To

The Secretary

Telangana State Electricity Regulatory Commission

5th floor, Singareni Bhavan, Red Hills

Hyderabad – 500 004 **December 7, 2020**

Respected Sir,

Sub : Submission of suggestions and comments in O.P.No.24 of 2020 relating to determination of pre-fixed levelised tariff for solar power under component A of Pradhan Mantri Kisan Urja Suraksha Evam Utthan Mahabhiyan (PM-KUSUM) scheme

Further to my submissions dated 5.11.2020, am forwarding the following further submissions on the subject issue for the consideration of the Hon'ble Commission:

1. **In the latest competitive biddings floated by Solar Energy Corporation of India (SECI), the lowest tariff of Rs.2 per unit is discovered (copy of a report dated 24.11.2020 is encloded). This confirms that the parameters proposed to be adopted by the Hon'ble Commission and regulations/parameters of the CERC for fixing tariff for solar power are not in consonance with the latest market trends and have already become redundant.**

2. **It is reported that there has been delay in signing power supply agreements by SECI with Discoms for supply of renewable energy. It is explained that "industry experts believe the delay in signing power supply contracts has more to do with drop in module prices which gives an impression that tariffs may fall further. The latest project awards for RTC and peak-off peak were costly in comparison to prices on power exchanges, although they are comparatively different in terms of specification. The discoms are way of the must-run status of renewable power and the renewable purchase obligations, which makes it compulsory to buy a percentage of renewable power depending on state's resources" (copy of a report dated 23.11.2020 is enclosed). In other words, Discoms of different States are not willing to rush to sign PPAs with SECI or other central agencies and developers of renewable energy, in view of the continuing trend of tariffs for RE, especially solar and wind power, coming down. This cautious approach of the Discoms is justified and prudent .**

3. **While maintaining that increasing efficiencies in solar and wind energy modules have helped bring down clean energy tariffs, the Union Minister for Power, Sri R K Singh, is reported to have expressed optimism that "the clean energy tariff would further come down" (copy of a report dated 29.11.2020 is enclosed).**

4. Seen in this background, the submissions of some of the objectors, claiming themselves to be farmers, requesting the Hon'ble Commission to consider Rs.4.28 per unit of solar power for PM KUSUM scheme based on its order in OP No.72 of 2020 dated 2.3.2020, are patently irrational and unrelated to market trends. The latest lowest tariff discovered through competitive biddings, as quoted above, for solar power makes questionable the veracity of the claims that "there is no reduction in the cost of solar equipment in last one year but increased due to Covid-19 Pandemic and the limitations of domestic manufacturing. The cost of other components like inverters, switch gears etc. also increased globally." That the text of submissions of these objectors is uniform confirms its orchestrated nature and how lobbies can work. Larger consumer interest and fairness simply do not find any place in the approach of such lobbies.

5. Contending that the scheme being proposed for development of farmers, the said objectors have maintained that they do not have expertise to develop the plants and that they are forced to hire design, procurement and maintenance experts. It is unthinkable that poor, small and marginal farmers, or even medium farmers, can afford to set up power plants. Only the rich farmers can do that. The subject scheme provides for developers, not only farmers, to take up solar power plants. Under the façade of farmers, the scheme is really intended for private developers and rich farmers with other sources of income.

6. As already pointed out, regulations/parameters of CERC for determination of tariff for solar power plants are unrelated to latest market trends and as such have become redundant. As such, any consideration to fix levelised tariffs on the basis of regulations/parameters of CERC is misplaced and has no relevance.

7. The submission of the two TS Discoms that "the Hon'ble Commission will be requested to explicitly mention that any income tax paid by the generators and reimbursed by Discoms shall be passed through to the end consumers via retail tariff" is highly objectionable and unfair. The failure of the Discoms to oppose the proposal to allow income tax paid by developers of solar power plants as pass through to be collected from consumers shows their unbalanced and pro-developer stance.

8. The request for considering the additional cost of land in the calculation of levelised tariff has several implications. If it is payment of lease rent, it confirms that it is not the farmers who set up the projects, but private developers. A uniform consideration of the lease rent ignores ground realities. Since it is a deal between the farmers and the developer concerned, the Hon'ble Commission will have no role in it. Depending on the nature and location of the land, lease rents may differ from place to place. There have been serious allegations in the Rayalaseema area that the private developers of renewable energy power plants cheated the farmers by paying lesser amounts and taking their signatures on papers showing payment of higher

amounts. In the face of such manipulations, there is no check on such fraudulence and the SERC has no jurisdiction to examine and decide the same. If it is outright purchase of land by developers, the cost of land should not be considered at all for the purpose of working out capital cost of the project concerned and tariff, as has been the standard practice. It is because, there is no depreciation of land and its value. On the other hand, with passage of time, value of land gets appreciated periodically. As such, it is not being taken into account for working out depreciation charges and fixed charges.

