Indian solar policy clear-up muddled by safeguard saga

Policy | The Indian solar juggernaut shows few signs of slowing down en route to its huge target of 100GW by 2022. But, as Tom Kenning, recent policy developments could create a few bumps in the road along the way

At the end of 2017, India announced plans to tender out 20-30GW of large-scale solar energy capacity every year, with its eyes firmly on Prime Minister Narendra Modi's 100GW by 2022 target. The idea was to blast away the cobwebs of stagnation through sheer ambition, regardless of any major issues plaguing the sector at that point in time. Indeed, tenders came out thick and fast, perfectly in line with government timelines in early 2018, but it took until the summer for the auctions to really start rolling. This was because there were still issues with a new countrywide sales tax and confusion at ports where PV modules from foreign suppliers were entering India, along with complete uncertainty over an anti-dumping investigation that had been dragging on for some time. The auction bonanza then hit its own, far larger snag when the Ministry of Finance suddenly announced a safeguard duty against cell and module imports from China, Malaysia and developed countries on 30 July 2018 (see boxout). The duty is sure to cause more confusion and debate over the coming weeks and months, particularly with a worrying trend of auction cancellations rearing its head.

This article seeks to clarify where India stands with each of these hindering laws and regulations at present, while also highlighting more progressive introductions such as the National Solar and Wind Hybrid Policy and their efficacy.

Goods and Services Tax

The industry was pained for several months by the Goods and Services Tax Bill (GST), introduced on 1 July 2017, as it awaited clarity on tax levels for different equipment. Eventually, modules would be taxed at 5%, while certain other equipment would be hit with levies of 18% or higher.

"Now, by and large there is clarity in terms of what is the level of GST applicable on individual pieces of equipment, modules, inverters, cables etc.," says Vinay Rustagi, managing director of consultancy firm Bridge to India. "The big issue is the lump-sum EPC contracts – do they qualify under the 5% GST regime or are they taxed at higher rates? And many different states are interpreting the GST order very differently and levying full GST of 18% on the lump-sum contracts, as against an expectation that the lump-sum contracts will attract a GST of only 5%."

For months, goods were also being held up at ports all over India due to confusion over a customs duty, however, the issue has now been resolved and Bridge to India has not heard of any related issues in the last month.

With GST and customs duty cleared in the spring, the solar sector looked forward to unfettered auctioning, only with the threat of a safeguard duty imposition lurking in the background.

Tender opportunities

Whatever short-term moments of stasis or confusion arise in the industry, there is a general sense that Modi and his government's vision of solar is so robust in the long term that players can step in for the long game with confidence. For example, Leandro Leviste, CEO of developer and manufacturer Solar Philippines, a company that plans to enter India by signing 500MW of solar PPAs this year, says that his company is willing to accept initially lower returns since it believes in India's massive long-term potential.

"The investment interest in the sector is very, very strong," adds Rustagi. "There are still many players both domestic and international who've got a very strong appetite for bidding large numbers for these projects."

This manifested itself in heavy oversubscription for tenders in the state of Odisha, and NTPC and SECI's multi-gigawatt, pan-India auctions prior to the safeguard duty imposition.

Credit: Government of Karnataka

The Pavagada solar park in Karnataka is expected to become the world's largest single PV project at an eventual 2GW

"Also bear in mind that while land acquisition, transmission and even fundraising is going to become more challenging given the increasing scale of these projects," says Rustagi. "Now the developers have got a much larger time period for implementation of 21-24 months as against 12 months. So, on the whole we don't see any cutback in developer interest. What we do see is the level of aggression in terms of tariffs to come down a little bit and we think it has already come down somewhat because module costs are now back to their historic lows or where they were about 1-1.5 year ago and the tariffs are still in the INR2.50-2.80 category and it's pretty unlikely that the tariffs will go down beyond these levels."

The Power Ministry recently amended solar power procurement rules, giving the likes of procurers SECI and NTPC the option to extend:

- land acquisition periods from seven to 12 months;
- financial closure periods from seven to 12 months from the date of execution of the PPA;
- project commissioning timeframes from 13 months to 21 months, from the date of execution of the PPA;

- projects of >250MW capacity commissioning timeframes from 15 months to 24 months, from the date of execution of the PPA.

The sheer number of tenders also means that developers who don't win projects one day can be sure to have a crack at another auction after only a short wait, adds Rustagi.

