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

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Tamil Nadu: Dull TANGEDCO subsidies take sheen away from solar rooftops

The New Indian Express : February 11, 2018

After an intensive rooftop solar campaign by the State, which peaked in 2015-2016, the State-run electricity discom TANGEDCO has back-pedalled on its promises of offering subsidies and distribution of net metres. Result: those who have installed rooftop solar equipment and those looking to do so were left in the lurch.

In its proposal to the Tamil Nadu Electricity Regulatory Commission (TNERC) last year, the discom had proposed to fix the price for solar power exported to the grid at 50 per cent of the lowest solar tender rate quoted during the previous financial year or 50 per cent of the solar preferential tariff rate issued by the TNREC corresponding to the financial year, whichever is less.

This, in contrary to the existing power credit system that allows consumers to be billed after deducting the power exported to the grid from his/her bi-monthly usage, would drastically reduce the return on investment.

The proposal aside, those looking to install rooftop solar panels for the sake of energy security, are also staring at a dead-end.

While the Tamil Nadu Energy Development Agency (TEDA) still stands by its campaign to install solar power on houses and save up to `14,700 per year, the subsidies for installation have become irregular, claimed users.

"If the government is not ready to give subsidies for rooftop solar plants, they should scrap the scheme altogether and stop advertising it so that people will stop expecting it," said Suresh, who has a 3KW solar plant at his residence in Kilpauk.

Private rooftop solar installers also claimed to bear the brunt of the 'namesake' subsidy. "The subsidies became far and few in 2016 and now they seem to have completely stopped," said Dinesh Salem Natarajan of Sootless Energy, a private solar power installation firm.

"This being a low-margin business as it is, we have decided against taking the subsidy model route. We tell our customers upfront that we will be installing it at non-subsidised rates," he added.

Now the TEDA promises a subsidy of `20,000 per kWp, for which 1kWp plants for residential purposes are eligible.

If at all a consumer agreed to proceed with the installation with neither the subsidy nor the power credit system in place, simply for the sake of achieving energy security or for the satisfaction of taking a step towards new, renewable energy, they are met with another roadblock -- the unavailability of net metres. Consumers and installers claimed that the wait to avail net metres from TANGEDCO is long, deliberate attempt to discourage users from turning to rooftop solar power generation.



"We at the CAG had attempted to install rooftop solar plants at our office premises in April last year. We were told that net metres were unavailable when sources said they had net metres in stock," said Vishnu K of Citizen Consumer and Civic Action Group (CAG).

Activists attributed the bottleneck to TANGEDCO's singular monopoly on net metres. Although the TNERC had maintained that while TANGEDCO could be responsible for the distribution of net metres, consumers may also procure them from private sources. But finding private net metre suppliers was a rarity, said installers.

"In States like Karnataka, the consumer is able to choose from a list of authorised net metre dealers available in the State discom's website and procure it from anyone of them. For installation and connection to the grid alone, the discom is responsible," said Dinesh.

However, in Tamil Nadu, the net metres have to come from TANGEDCO along with the discom being responsible for connection of the net metres to the grid, he added.

Vishnu said the net metres keep track of the excess electricity that flowed back into the power grid after meeting the home owners' requirements. But if they are not present, there is no way to calculate and deduct the power credits from the consumers' bill.

"For the remaining, parallel operations are in place. But there is no way of tracking the electricity exported to the grid and so the electricity that flows to the grid is free power for TANGEDCO," he said.

On the unavailability of net metres, the TANGEDCO officials said the net metres were being distributed according to demand.

"We have received no complaints so far with regard to the long waiting time," a TANGEDCO official said.

The metre conundrum

Consumers who have rooftop solar plants without net metres may actually have to pay double their bill if they turn on the plant inadvertently. The consumer would have to pay for the power consumed and for the power generated by the solar plant and exported into the grid.

The net metres keep track of the excess electricity that flowed back into the power grid after meeting the home owners' requirements

20,000 Subsidy per kWp promised by TEDA while installing rooftops

According to activists, TANGEDCO's alleged decision to hold back net metres could be a violation of Section 60 (Market Domination) of the Electricity Act, 2003, which stated that a generating company may not abuse its dominant position or enter into a combination which is likely to cause or caused an adverse effect on competition in electricity industry. In States like Karnataka, a list of authorised net metre dealers is available in the State discom's website and metres can be procured from anyone of them.

