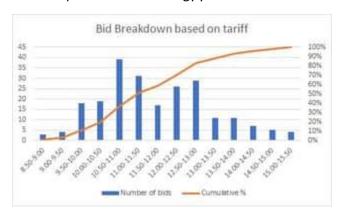
## Has The Solar Energy has come of Age for Sri Lanka?

There is much euphoria after opening the tenders for the 150 MW of Solar PV parks on the 22<sup>nd</sup> July 2020. This tender called for offers for setting up Solar PV parks of capacity in the range 1 -10 MW.

The significantly lower tariff levels claimed by the tenderers may have come as a surprise to many, including the CEB, which had set a ceiling of Rs 15.60 per kWh as the cut off point for acceptance. The range of offers received is reported to be in the range Rs 8.89 –Rs 11.50 varying with the targeted GSS. A range of tariff is to be expected due to the range of capacities and different locations with the variability of the expected annual energy yield at each location and other factors.



Naturally the Chairman CEB was ecstatic with the outcome and had expressed his satisfaction in the social media

Quote

Today is a remarkable day for Solar Energy Sector in Sri Lanka as well as CEB.

Tender bids of 150MW Solar Energy Generation (from 1 to 10 MW solar PV plants) were opened today. There were 230 keen participants mostly local investors. Total investment would be around USD 150 million. This projects will generate direct and indirect jobs for 2000 to 3000 people.

We got very competitive bids of average 10 Rs/kWh. In comparison with previous prices and 15 Rs/kWh upper ceiling of the tender this price will be very beneficial to the country as well as CEB. Anyone should understand the significance of this 10 Rs/kWh price when considering CEB's average generation cost of 23 Rs/kWh and average selling price of 16.50 Rs/kWh.

The credit of this successful tender must go to the new government, CEB staff and the investors.

Unquote

The citizens of Sri Lanka who whole heartedly approve the President's and the government's policy goal of achieving the 80% RE target by 2030 are equally encouraged by the clear signal given by the market to underscore the fact that electricity from Renewable energy sources are indeed the lowest cost option. It is also hoped that the majority of successful tenders would be from local developers, embarking Sri Lanka on the path to ensure that Energy Industry will become a local industry.

However, even the high end of the range of offers received does leave ample room to add the added storage capacities for these plant to overcome both the issue of intermittence and the lament that Sun does not shine in the night.

The Chairman has also spelled out his intentions to ensure the speedy implementation of the offered projects so that the CEB as well as the country would reap early benefits of this opportunity as well as to build on the trend of lowered prices.

There has been two previous tenders called for by the CEB for solar PV parks

- The first tender was called for 1 MW x 60 in 2016. Only 35 offers were received. The average tender price was of the order of Rs 17.50 per kWh. The US Dollar parity was only Rs 150. The second tender for 1 MW x 90 was called in 2018 and attracted over 500 offers. The lowest prices for each GSS ranged from about Rs 13.00 upwards. But awards were made only in 2019 and only 30 have singed PPAs and none have been commissioned yet. By the time the awards were made the US \$ has moved up from Rs 150 to Rs 185 +. So those who quoted low prices below Rs 15.00 may never sign the PPAs and implement the projects. With the depreciation of the Sri Lanka rupee, many projects may not be implemented.
- After nearly four years, from the two tenders for 1 MW x 150 only 15 projected are reported as being completed. The actual status of the 30 projects reported as under construction are not clearly known.
- In both cases, due to the long delays by the CEB in making awards and allowing the low prices quoted, to prevent the more serious viable tenderers being selected, the country continues to lose money.
- The new tender allows for offers to be made from 1 MW to 10 MW, which is an attraction. Although there has been a down ward trend of prices of the Solar Panels, the US \$ has increased significantly, compared the parity prevailing at the time of the 1 MW x 90 tender. There is also the natural increase in cost of labour and other costs. This may be reason for the drop in the number of tenders with only 230 offers, perhaps due to the loss of confidence of serious developers, due both to the delays by the CEB and the possibility of spurious low priced offers which block up the access to the GSS capacity. Much effort and expense is required to make a bid, including the bid bond which gets blocked for a long time.
- Thus the very low prices quoted in the current tender is suspect and at such low prices projects may not ever be built. But unless the CEB acts speedily and reject them and make awards to the higher but more viable bidders soon, the access to the particular GSS will be blocked.
- The CEB declared a ceiling tariff of Rs 15.60 for the current tender. It is therefore expected that they have done their homework and should have a clear idea of the viable price levels. Thus offer of 50% below this ceiling price are highly suspect. The possibility of using this opportunity for laundering black money is also a distinct possibility as described in an article by the Senior

