

Renewable Energy PPAs for 55 GW capacity yet to find takers

Our Bureau
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Around 55 gigawatts (GW) of renewable energy (RE) capacity, awarded between April 2022 and October 2024, are awaiting the signing of power purchase agreements (PPAs). Delays are due to surge in bids as well as a mismatch between electricity demand and the bid pipeline.

JM Financial, in its latest report, analysed 357 RE projects totalling 95 GW, awarded between April 2022 and October 2024, to understand what is causing delays in the signing of PPAs. It takes roughly 8-10 months for a PPA to be signed.

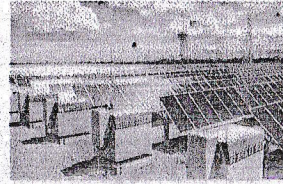
Around 224 contracts, with

a total capacity of 55 GW, are still awaiting PPA signing. PPAs have been signed for 40 GW capacity.

"We found that the sharp surge in bids (over 50 GW in FY24 compared to 14 GW in FY23 and 17 GW in FY22), a large pipeline of projects under construction (79 GW), mismatch between power demand and the bid pipeline, divergent views on the success of hybrid, RTC, FDRE projects, consistently declining prices and constraints in timely execution of projects are leading to delays in signing," it said.

DELAYING FACTORS

The government's bidding pipeline of 50 GW of bids an-



POWER PLAY. With a decline in the cost of Battery Energy Storage Systems, solar with storage is gaining preference in bidding

nually from FY24 to FY28 for RE projects resulted in a sudden and sharp surge in the number of bids, which was not in sync with demand with discoms and preparedness of the developers, JM Financial said. On top of that, older project capacities are still awaiting execution. As of

September 2024, a total RE capacity of 79 GW is under construction (solar 52 GW, wind 15 GW and hybrid 12 GW), the brokerage pointed out. Additionally, 95 GW capacity (solar 56 GW, wind 16 GW, and hybrid 23 GW) is under development and may transition into an active under-construction phase in the near future.

"Hence, given the large pipeline of RE capacity additions, discoms are not in a hurry to sign PPAs for more capacities," it added.

Moreover, India has excess capacity during solar hours, and there are indications that there are not many takers for vanilla solar power. For instance, the conversion rate

for solar projects into PPAs was 44 per cent in FY23 and 47 per cent in FY24 but it dropped to 16 per cent during year-to-date (YTD) FY25.

"In FY24, solar accounted for a majority share of capacity signed, at 62 per cent. However, during YTD FY25, solar has fallen to just 14 per cent. On the other hand, the vanilla wind saw much lower capacity (2.5 GW) awarded in FY24 but has an 89 per cent conversion rate. With the declining cost of BESS (Battery Energy Storage System), solar with storage is gaining preference in bidding," JM Financial opined.

WAY FORWARD

However, as large discoms

become more active in direct bidding, providing higher assurance of offtake, and as developers prepare for the next level of growth with enhanced enablers (equity capital, developing domestic supply chain and policy support), JM Financial believes that the situation is not as concerning as it may appear and signing of PPAs may accelerate, going forward.

Further, the success rate of PPAs is largely unchanged. Of the total bids awarded during FY23 to YTD FY25 (October 2024), PPAs have been signed only for 47.5 per cent (40GW) of projects. Historically, the brokerage has seen a similar 48-50 per cent conversion of contracts into PPAs.