Off-grid facility comes in handy

Despite activists claiming that the environment was not conducive for a shift to solar power, residents of an apartment in Padur on the OMR were determined to switch to solar rooftop, expecting a reasonable return of investment. They were not disappointed. The apartment now has an off-grid solar plant to power their shared 3,200 sq ft club house. While their system neither allows them to store nor export the surplus power generated, they still claim



substantial savings in their power bill. "We have saved up to ` 1.2 lakh in six months. The power requirement is about 225 units a day, of which a part — 120 units — is solar powered," said R Gopalan, president of Mantri Synergy Residents Welfare sociation

Tamil Nadu should increase its solar and wind energy capacity, suggests study

Live mint : February 8, 2018

Adoption of renewable energy would restore debt-ridden Tamil Nadu Generation and Distribution Corp. (Tangedco) to a profitable status, says report

Tamil Nadu should consider doubling its wind energy capacity and increasing its solar capacity six-fold, instead of building expensive coal-fired power plants, said a report published by the Institute for Energy Economics and Financial Analysis (IEEFA).

The report, titled 'Electricity Transformation in India: A Case Study of Tamil Nadu', was released on Wednesday and highlighted how Tamil Nadu is building 22,500MW of expensive coal-fired power plants despite the favourable investment and electricity tariff costs for renewable energy.

"Tamil Nadu should double its wind energy capacity to 15GW and increase its solar capacity to 13.8GW by 2026-27 to deliver cheaper electricity to customers," the report said.

It also mentioned that adoption of renewable energy would restore debt-ridden Tamil Nadu Generation and Distribution Corp. (Tangedco) to a profitable status.

Tangedco reported a staggering loss of Rs13,985 crore in 2013-14. Subsequent reforms under UDAY scheme helped Tangedco reduce its losses to Rs3,783 crore in 2016-17. It has also reduced the deficit on energy availability from 12.3% in 2011-12 to a record low of 0.6% in 2015-16. IEEFA expects a break-even result next financial year, then moving to net profit for the first time in two decades.

The report by IEEFA also warned that projects like the Cheyyur Ultra Mega Power Plants are likely to remain "nothing more than a stranded asset proposal".

Tamil Nadu can leverage its already leading renewable energy base to drive new investment and employment opportunities in high-tech industries of the future, which would also be a profitable revenue source for Tangedco, the report said.

Tamil Nadu does not need any net new thermal power capacity additions in the coming decade, it said, as building net new thermal capacity would further depress existing low utilisation rates and create further financial distress for the thermal power sector.

Stating that Tamil Nadu is the leading state in India in terms of installed wind capacity, making it also one of the top states globally behind only a few provinces in China and Texas in the US, the report said, Tamil Nadu has temporarily slipped to the third position in terms of commissioned solar infrastructure in India.

"But the very successful 1.5 GW solar tender of July 2017 will see Tamil Nadu vie for leadership again by the end of 2018-19," it said.

Talking about the state's wind energy, Tim Buckley, IEEFA's director of energy finance studies, Australia, said: "Despite being a world leader in wind energy, Tamil Nadu's wind farms have aging and outdated technology. Upgrading the existing turbines alone could double the state's leading wind energy capacity."

By 2026-27, IEEFA forecasts that 67% of installed capacity and 56% of electricity generation in the state will be derived from zero emission technologies.



A huge transformation of the power sector can be expected

Money Control : February 5, 2018

But look close and you begin to see the first stirrings of policy change which could overhaul the power sector.

The recently tabled Union Budget did not talk about the power sector directly. But it did mention the fact that farmers with solar pumps would be able to sell the power their solar panels generate to the grids, especially during months when the solar power would not be required to draw water from tubewells.

But look close and you begin to see the first stirrings of policy change which could overhaul the power sector.

In a way, the first move came in February 2016 when the Power Ministry decided to keep aside 40 GW of solar power generation exclusively for rooftop solar. Behind this step was the awareness that the maximum 'bang-for-the-buck' would come from rooftop solar rather than from large solar farms.

But rooftop solar has another advantage. If harnessed properly, it could be a big employment generator as well.

Post the tabling of the Budget, Subhash Chandra Garg, Secretary Economic Affairs, Ministry of Finance, Government of India concurred with this view. "Yes, we see a future for micro-grids," he told Moneycontrol in an exclusive interview. He admitted that all calculations done by the Finance Ministry show that rooftop solar through the distributed micro-grid model is a far cheaper way to generate electricity than supplying the remotest villages through the conventional grids.

That may not be easy. It is well known that while technical losses through the grids are not high, the real losses take place when the grid power is taken into the distribution network and that is where losses and theft take place. Decentralised cluster of solar power modules will automatically step in and reduce losses and theft. But the manner in which the bureaucracy has tried to derail solar power is there for everyone to see.

But Garg is optimistic that the Budget provisions on the one hand and the to-be-announced measure on the other could sort out this problem.

But the biggest beneficiaries of such theft are powerful people well-connected with politicians. Will they agree to switch over from supply through the grid to off-grid micro-grid solutions? "That is something we need to work out with the power ministry," explains Garg. "But I see no reason why this cannot be done. Thus the grid will continue to supply to high tension users like industry. But consumer power consumption will be transferred to micro-grids, and the main grids will be required to stay off such supplies.