Developers had lobbied NTPC to change the rules of its 2GW auction as they claimed the maximum allocation available to any single player was so big that it favoured the biggest and most financially powerful bidders who could take the risk of economies of scale and bid for the whole amount. It was somewhat surprising to the industry then that NTPC's 2GW auction saw Japanese giant Softbank walk away with just 600MW having bid at 2.60 rupees per unit, just higher than the three other winners Acme Solar, Azure Power and Shapoorji Pallonji who bid at 2.59 rupees.

When asked if there is now room for smaller developers to come back into the market, Rustagi says that the ever increasing project sizes are seeing some consolidation within the industry and it's only the larger developers with the experience, the funding capability etc. who will play the lead role going forward.

"So we do expect that the smaller developers will continue to be edged out of the market because they simply can't compete versus the bigger developers, and the project sizes are getting larger as well," he adds.

There were some worrying signs even before the safeguard duty came in, however, with SECI cancelling 2.4GW out of its 3GW auction citing the tariffs as being too high, while Uttar Pradesh (1GW) and Gujarat (500MW) cancelled their auctions of late for the same reason.

Tying up with down

One of the most impactful ideas touted by the Indian government is its unusual plan to link all future tenders for solar deployment with manufacturing capacity. It would mean all developers would no longer be able to think exclusively in downstream terms and would have to either start upstream manufacturing operations or – more likely – enter a joint venture with an established manufacturer, whether a foreign or domestic firm.

There are two issues with this plan that have already surfaced in the first attempt at such a tender. A 5GW manufacturing/10GW solar deployment tender (minimum project bid for 1GW manufacturing/2GW solar) was floated in late spring 2018.

Credit: Indosolar

The Indian government has sought to link project tendering with manufacturing capabilities

In a briefing note, Bridge to India stated: "We believe that few players have the willingness and capacity to participate in a tender of this scale/complexity. Combined capital cost of a 1GW manufacturing line and 2GW projects is estimated in excess of INR110 billion (US$1.6 billion). Minimum net worth requirement for bidders is INR20.4 billion (US$300 million). Our list of potential candidates is limited to ReNew, Adani, Softbank and Tata Power."

Secondly, SECI is reported to have toyed with the idea of reducing the manufacturing component back down to 3GW instead of 5GW to make the proposition more attractive. It may come as some comfort to developers that most analysts believe that the 10GW solar was there to be tendered in any case – whether tied to manufacturing or not – so the amount of solar being tendered should not to be critically affected by the success or failure of any attempts to tie in manufacturing.

Solar parks

Aside from the odd state tender, the bulk of tendered capacity in 2018 and for the coming year will be for projects outside solar parks. Even though MNRE sanctioned the Solar Parks scheme to be increased from 20GW to 40GW, it has now extended the implementation period from 2019-20 to 2021-22. This is partly due to land acquisition issues and an overall lack of power demand compared to expectations in certain states. Developers must now focus on pan-India tenders with PV to be connected to the Interstate transmission system (ISTS).

O&M/EPC opportunities

New opportunities on the engineering, procurement and construction (EPC) side are also narrowed by the fact that larger India-based firms are increasingly bringing all the EPC work in house and Rustagi thinks this a trend that is unlikely to change. However, there is one caveat in that there has already been a bunching up of tenders, and developers that win large amounts of capacity may simply not have enough capacity for execution. This would then open the doors for outsiders to come in and perform EPC services. Acme Solar for example has racked up more than 2GW worth of capacity awards in the last two months, although, when asked, Shashi Shekhar, vice chairman, Acme Group, does not say whether his company will need outside help.

Hybrid push

In May, MNRE released its 'National Wind-Solar Hybrid Policy' seeking to encourage hybridisation of projects due to the benefits they offer for grid integration. Hybrid systems involve solar PV systems and wind turbine generators being configured at the same point of connection. In order to be classed as 'hybrid', the rated power capacity of one source of energy must be at least 25% of the rated power capacity of the other resource.

Moreover, any form of energy storage can be added to such projects.

Hyderabad-headquartered firm Greenko Energies has received state government approval for a huge renewable energy project involving 1GW of solar, 550MW of wind and 1.2GW of pumped energy storage in the Indian state of Andhra Pradesh, while SECI has a tender out for a 160MW solar-wind-battery project in the same state and a 2.5GW tender out for hybrid projects across India.

