

Process for Procurement of Power from Grid Connected Solar PV Power Projects':—

- (i) Solar Power Generators have been allowed to submit documents/Lease Agreement to establish possession/right to use 100% (hundred per cent) of the required land in the name of the Solar Power Generator for a period not less than the complete term of the PPA, on or before the Scheduled Commissioning Date (SCD).
- (ii) Clear and elaborate provisions for time extension and compensation to affected party in the event of natural and non-Natural Force Majeure events with specific provisions regarding termination due to natural and non-natural Force Majeure events have been included.
- (iii) Quantum of compensation for back-down has been increased from 50% to 100% with provision for recognition of only written instructions of back-down.
- (iv) Corresponding time extension in date for achievement of financial closure and scheduled commissioning date, in case there is a delay in adoption of tariff by the concerned State Electricity Regulatory Commission beyond a period of 60 days from the filing of such application.

(b) The participation of bidders in tenders for solar power projects has over the time been very encouraging with some tenders attracting bids of more than ten times the capacity to be allotted. However, in past few months, some solar tenders, have remained undersubscribed, which may be due to various reasons like delays in payments by distribution companies in some States, delays in adoption of tariffs by concerned State Electricity Regulatory Commissions, etc.

#### **Measures to increase solar energy generation**

1731. SHRI SANJAY SINGH: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

- (a) the details of steps taken to increase solar energy generation by 2030;
- (b) the details of revised solar manufacturing tender specification for the energy expansion; and

(c) the number of model solar cities in the last three years and the number of estimated expansion of model solar cities?

THE MINISTER OF STATE OF THE MINISTRY OF NEW AND RENEWABLE ENERGY (SHRI RAJ KUMAR SINGH): (a) the Government have taken, *inter alia*, following steps to increase solar energy generation in the country:—

- (i) Announcement of a target of installing 100 GW of solar energy capacity by December, 2022.
- (ii) Waiver of Inter-State Transmission System (ISTS) charges and losses for inter-State sale of solar power for projects to be commissioned upto December, 2022.
- (iii) Permitting Foreign Direct Investment (FDI) upto 100 per cent under the automatic route.
- (iv) Notification of standard bidding guidelines to enable distribution licensees to procure solar and wind power at competitive rates in cost effective and transparent manner.
- (v) Declaration of trajectory for Renewable Purchase Obligation (RPO) upto year 2022.
- (vi) Implementation of Green Energy Corridor project to facilitate grid integration of large scale renewable energy capacity addition.
- (vii) Notification of Quality Standards for deployment of solar photovoltaic system/devices.
- (viii) Launch of various schemes including, Pradhan Mantri Kisan Urja Suraksha evam Utthan Mahabhiyan Yojana (PM-KUSUM), CPSU (Government Producers) Scheme -Phase II and Solar Rooftop Phase-II program.

(b) Salient features of the tender for setting up of solar projects linked with manufacturing facilities are given in the Statement (*See below*).

(c) In last three years, Ministry has not sanctioned any Model Solar City.

*Statement**Salient features of the tender for setting up of solar projects  
linked with manufacturing facilities*

A tender for "Selection of Solar Power Developers for Setting up of 7GW ISTS Connected Solar PV Power Plant linked with 2GW (Per Annum) Solar Manufacturing Plant under Global Competitive Bidding" was launched by SECI with bid submission date as 13.11.2019.

2. The salient features of the tender:- The Solar manufacturing plant completion period was mentioned as 2 years, while solar PV project completion period was mentioned as 5 years and 4 years for Package-A and Package-B respectively.

(i) A single stage two envelope followed by e-Reverse Auction bidding mechanism on e-tendering portal (ETS) of ISN-ETS was adopted for this bidding.

(ii) The entire tender is splitted into 02 (Two) Bidding Packages as detailed below:-

(a) **Bidding Package A:** This Package was meant for setting up of Solar Manufacturing Plants related to Cells and Modules only. Under this Package 02 (Two) Blocks shall be awarded. Each Blocks having minimum Annual Production Capacity as given below:-

Sl. No.	Description	Minimum Annual Production Capacity
1.	Cells	Corresponding to 500MW of Modules Manufacturing Facility
2.	Modules	500MW

(b) **Bidding Package B:** This Package was meant for setting up of Solar Manufacturing Plants related to Ingots and Wafers only. Under this Package, 02 (Two) Blocks were be awarded. Each Blocks having minimum Annual Production Capacity as given below:-

Sl. No.	Description	Minimum Annual Production Capacity
1.	Ingots	Corresponding to 500MW of Modules Manufacturing Facility
2.	Wafers	Corresponding to 500MW of Modules Manufacturing Facility

3. A cumulative annual Solar Manufacturing Capacity of 2GW per year was allowed, which was to be setup over a maximum period of 02 (Two) Years' from the effective date of Package-I PPAs. The SPDs shall be provided assured PPAs (i) upto 2000MW against 500MW of Solar Manufacturing Plant under Bidding Package-A and (ii) upto 1500MW against 500MW of Solar Manufacturing Plant under Bidding Package-B. Thus, the total Solar PV Power Plant capacity would be maximum of 7000MW for manufacturing capacity of 2000MW.

4. Under Bidding Package-A, any bidder can quote upto 2000MW of Solar PV Projects Capacity linked to 500MW of Solar Manufacturing Capacity corresponding to 01 Block. Under Bidding Package-B, any bidder can quote upto 1500MW of Solar PV Projects Capacity linked to 500MW of Solar Manufacturing Capacity corresponding to 01 Block. A total of 02 Blocks (each Block comprising upto 2000MW of Solar PV Projects Capacity linked to 500MW of Solar Manufacturing Capacity) under Bidding Package-A and a total of 02 Blocks (each Block comprising upto 1500MW of Solar PV Projects Capacity linked to 500MW of Solar Manufacturing Capacity) under Bidding Package-B are under the bidding process. However, any bidder would be free to bid for all the 04 Blocks.

#### **Scheme for manufacturing equipment for wind power production**

†1732. DR. KIRODI LAL MEENA: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) whether Government has formulated any special scheme for manufacturing of the equipment used in generation of wind power in the country, if so, the details thereof;

(b) whether special efforts have been made by Government for generation of

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†Original notice of the question was received in Hindi.