9. **If the Hon'ble Commission wants to determine pre-fixed levelised tariff for solar power under the subject scheme, i.e., the upper limit for bidders to quote their price, it may fix it as per the latest lowest tariff discovered through competitive biddings in the country plus or minus five percent. Such an approach avoids all questionable and subjective considerations and ensures competitive tariffs on firm basis to the consumers. And such levelised tariff should be made applicable for a specific shorter period and needs to be revised periodically in tune with changing market trends. The competitive rates discovered through competitive biddings include substantial profit as incorporated by the developers themselves. In other words, the developers of plants themselves can take care of their expenditures and profits.**

10. **I request the Hon'ble Commission to provide me an opportunity to make further submissions during the virtual public hearing on the subject issue.**

Thanking you,

Yours sincerely,

M. Venugopala Rao
Senior Journalist &
Convener, Centre for Power Studies

H.No.1-100/MP/101, MonarchPrestige,
Journalists' Colony, Gopanpally,
Serilingampally Mandal, Hyderabad - 500 032

Encl : Copies of three reports

Solar power tariff dips to all-time low of Rs 2 per unit

Under the SECI auction concluded on Monday, Saudi Arabian firm Aljoemaih Energy and Water Co and Green Infra Wind Energy emerged as the lowest bidders by quoting a tariff of Rs 2 per unit for 200MW and 400MW capacities

PTI **November 24, 2020, 08:00 IST**

NEW DELHI: Solar power tariff on Monday dropped to an all-time low of Rs 2 per unit in an auction conducted by the Solar Energy Corporation of India (SECI), according to a source.

Under the SECI auction concluded on Monday, Saudi Arabian firm Aljoemaih Energy and Water Co and Sembcorp Energy India arm Green Infra Wind Energy Ltd emerged as the lowest bidders by quoting a tariff of Rs 2 per unit for 200MW and 400MW capacities, a source told PTI.

The source further said that state-run power giant NTPC quoted a price of Rs 2.01 per unit for 600 MW capacity.

However, NTPC will get the balance amount of 470 MW even as it bid for 600 MW because it is the L2 (second lowest) in the auction.

In July this year, solar power tariffs had dropped to a low of Rs 2.36 per unit in an auction of 2GW capacities by SECI.

Delay in supply pacts with discoms seen to hit renewable energy projects

By: Vikas Srivastava |
November 23, 2020 4:15 AM Financial Express

SECI is trying to bundle this relatively high cost power with low cost power from other tenders to offer an agreeable price to discoms.

This would avoid unnecessary delays and help project developers streamline their project schedules.

The delay in signing power supply agreements (PSA) by Solar Energy Corporation of India (SECI) with discoms for over 20,000 MW of power projects awarded in the last one year is threatening the renewable energy target of 175 giga watt (GW) by 2022.

Manufacturing projects of 12,000 MW was awarded in June, while the peak-off-peak units of 1,200 MW were awarded in February.

In addition, RTC projects of 400 MW were awarded in May. There are several other projects, totalling around 6,500 MW that were awarded in the last one year and are awaiting PSA with discoms.

In a recent MNRE notification for procurement of power from grid connected hybrid renewable projects through tariff based competitive bidding, a clause adds that if the nodal agency (SECI) is unable to enter into PSA within six months of issue of letter of award, then those projects will get cancelled.

Industry experts believe the delay in signing power supply contracts has more to do with drop in module prices which gives an impression that tariffs may fall further. The latest project awards for RTC and peak-off peak were costly in comparison to prices on power exchanges, although they are comparatively different in terms of specifications.

The discoms are wary of the must-run status of renewable power and the renewable purchase obligations, which makes it compulsory to buy a percentage of renewable power depending on state's resources.

The Union power ministry has mandated all discoms to purchase at least 21% of their total energy requirements from renewable energy sources by 2021-22.

Kameswara Rao, lead, energy practice at PwC said, the un-contracted tendered capacity has become large and is indicative of a deeply fundamental mismatch.

The expectations of future demand, load profile; costs and reliability have diverged significantly from a discom's perspective.

"The benefits of the current format, such as large scale, standardisation, and creditworthiness still hold, but the requirement of discoms has changed.

