Govt to float bids for one of the world's largest grid-scale battery storage projects

We will come out with tender details soon, says Power Minister RK Singh

OUR BUREAU

New Delhi, September 7

Power Minister RK Singh on Wednesday said the government will soon float bids for one of the world's largest grid-scale battery energy storage system (BESS) projects, a step that will help in better grid management while accommodating renewable energy (RE).

In his address at an event organised by USIBC, Singh revealed that the next bids under the production-linked incentive (PLI) scheme will be for grid-scale storage.

"That is necessary because the requirements of storage for electric mobility are slightly different.... you want to store thousands of MWh (megawatt hour). So the capacity required will be slightly different. It will not be lithium-ion, per se. Lithium-ion is for four-wheelers, etc. For grid-scale storage, probably some newer (technology) capacities will be required. That again will be one of the largest bids for storage in the world," he added.

When asked about the

tender details, Singh told BusinessLine, "we are working on it and will come out with the details soon.'

Gird-scale BESS allows power utilities to store energy and deploy it later depending on demand, variability, etc. It becomes crucial for India as the country will need to accommodate 500 gigawatt (GW) of non-fossil fuel power requiring grid operators to handle intermittency and supply round-theclock power through RE sources. There are various battery chemistries available or under testing including lithium-ion, lead-acid, redox flow, and molten salt (including sodium-based).

First BESS tender

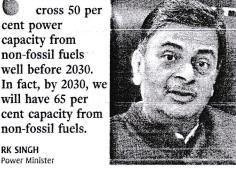
Singh added that a battery energy storage system is important for better grid management, but the problem is that storage is expensive.

"We are expanding in storage and have floated one of the largest bids globally with 1,000 MWh tender. That bid has been finalised. In fact, it is one of the largest bids for

cross 50 per cent power capacity from non-fossil fuels well before 2030. In fact, by 2030, we will have 65 per

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RK SINGH Power Minister



storage in the world, and all our bids will be the largest in the world due to our size. The rate we have got is ₹9.30 per kilowatt hour (US cents 11-12 per unit) which is a bit expensive because my power cost from solar is 2.5-2.6 cents per unit and my battery cost is 11 cents per unit, which is five times the cost of my energy. So the only way to bring down storage costs is to start manufacturing here and to add volumes," he added.

NDC targets

Singh said that as of today, India has achieved 41.5 per cent power capacity from nonfossil fuels, which is nine years in advance of its nationally determined contributions (NDCs) target.

"Today, India has a nonfossil fuel capacity of 168 GW, of which nuclear power is 6.7 GW, and the rest is renewable energy (RE)," he added.

"We will cross 50 per cent power capacity from nonfossil fuels well before 2030. In fact, we have set an internal target for myself and my Ministry that by 2030, we will have 65 per cent capacity from non-fossil fuels. We are among the fastest growing markets for renewables in the world," the Minister said.

Elaborating on the advantages of investing in India in the renewable space, Singh said: "Due to our size, we have space to add this as we have more demand because we have connected every home. Another advantage is that we are a huge market and we are determined towards energy transition, which is faster than everybody else."

More in-store under PLI

India is one of the biggest markets for solar cells and modules. On imposition of Customs duty on import of solar modules and cells from China, he explained that China was dumping solar cells and modules at very low prices, trying to kill the domestic industry.

"So we imposed safeguard duty and then customs duty. and we decided that we will give incentive for manufacturing here. So the first round for ₹4,500 crore...it brought additional manufacturing of about 10 GW. I am going to come out with another bid, which will be fourand-a-half times of that at ₹19,500 crore. So that will bring in almost about 40 GW of manufacturing capacity,"