The model Garg has in mind is one which allows entrepreneurs to take up the management and operation of these micro-grids. That way, the entrepreneurs will have a very profitable business to work on. They will provide electricity to villages, which fits perfectly with the government's vision of power for all. And – most importantly – such moves will also generate employment.

Since the main grid and the discoms will no longer be required to supply subsidised power to the rural areas – this will be taken over by the micro-grids – the cross-subsidisation pattern adopted by the entire country will gradually become a thing of the past. This would mean that industry would now be able to get power at under Rs 5/unit, which in turn could improve their competitiveness in the global market as well. Currently, industry pays around Rs 8/unit while commercial enterprises pay around Rs.12. Hoardings and malls are required



to pay as much as Rs 15. These higher tariffs were meant to cross subsidise cheap power offered to the rural population.

Garg agrees with this analysis. He believes that with cross-subsidisation out of the way, there is no reason why industries should not be encouraged to generate their own solar power. Today, state governments and discoms do not like this idea because then industry would gain access to cheap power, which in turn would prevent the state from getting the money with which they subsidise rural power.

The micro grid will change all this.

Garg confirms this. He also believes that the next few months should see the roll out of policy initiatives aimed at encouraging microgrids on the one hand, and keeping way the main grid from supplying power directly to rural customers. Garg believes that the micro-grids are so profitable for entrepreneurs, that the need for further incentives will not arise. And should there be a need, his ministry already has in place, through the Solar Energy Corporation of India, various forms of viability gap funding.

This could mean less smog caused by coal consuming and smoke belching power plants. It could mean reduced import bills for diesel which is used by gensets in the rural areas. And it could mean a lot more employment than many seemed feasible till now.

Is India's Coal Power Sector Set To Crash? 65% Of Existing Coal Generation Costs More Than New Wind Or Solar

The Energy Collective : February 7, 2018

King Coal's reign in India is about to come crashing down . Coal supplied 80% of India's total power mix in 2016-2017, but economics have flipped the country's energy equation – new renewable energy is now cheaper to build than running most existing coal-fired power plants.

Renewable energy costs have fallen 50% in two years, and are forecast to continue dropping apace. New wind and solar is now 20% cheaper than existing coal-fired generation's average wholesale power price, and 65% of India's coal power generation is being sold at higher rates than new renewable energy bids in competitive power auctions.

The tipping point may have been 2016-2017, when renewable energy installations surpassed coal for the first time, adding twice the capacity. Coal plants nationwide already only run around half of the time, nearly every Indian coal plant violates the country's new air pollution standard, and India's Central Electricity Authority (CEA) has proposed closing nearly 50 GW of coal capacity by 2027. Retrofitting the plants that remains open will each cost millions to achieve compliance, so running already uneconomic plants will get more expensive as plants run less often and generate less profit.

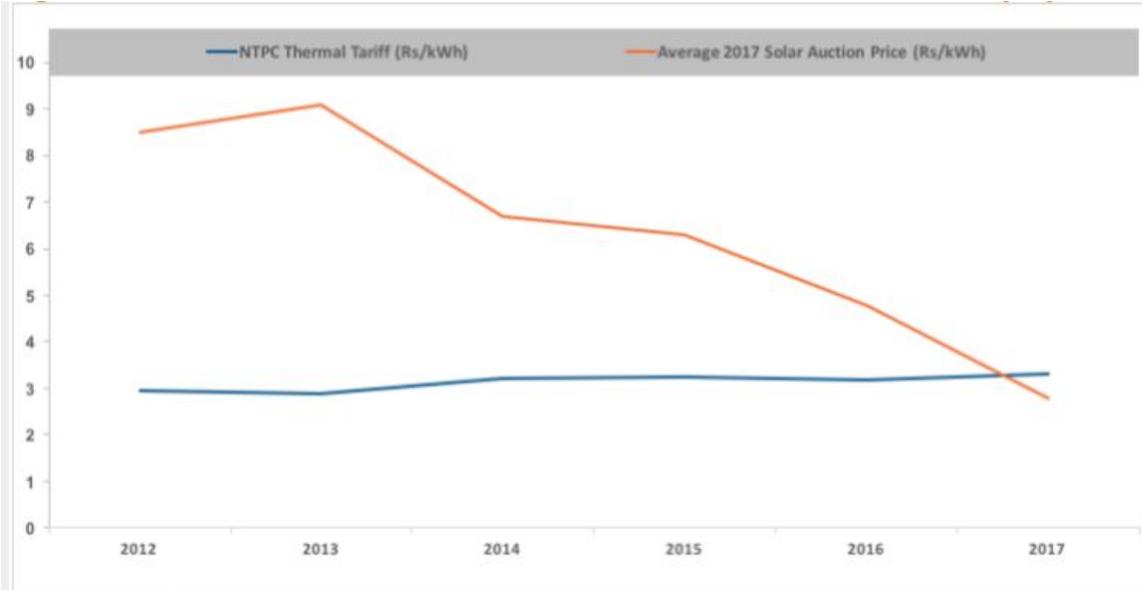
But while India's power demand will double over the next decade, its draft National Electricity Plan (NEP) calls for rising demand to be met with 275 gigawatts (GW) total renewable energy capacity by 2027, without requiring new coal plants beyond those already under construction.