A consultation with discoms is a start, but there is a need for a comprehensive revamp of the format, involving scalable storage and flexible contracting for future bids," Rao said.

Jyoti Gulia, founder of consultancy firm JMK Research, said that government should consider implementing the bidding approach as followed in thermal sector wherein all the relevant approvals are taken from discoms as well as state regulators before planning a bid and not the other way round as what is been pursued in renewable sector.

This would avoid unnecessary delays and help project developers streamline their project schedules.

Vinay Rustagi, managing director of consultancy firm Bridge To India, said that power from many of these projects is costly due to complex tender designs.

SECI is trying to bundle this relatively high cost power with low cost power from other tenders to offer an agreeable price to discoms.

"However, the possibility of some of these projects being cancelled can not be ruled out if discoms don't come forward to purchase power. As more time passes by, the risk of cancellation increases," Rustagi said.

SECI, however, is confident of achieving the target in coming months as it believes Covid played the spoil sport in holding physical meeting with discoms and expects some of the PSAs to be signed in coming months.

"We do not consider the delay as cause of worry and are confident of selling all these capacities.

"We don't believe that these projects are costly. The Rs 2.66/kWh price for manufacturing projects is the cheapest that no other states have offered.

"The entire concept of blending was introduced in projects to allay the fear of discoms that prices may drop further in future bids," a senior SECI official told FE.

Higher efficiency brought down renewable energy tariff: R K Singh

Earlier this month, solar power tariff dropped to an all-time low of Rs 2 per unit in an auction conducted by the Solar Energy Corporation of India (SECI).

PTI November 29, 2020, 08:00 IST

New Delhi: Power Minister R K Singh on Saturday said that increasing efficiencies in solar and wind energy modules have helped bring down clean energy tariffs. He also expressed hope that the clean energy tariff would further come down.

Earlier this month, solar power tariff dropped to an all-time low of Rs 2 per unit in an auction conducted by the Solar Energy Corporation of India (SECI).

Under the SECI auction concluded, Saudi Arabian firm Al Joemaih Energy and Water Co and Sembcorp Energy India arm Green Infra Wind Energy Ltd emerged as the lowest bidders by quoting a tariff of Rs 2 per unit for 200MW and 400MW capacities.

In July this year, solar power tariffs had dropped to a low of Rs 2.36 per unit in an auction of 2GW capacities by SECI.

"Increasing efficiencies in Solar PV and wind modules is bringing down prices, enhancing affordability and accessibility of energy and supporting better standards of living," said Power Minister R K Singh while speaking at the Valedictory Session of the 3rd Edition of the Renewable Energy Expo & Conference, RE-INVEST, 2020.

The minister also said that increasing storage and democratizing RE deployment will be the next frontier for the Government of India".

Highlighting India's drive to bring in more energy access with a target of 450 GW by 2030 and through reduction of prices and use of clean fuels, the minister added that as a policy, India will shift to 'Green Ammonia' from imported Ammonia, as well as add volumes in the usage of hydrogen.

Apart from 450 GW RE capacity India will also focus on building an integrated clean gas-based economy said Petroleum Minister Dharmendra Pradhan on the occasion.

Addressing the gathering, Bento Albuquerque, Minister of Mines and Energy, Brazil, said,

"Brazil & India are key partners in developing mechanisms for the use of ethanol. Our countries are energy powers & our association will have a positive impact on society and in the post-pandemic world.

"The RE-INVEST is a great platform to discuss and debate with experts in the world of RE on the opportunities, issues and challenges of procuring energy from renewable sources."

One Sun One World One Grid is also a strategy that India continues to push for at an international level.

Upendra Tripathy, Director General, International Solar Alliance (ISA) emphasized India's role in the world and the work that ISA continues to foster across the world.

"At the COP26 next year, we plan to bring out a Glasgow charter not just for OSOWOG but also for World Solar Bank. ISA is happy to play a big role in building this together."

Renewable Energy Secretary Indu Shekhar Chaturvedi said that 3rd RE-INVEST has helped to understand the depth and outcomes of the collective effort involving global stakeholders.

Many great learning experiences, new ideas & facts that will drive the way forward for Renewable Energy in India and across the world, he added.

The 3rd Global RE-INVEST was inaugurated on 26th November, 2020 by Prime Minister Narendra Modi and joined by various dignitaries from India and across the world including Prime Minister of Israel, Energy Minister from the UK etc.

More than 41 Sessions were organised during the event leading to deliberations on various aspects of renewable energy.