Testing standards

While India's attempts to bring in new quality standards came under fire for not being any more stringent than already well-recognised global standards, they are also burdensome for developers, not just manufacturers.

"Obviously they affect everybody because all modules sold need to reach the specifications of the standard, and even today there are not enough testing labs in India and MNRE has been extending the deadlines on a piecemeal basis," says Rustagi. "That again doesn't give any clarity to the market, so the issue is not just for the module makers, it is for all equipment makers and it is for developers who are hoping to buy this equipment. It's hard to see how the situation will improve even in the next one year."

Conclusion

When India announced its 100GW by 2022 target, many laughed at the idea, but its progress has astonished bystanders. The market – now settled in the top three of the world – is close to full maturation. The safeguard duty saga will certainly make further progress bumpy, but most consider it a short-term challenge. Utility-scale solar is here to stay, in any case, but its trajectory hinges on how the government goes about trying to appease both the solar developers and its domestic manufacturing lobby, and whether that materialises in several manufacturing-linked solar tenders or even a future anti-dumping duty.

India's National Energy Storage Mission (NESM) sadly focuses almost entirely on batteries for electric vehicles (EVs) but the hybrid solar and wind opportunities could be a strong outlet for this fledgling sector.

With all this in mind, the issue of quality still has to be raised when discussing India. Has the frenzy to drive down costs and get a foot in the market with little or no margin created a sustainable industry?

After visiting six solar projects in various Indian states, PV consultancy PI Berlin, which has opened a subsidiary based in Delhi, issued a report highlighting serious safety concerns, poor installation practices and system output monitoring as well as a worrying lack of warranties. It found faulty electrical joints, delamination and cracked cells, much of this stemming from the installation process. Ultimately, to draw suitable rates of return from PV projects, the focus must not only be on navigating the minefield of policy changes, but also on taking steps to ensure the use of high-quality components with proper assurance processes in place. ■

Safeguard duty

At the time of writing, India's Ministry of Finance had tried to impose a 25% safeguard duty on imports of solar cells and modules from Malaysia, China and developed countries starting on 30 July, but it has now temporarily deferred the duty.

The backtracking came following direction from the Odisha High Court, which had issued a stay on the safeguard duty imposition prior to the ministry's announcement. While uncertainty on the issue is likely to remain for some time, it can be assumed that the duty will come fully into force again in the near future.

Once imposed, the 25% duty will run for one year, then reduce to 20% for a six-month period and to 15% for the final six-month period.

The Indian solar industry currently sources more than 90% of its cells and modules from China and Malaysia, so the duty has major ramifications for the sector.

Concerns include the threat of rising tariffs, the appetite of utilities to buy more expensive power (there is already a trend of auction cancellations due to high tariffs), the possibility of circumvention of the tariffs though other Southeast Asian countries (Vietnam, Thailand, the Philippines and Indonesia) and the duties not being high or long enough to actually support domestic manufacturing.

"We are pleased that something at last has been done and uncertainty has been removed," says Rakesh Tiwari, CFO, Mundra Solar, a unit of Indian conglomerate Adani, and a member of the Indian Solar Manufacturing Association (ISMA). "Now solar manufacturers and developers can both go back to their drawing board and work accordingly."

However, given a Parliamentary Committee report revealing that 200,000 jobs in India had been lost as a result of the country's reliance on cheaper solar imports from China and other countries, Adani had been expecting a higher tariff imposition.

For developers, the greatest concern is the effect of the duty on projects that are already under construction or bid out.

Indeed Sunil Jain, CEO of Indian developer Hero Future Energies, says that developers had met with the MNRE secretary Anand Kumar, who had said ongoing projects would be given a pass-through option to avoid bearing the costs of the duty. However, there is still uncertainty and Jain says that even with a pass-through, how to implement it will be another problem. For example, many companies are still waiting for a pass-through on the Goods and Services Tax (GST) more than a year after its implementation.

"Obviously this has put a number of projects which are half constructed or 75% constructed into a situation of uncertainty," says Shashi Shekhar, vice chairman, Acme Group.

Acme expects its 2.44 rupee solar tariffs to go up to 3.01 rupees (up 60-70 paisa) as a result of the safeguard duty, while Bridge to India has itself estimated a 25% duty is equal to around a 40-50 paisa impact on tariffs.

A safeguard duty on certain cell and module imports into India has been temporarily deferred