As ever-cheaper renewable energy comes online, increasingly expensive coal generation will fall further from profitability. So how can India's power sector handle this looming coal crash?

New Wind And Solar Are 20% Cheaper Than India's Existing Coal Power

Similar to the United States, it's increasingly difficult for Indian coal generation to compete economically with fast-falling renewable energy costs, according to the Institute for Energy Economics and Financial Analysis (IEEFA).

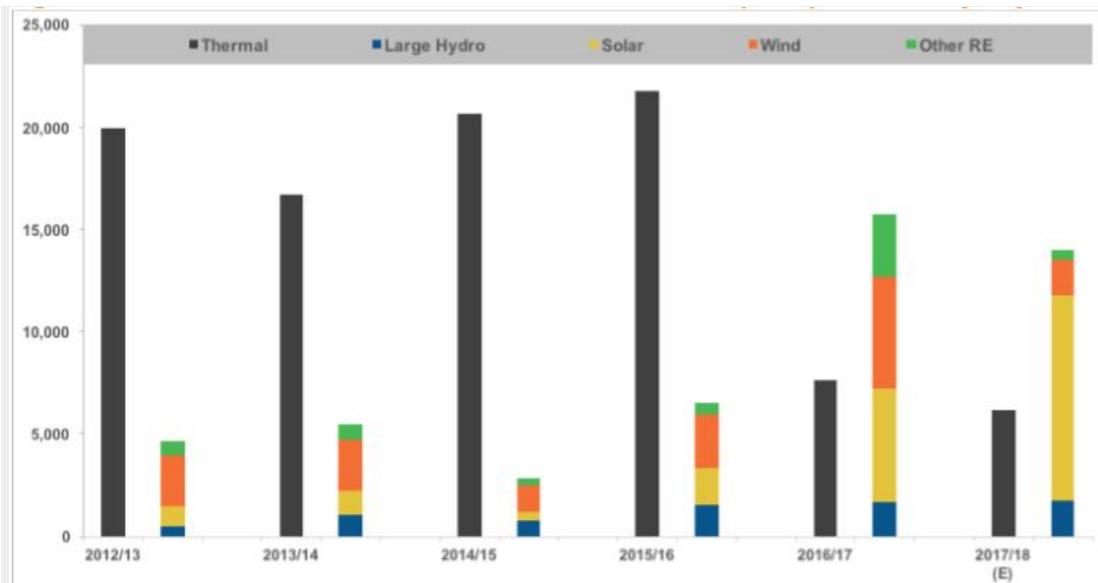
IEEFA finds India's wind and solar energy costs have fallen 50% to as low as \$38 per megawatt hour (MWh) over the past two years, with renewable energy bids in new auctions costing 20% less than the cost of wholesale electricity from existing Indian coal generation, and 30-50% less than the required cost to justify new imported coal or liquefied natural gas capacity.



Source: NTPC, Bloomberg New Energy Finance, Livemint, Bloomberg Gadfly

India coal power prices compared to solar auction prices 2012-2017

In 2016-2017, India added 15.7 GW renewable energy capacity (2.5 times the 6.5 GW added in 2015-2016), compared to 7.7 GW net coal installations (65% less than average installs over the previous four years). IEEFA forecasts India will add 14 GW new renewable energy capacity in 2017-2018, more than doubling the 5.8 GW expected net coal additions.



Source: Central Electricity Authority (CEA), MNRE, IEEFA Estimates
 Note: The renewables estimates exclude large scale hydro



India power generation capacity additions by technology 2012-2018

India's 2027 renewable energy target requires 57% of installed capacity to come from non-thermal energy, necessitating 21-22 GW annual renewable installations. CEA expects 317 GW peak national power demand in 2026-2027, 20.7% lower than its previous estimate, thus requiring no new coal capacity beyond the 50 GW of coal currently under construction. IEEFA estimates less than 5 GW annual net coal power installations over the next decade, with more than 2.5 GW in annual retirements of the oldest and dirtiest generation.

