, tariff under gross metering will be the weighted average tariff of grid-connected solar PV projects of capacity 5 MW and above from the previous financial year plus a 25 percent incentive.

The UPERC observed that under the SAUBHAGYA program, DISCOMs are providing connection to cross-subsidized consumers and under the net-metering mechanism the same consumers are offsetting energy requirement affecting recovery of cross subsidy by DISCOMs. The UPERC has restricted the consumer categories eligible for net-metering; metered residential and agricultural consumers falling under LMV-I and LMV-V categories will be eligible for net metering. The other consumer categories will be eligible for gross-metering or net-billing.

The UPERC has fixed ₹2 (~\$0.029)/kWh as the tariff for settlement under net-metering arrangement.

RSPV Regulations 2019 will come into force from the date of their notification in the Official Gazette of Uttar Pradesh. These regulations will apply to the distribution companies and licensees (DISCOMs), eligible consumers of the DISCOMs, and third-party owners of gross-metering arrangement of rooftop solar PV systems in Uttar Pradesh.

Mercom previously reported on how net metering policy has been a drag for India's rooftop solar sector as most states have an upper limit (usually 1 MW) on the size of a rooftop solar project.

A 1 MW rooftop project is relatively large, but the size limit sidelines a large number of commercial and industrial consumers from installing rooftop solar to meet their power needs. Now, in Uttar Pradesh an increasing number of prosumers will find it easy to install rooftop solar PV systems.

Solar power sector: 2019 outlook

Economic Times : January 09, 2019

The country's solar power generation capacity grew to 26,000 MW by end of September 2018 which comprises 87 per cent (23 GW) of utility-scale solar and about 13 per cent (3 GW) of rooftop solar projects

The outlook for the solar power industry looks positive in 2019 on the back of improved capacity addition, favourable policy push and rising demand for non-fossil fuel based energy, industry CEOs and sector experts told *ETEnergyworld*. They, however, caution against low tariffs hurting the viability of projects and quality of installations.

The solar energy sector was full of uncertainties in 2018 with respect to the imposition of safeguard duty, falling tariffs and continuous fall of the Indian rupee against the US dollar. The country's solar power generation capacity grew to 26,000 megawatt (MW) by end of September 2018 which comprises 87 per cent (23 GW) of utility-scale solar and about 13 per cent (3 GW) of rooftop solar projects.

According to Girishkumar Kadam, vice-president, and sector head of corporate ratings at research and ratings agency ICRA, the overall outlook for solar power's demand remains favourable in India, given the improved tariff competitiveness of solar energy and strong policy thrust.

"Even in the conservative estimates, assuming 5 per cent energy demand growth and 8 per cent solar Renewable Purchase Obligation (RPO) requirement by FY22 (as against



policy target of 10.5 per cent), incremental solar capacity addition requirement is estimated at about 40-45 GW over next three to four period," he said.

However, the continuous fall in tariffs witnessed last year has brought viability of projects under question. "With low tariffs, there may be a compromise in the quality of the products used in setting up of the plants," said Sanjeev Aggarwal, founder, and CEO, Amplus Energy Solutions. He added increasing scepticism regarding quality would be an alarming trend for 2019.

More than 90 per cent of solar panels and modules used in Indian solar projects are imported from China and Malaysia. Therefore, domestic price fluctuation is also dependent upon supply trends in these markets. According to Maxson Lewis, managing director, Magenta Power, the year 2019 would be driven by cost optimisation and stabilisation of solar panel prices, and the crash in solar prices as a result of the overcapacity in China in 2017-18 is set to taper off.

"The demand is picking up in Africa which is a logical market for China and, hence, the pricing scenario is likely to get back to demand-driven price points rather than oversupply driven dips," Lewis said.

In order to address the issue of Chinese imports and to boost local manufacturing, the government had floated a 10 GW tender in May 2018, which received a lukewarm response from the industry. The manufacturing-linked tender was first floated by Solar Energy Corporation of India (SECI) but the industry has not been keen on the model and the bid submission was postponed six times.

India needs to focus on strategies for the long-term growth of the renewable energy sector in addition to chasing ambitious solar deployment targets, says Rajendra Kumar Parakh, chief financial officer at Vikram Solar, a large solar power developer.

"Investing in domestic manufacturing can help in building the supply chain, control prices, and earn foreign exchange through exports besides creating jobs, increasing gross domestic product for the country and stabilising the adverse balance of payments," he said.

India's solar deployment plan has also received a boost from multinational corporations who are increasingly declaring themselves net carbon zero companies. More and more of these corporates are working to lower their carbon footprints and moving to adopt solar.

"We believe that adoption of solar energy by corporates will continue to grow at a fast pace as they recognise climate change and sustainability as the need of the hour, coupled with the cost advantages of switching to solar," said Nikunj Ghodawat, CFO of CleanMax Solar.