Asst. Director of Central Bank in the Island newspaper. http://island.lk/index.php?page\_cat=article-details&page=article-details&code\_title=225395

- The acceptability of the quality standards guaranteed, is an important criterion to be checked.
- One cannot help but wonder if this is an attempt to further delay the widespread the
  introduction of Solar PV parks by portraying an unviable low prices, but not proceeding with the
  projects. Thereby the CEB may be inclined to offer much lower caps which will not attract any
  serious developers for the future tenders. Such things are known to happen and the risk of
  losing only the Bid Bond of Rs 1,000,000 may be considered acceptable to ensure the
  continuation of the highly lucrative oil based power generation.
- An interesting test would be to see how many of those offering such patently unviable tenders, have already received awards during the last two occasions, and how many of such projects have even commenced implementation. Shouldn't such companies be black listed from participating in any future tenders?

A goal of making all the awards and signing the PPAs and obtaining performance bonds before end of the year is the only means by which the Chairman's expectation noted as "Hope we will be able to achieve above targets with the firm commitment of all relevant parties to mark 2020 is the highest solar PPA signing year"

If not, the bid bond should be enchased and the tenderer and the directors should be blacklisted for trying to block the development of the Solar Energy by serious developers at viable levels of tariff.

While whole heartedly approving and sharing his ambition, we would like to point out some issues worthy of consideration before the next tender proposed by the Chairman is launched.

There were some improved conditions stipulated in the last tender in comparison with the previous tenders, particularly the increased capacity up to 10 MW. There are few more improvements that could be considered for the next tender.

- There is a great disparity in the cost to the different developers, by the length of the
  transmission line, which is governed by the availability of suitable lands. While this may be
  considered an inherent risk to be accepted by the developers, it is suggested that the CEB
  should seek to locate suitable lands coupled with respective GSS and seek offers targeting such
  lands. This would optimize the tender process by allowing the developers to compete on a level
  playing field.
- 2. A further improvement may be to seek the assistance of the CEA and the local authorities to ensure such lands are pre-approved for the development of Solar PV Parks. This would remove the greatest obstacle faced by the genuine developers and is the cause of most delays in implementation of the projects.
- 3. CEB will need to have a clear idea about the commercially viable lowest tariff possible under the conditions prevailing at the time of the tender, such as the parity rate, cost of solar panels and inverters which contributes the major portion of the overall cost structure and cost of finance. This will enable early detection of any attempts to destroy the stable and sustainable development of the Solar Energy resource by whatever means.

4. The objective should be broader than the mere addition of energy to the grid. The Solar Energy opens up the potential for making the energy sector an indigenous industry. This would contribute to the national economy much more than what is given by the amount of electricity generated, by way of high level employment, development of local entrepreneurs and possibility if upstream and downstream integration not to mention the savings in foreign exchange.

We also look forward to an early publication of tenders for the 100 MW Solar projects at Siyambalanduwa and Pooneryn , which received the cabinet approval three years ago. The scale of such projects hold out the tantalizing prospect of even lower unit prices for the Solar Electricity which would indeed place Solar Power as a significant renewable energy contributor to the national energy supply.

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