Because power demand has risen slower than expected and renewable energy has come online faster than expected, national coal-fired power plant capacity factors (how often a plant runs) fell from 77.5% in 2010 to 56.7% in 2016-2017. The 50 GW of planned coal could push national coal capacity factors as low as 50%, just as gigawatts of cheap renewables come online, meaning unless new plants replace retiring capacity they could come online as stranded assets.

Expensive (And Dirty) Coal's \$8 Billion Annual Bill

Stranded assets are already a problem for Indian's coal fleet – the India-run Numerical service estimates 17 coal-fired plants totaling 18.4 GW capacity worth roughly \$30 billion are currently stranded assets – and the problem isn't going to improve anytime soon.

Two-thirds of existing Indian coal generation is now more expensive than solar or wind generation, and keeping these power plants running costs India billions every year, according to Greenpeace research comparing CEA 2015-2016 coal power generation data to new renewable energy project bids. At least 65% of India's current coal power generation (94 GW of installed capacity) is being sold to distribution utilities at rates higher than the cost of new solar and wind. Roughly 30 GW of this total is more than 20 years old, and ran at a 53% average capacity factor in 2016.

	Coal Power Plants selling electricity above Rs3/kWh	Coal Power plants selling electricity above Rs.3kWh & older than 20yrs
Installed capacity	94GW	30GW
% of total coal capacity	48%	15%
Generation (million kWh)	456351	140315
% of total coal power generation	65%	20%
Potential annual savings from replacement with RE	54,730 crores (\$8.3 billion)	20,486 crores (\$3 billion)

Potential annual savings by replacing coal with renewable energy

Greenpeace reports replacing the 94 GW of uneconomic coal generation with solar or wind energy would save Indian industrial and residential consumers \$8 billion per year, but even replacing the 30 GW of older uneconomic coal would reduce annual power costs by \$3 billion.

Coal replacement cost savings are made more significant by India's stricter power sector emissions rules, which aim to reduce air pollution and early deaths from coal-fired generation. While the compliance period for these rules was extended to 2022, virtually all of India's existing coal plants are in violation of the new rules.



India's Power Minister expects the price of electricity from coal-fired generation will rise up to \$200,000 per megawatt of capacity retrofitted, and maintains the Power Ministry's will not support retrofitting coal plants 25 years or older, saying "the government does not want to continue with old technology – besides environmental cost, they are less energy efficient."

India's Center for Science and Environment (CSE) reports coal is responsible for 80% of India's mercury pollution, 60% of airborne particulate matter, 45% of sulphur dioxide emissions, and 30% of nitrogen oxide levels. The Health Effects Institute estimates coal-fired pollution contributed to 169,000 early deaths in 2015 and would contribute to around 1.2 million early deaths in 2050.

So while financiers can gamble on the rules not being enforced now, political and financial pressure to deal with air pollution will keep increasing over time

How Utilities Can Tap Cheap Renewables To Beat Coal's Crash

The economics of running existing coal versus building new renewables map the route through this interregnum from King Coal to clean energy: Close old coal and build new renewables to save billions in power costs and hundreds of thousands of lives. But how can utilities make this transition?

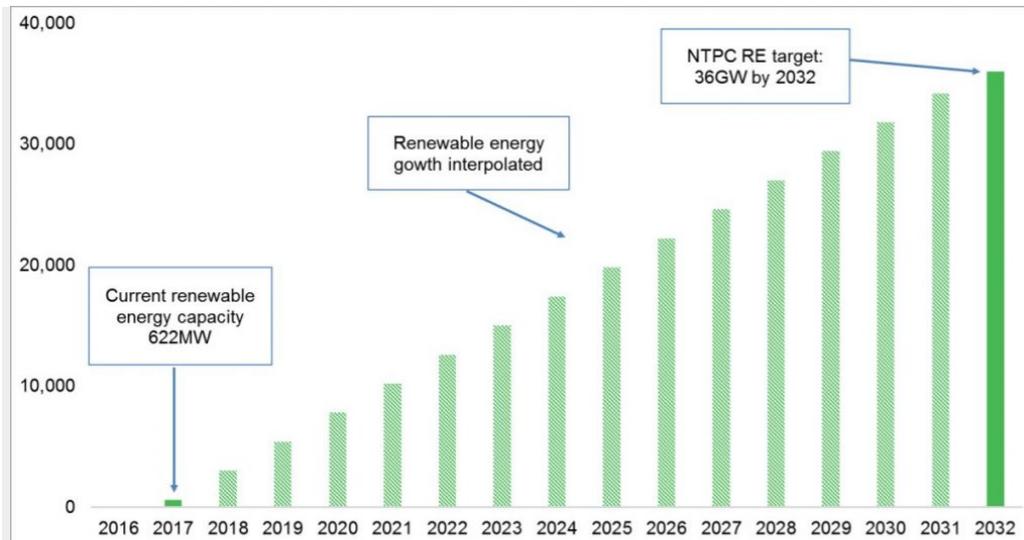
CSE proposes allowing the country's electricity distribution utilities (DISCOMs) to exit power-purchase agreements (PPAs) more than 10-15 years old which have been rendered uneconomic by low-cost renewables, enabling cheaper spot market power purchases. CSE also recommends enacting CEA's plan to retire 48 GW of India's oldest coal generation by 2027, allowing cleaner distributed electricity sources to meet India's power demand while raising capacity factors for newer "cleaner" coal plants, simultaneously reducing financial risks for utilities and consumers.