Among the other factors helping quicker pickup in demand for solar is the government's focus on electric mobility. "Additional clarity is likely to come in with regards to regulations and fiscal incentives in the EV space. This may have an impact on the adoption of EV charging infrastructure (augmented by solar energy), as well as EV accessories (eg, storage)," said Ramnath Vaidyanathan, CEO of WiSH Energy, a subsidiary of Bangalore-based Enzen Group.

Other industry leaders believe India's solar power sector is set to witness a technology-led growth at a massive scale. Technological innovation is at the centre of solar power development in India, say Sunil Rathi, director at Waaree Energies, a large solar player. "With disruptive techniques that put us on a par with international counterparts, we believe floating solar, energy storage and flexible modules will prove to be important tools in taking solar energy to the next level," he said.

Rathi also pointed out that the government's latest move to impose safeguard duty on imports of Chinese solar panels has created a level playing field for local manufacturers to showcase their capabilities and bring disruptive R&D. This is another reason why adoption of new technology has become possible.



The promising outlook for the sector comes on the backdrop of major execution challenges. Consultancy firm, Bridge to India, recently pointed out that overall solar power capacity addition is slowing down. "Indian solar market has grown spectacularly over last four years but is struggling to sustain because of policy and execution challenges. The slowdown is worrying for all stakeholders," said Vinay Rustagi, managing director, Bridge to India.

India added only 1,900 MW of solar capacity in the first six months of the current financial year (April-September 2018), down 44 per cent as compared to the solar capacity added in the same period last year. The generation capacity of 1,200 MW added in the quarter ended September, too, was 43 per cent less than the capacity addition achieved in the corresponding quarter last fiscal.

India needs hourly electricity tariffs: IEEFA

Economic Times : January 09, 2019

As India's reliance on renewable energy increases, IEEFA notes there will be increased need for firming capacity to back up renewables at times of high demand

With \$100 billion of existing and proposed thermal power plants in financial distress and low cost but variable renewable energy capacity best able to meet targets, India has an opportune moment to transform its electricity sector by introducing day-ahead market pricing, the Institute for Energy Economics and Financial Analysis (IEEFA) said on Tuesday.

A new IEEFA briefing note, "Flexing India's energy system: Making the case for the right price signals through day-ahead market pricing", finds the current pricing system in India is a largely flat tariff providing little incentive for network or consumer efficiency through load smoothing.

Tim Buckley, co-author of the briefing note and IEEFA's Director of Energy Finance Studies in Australasia, told IANS that the pricing system also does not incentivise the ramping up of flexible, peaking power generation capacity to meet peaks in demand.

"India's electricity generation and demand profiles have become 'peakier', meaning there is clearly more demand at certain times of the day such as evening or during hot weather periods," Buckley said in a statement.

"As India's economy grows, this peakier demand will become even more apparent, putting stress on consumers, businesses and electricity generation systems currently struggling to meet those peaks."

The co-authors of the note found India's increasingly obsolete sub-critical coal-fired power fleet is not flexible enough to viably meet growing demand peaks with a shift in generation pricing.

"Coal-fired power stations cannot be ramped up and down quick enough to respond to peaks," co-author Vibhuti Garg, IEEFA energy economist, said.

"Pricing tariffs are also not available to incentivise network efficiency and flexible peaking power generation."

The total renewable energy installations in India reached 75 gigawatts (GW) by September 2018, representing 21 per cent of total installed capacity and generating a record high of 11.9 per cent of all electricity in the September 2018 quarter.

"India is going through a renewable energy transformation, but the pricing signals have yet to catch up," said another co-author Anil Gupta, Director with Enerfra Services Pvt Ltd.

"India needs electricity production tariffs that encourage flexible electricity generation to meet the peaks in demand. This would help ensure grid stability as the share of renewable energy continues to increase."



As India's reliance on renewable energy increases, IEEFA notes there will be increased need for firming capacity to back up renewables at times of high demand.

Technologies that can provide this include pumped hydro storage, gas peaking plants, faster ramping, more flexible but lower utilisation coal fired power plant and battery storage.

Enhanced national and international grid interconnectivity will also play a role.

India is already planning a doubling of pumped hydro storage capacity and considering near term measures to promote gas peaking power generation, leveraging India's existing base of 25GW of largely stranded gas-fired power generation.

Battery technology will get ever-cheaper as global production capacity continues to increase.

"Right now, however, a stronger price signal to incentivise fast ramping peaking power generators will help drive the roll-out of flexible power technologies that can meet India's future peak demand," Buckley said.

"India must introduce day-ahead market pricing tariffs to help manage peak demand while providing a better deal for consumers."

Save Energy. Save Money. Save the Planet