Indian utilities may also want to consider a coal retirement policy previously used to help utilities retire nuclear assets through private-sector bonds, now being considered by utilities in Western U.S. states like Colorado and New Mexico to transition from coal to clean. This approach helps utilities refinance the costs of stranded coal generation assets and redirect savings toward cheaper renewable energy to replace generation capacity, while directing funds to communities or workers affected by coal closures.

IEEFA notes state-owned utility NTPC, which provides 25% of India's total power supply, could be key to the clean energy transition. While NTPC is among the top 10 coal utilities globally with 44 GW coal-fired capacity, it is perhaps one of the Indian utilities most at risk from stranded assets. NTPC reduced coal operating costs by ending foreign coal imports in 2017, but its electricity prices are still higher than solar and wind generation, so adding new renewable capacity is cheaper than building new coal.

It's no surprise that NTPC is one of the primary drivers behind Indian renewable energy. NTPC is one of the country's largest renewable energy offtakers, is responsible for 3.6 GW of India's 12 GW existing solar capacity, has committed to 10 GW of the government's 100 GW by 2022 total solar target, and has a 36 GW by 2032 total renewable energy target for its generation fleet.

"NTPC is an emerging role model for electricity generation companies, in India and across the wider ASEAN region, by progressively reducing its thermal power expansion plans as renewable energy becomes more cost-competitive," said Tim Buckley, IEEFA Director of Energy Finance Studies Australasia. "NTPC's Managing Director Gurdeep Singh emphasizes his new technology-neutral stance, highlighting how the rate of technology innovation makes a diversified generation portfolio optimal for risk management."



Source: NTPC, Economic Times, IEEFA Estimates

Note: The year is installed capacity as at March of the stated year.

NTPC renewable energy installation targets through 2032

This South Indian state is set to become a world leader in clean energy

Provided it transforms its power sector

The southern state of Tamil Nadu could be well on its way to becoming a world leader in wind power, according to a recent report by US-based Institute for Energy Economics and Financial Analysis (IEEFA). But in order for this to happen, the state essentially needs to overcome its addiction to coal, according to writer, researcher and social activist Nityanand Jayaraman. The report predicted that by 2027, more than half of the state's power will be generated with the help of 'zero emissions' technologies, ie, wind and solar.

The current capacity of Tamil Nadu to generate wind power is already at 7.85 GW, which is higher than that of Sweden or Denmark. But this number could double over the next decade with the capability of solar installations increasing six-fold to reach 13.5 GW, as estimated by the IEEFA report.

The result of this could be clean, renewable energy accounting for 67 per cent of the state's capacity. Thus ensuring the revival of Tamil Nadu's debt-ridden power sector. If the state wants to make use of this potential, it needs to transform the way it produces power.

Tamil Nadu, which houses a population thrice that of Australia and has the per capita GDP on the same lines as Sri Lanka and Ukraine, could indeed set an example for emerging economies; teaching them how to grow in this sector just by slashing their carbon emissions.

According to the IEEFA, Tamil Nadu will have 10.3 GW of utility-scale solar installations before this decade ends, in which the rooftop installations will account for only about 2GW. However, both the availability of sunlight and the demand for electricity are decentralized. Hence maximizing rooftop solar installations makes more sense than investing in large solar parks.

But there are certain challenges that the state could face while moving towards leadership in the clean energy sector. For one, wind power can only be generated between May and October. Production will not reach peak levels even during those months since Tamil Nadu lacks a big enough grid to transfer large amounts of electricity to other states. This will result in slowing down electricity generation from other sources.



The report suggests that it is both a possible as well as an essential solution, financially and environmentally, even though it may seem too ambitious in terms of magnitude and rate of change.

Budget 2018 impact: 10% surcharge on customs duty to pinch power sector

Business Standard : February 3, 2018

India would lose competitive edge while exporting in a highly fluctuating market

The 10 per cent surcharge on Customs duty for import of all items would hit the power sector. The equipment and generation industry is expecting an increase in cost across the value chain.

"Most of these items across the chain are governed by commodity pricing, which in the past few months has already seen an upswing. Items such as aluminum conductors, wires, etc, are procured in bulk at a fixed price and will see increase in cost. These items constitute 60 per cent of the cost of power," said Harish Agarwal, vice-president, Indian Electrical and Electronics Manufacturers Association.

India would lose competitive edge while exporting in a highly fluctuating market, he contended.

So, too, for solar power panels, mostly imported. Close to 80 per cent of India's solar power is based on imported content. Solar panels from last year on have been inviting 7.5 per cent Customs duty. Sector executives said a 10 per cent surcharge over this would escalate the cost and could impact power rates, too.

It also happens that the Directorate General of Safeguards Duty has in a preliminary report after investigating charges of dumping in solar cells, has suggested a duty of 70 per cent on import from China. The industry expects a hike of Rs 1-2 per unit in solar power rates if the duty is imposed.

Since electricity is not covered in the goods and services tax, there will not be any input tax credit; any change in cost due to surcharge would be passed on to consumers. "This will lead to escalation in cost of power, borne by the consumer," said A K Khurana, director general, Association of Power Producers.

For imported coal-based power plants, it would translate into an increase in fuel cost as well. According to a CRISIL analysis, petcoke and imported non-coking (thermal) coal prices would increase 0.6-0.8 per cent and 0.1-0.2 per cent, respectively.

Dearer Gear

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- Solar panels from last year on have been inviting 7.5% Customs duty
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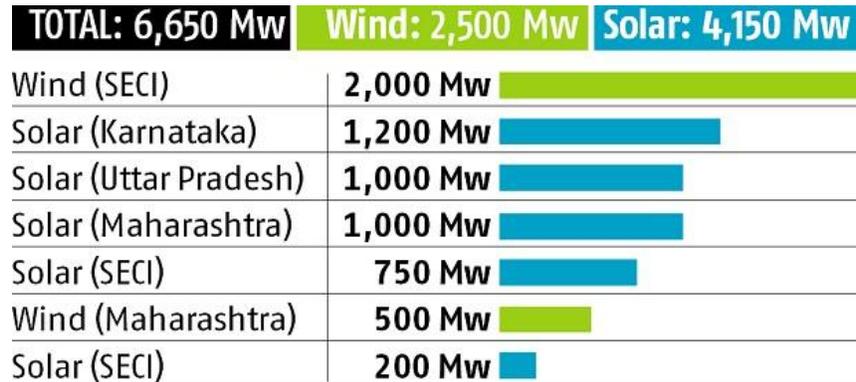


India's renewable energy project tendering to be an all-time high in FY18

Business Standard : February 8, 2018

With the govt tendering close to 6,650 Mw of renewable energy projects in February alone, the total projects offered during 2017-18 will exceed a combined 10,000 Mw capacity

In what will be a record offering in a financial year, India is set to tender close to 6,650 Mw of renewable energy projects in February. Of this, 2,500 Mw are wind power projects and 4,150 Mw solar. With this, the total projects offered during 2017-18 will exceed a combined capacity of 10,000 Mw. The tranche of projects to be offered includes several state-level projects from Uttar Pradesh (1,000 Mw), Karnataka (200 Mw), Maharashtra (1,500 Mw of wind and solar) and Andhra Pradesh (750 Mw). Wind power projects totalling a generation capacity of 2,000 Mw would be bid out by SECI, a state-run company under the aegis of the Union new & renewable energy ministry. Under the Paris Climate Change accord, India has committed itself to building projects with a combined capacity of 175 Gw renewable energy by 2022. Of this, 60 Gw is solar and 40 Gw wind. The Narendra Modi-led central government last year introduced a competitive bidding process for wind power projects, along the lines of solar. In the 1,500 Mw of projects that have been tendered out, the wind power tariff has fallen to Rs 2.34 per unit. The lowest tariff in solar stands at Rs 2.44 per unit. In its latest report, research body Mercom Capital Group said India had achieved a milestone 20 Gw in cumulative solar installations. Though the MNRE website still maintains that the solar capacity in India is at 16 Gw, the Mercom report further said the top state for solar installations was Telangana, followed by Karnataka, Andhra Pradesh, and Rajasthan. "Twenty GW of solar installations is a laudable achievement for India, considering the initial goal.



However, it took eight long years to reach 20 Gw and hopefully the pace will pick up going forward. Private solar companies in India have gained vital experience over the years and are looking for the government to create an environment conducive to growth and remove the policy uncertainties that are currently plaguing the

Source: Solar Energy Corporation of India

industry," said Raj Prabhu, CEO of Mercom Capital Group. According to Mercom's Q3 2017 *India Solar Market Update*, a total of 1,456 Mw of solar projects were tendered and 1,232 Mw of solar projects were auctioned in the third quarter of 2017. That total represented a marked reduction from the activity seen in the second quarter 2017, when 3,408 Mw of solar projects were tendered and 2,505 Mw auctioned. According to the annual plan of the ministry, 3 Gw of solar power projects were to be tendered in December 2017, followed by 3 Gw in January 2018, 5 Gw in February 2018, and 6 Gw in March 2018. The plan mentioned that 30 Gw each would be tendered in 2018-19 and 2019-20. However, market experts are cautious about the coming financial year as several regulatory changes would impact the renewable energy landscape. While there is an impending decision on the dumping of imported solar panels, the recent increase in customs duty due to an additional 10 per cent surcharge would escalate the price of solar projects, and thereby impact tariff. Close to 80 per cent of India's solar power is based on imported content. Solar panels have been inviting 7.5 per cent customs duty since last year. Sector executives said a 10

per cent surcharge over it would escalate the cost of panels and impact tariffs as well. The surcharge comes at a time when there is also lurking fear of safeguards and anti-dumping duty on solar imports coming from China and Malaysia. The Directorate General of Safeguards Duty (DGS) in its preliminary report investigating the dumping of solar cells, (whether or not assembled in modules or panels), has suggested a duty of 70 per cent on the imports coming from China. The industry expects a hike of Rs 1-2 per unit in the solar tariff if the duty is imposed.

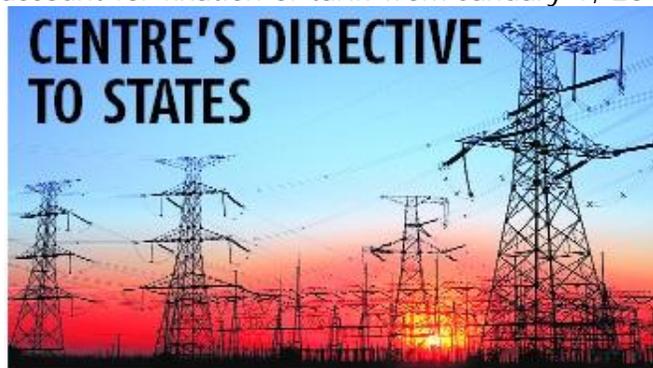
Give power distribution to private franchisees: R K Singh to states

Business Standard : February 6, 2018

Tariff policy to cap loss pass-through at 15%; Singh asks states to bring down operational losses to 15% by Dec 2018

With many states facing high aggregate technical and commercial (AT&C) losses, indicating operational inefficiencies, the Union Ministry of Power has asked the states concerned to hand over the job of power distribution to private franchisees. In a letter to all states, Minister of State for Power and New and Renewable Energy R K Singh has asked them to step up the monitoring and technical upgrade of power supply systems. The minister has also warned the states that the Tariff Policy 2018 will mandate that no state will be able to pass on the losses incurred by distribution companies (discoms) to consumers of electricity. "There is no justification for the consumers to be asked to bear the cost of inefficiency and theft. The technical losses generally vary from 2.5 to 6.5%. There is no reason for any losses beyond that. We had agreed that the losses will be brought down to less than 15% by December 31, 2018.

We propose to provide in the tariff policy that the maximum losses which can be taken into account for fixation of tariff from January 1, 2019, would not be more than 15%," said the



CENTRE'S DIRECTIVE TO STATES

- Bring down operational losses to 15% by December 2018
- Give out loss-making areas to private franchisees
- Ensure 100% metering, any subsidy for electricity to be in DBT mode
- New tariff policy to disallow pass-through of losses on consumer power tariffs
- Introduce 'time of the day' tariff to manage power supply better
- Honour the PPA and ensure sources for meeting 100% power demand is tied up

letter dated January 29, 2018. The letter said there were states that continued to have AT&C losses of 20-50%. According to the MoU signed by 31 states (and Union Territories) with the Centre under the Ujwal Discom Assurance Yojana (UDAY), the states have to reduce power theft and operational inefficiencies to reduce AT&C losses to 15% by 2019. The UDAY dashboard states the current average AT&C losses of the country stand at 23.37%. The letter further said the audit of all power supply feeders should be done regularly and the "loss-making areas should be given out on the franchisee system", by which power is sold in bulk to the franchisee, which gets a commission per unit. The selection, the letter said, should be through open bidding. "It is time to move away from the era of load-shedding. There is sufficient installed generation capacity to meet our energy requirements. We are also giving funds to strengthen the distribution system. Therefore, there is no reason why 24x7 supply should not be guaranteed to every consumer," Singh said in the letter. In an



earlier interview to *Business Standard*, Singh had said the Electricity Act would be amended to make the tariff policy mandatory. The letter has urged the states to work towards 100% metering, reducing human interface in power supply, and honouring power purchase agreements. It also said all consumers should be metered and they should pay in accordance with the tariff policy. Subsidies given to any section of consumers will go to their bank accounts as direct benefit transfer.

