# GOVERNMENT OF INDIA MINISTRY OF NEW AND RENEWABLE ENERGY LOK SABHA UNSTARRED QUESTION NO. 2721 ANSWERED ON 16.03.2023

#### ELECTRICITY PRODUCED FROM WIND ENERGY

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Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) the quantum of electricity produced from wind energy in the country, State/UT-wise;(b) the steps taken/proposed to be taken by the Government to increase the production of electricity from wind energy;

(c) the steps taken/proposed to be taken by the Government to improve the infrastructure for wind energy in the country;

(d) the current storage capacity of electricity generated from wind energy and the steps taken/proposed to be taken by the Government to increase such storage capacity; and(e) the other steps taken/proposed to be taken by the Government to promote the production of wind energy in the country?"

## ANSWER

## THE MINISTER OF NEW & RENEWABLE ENERGY AND POWER

#### (SHRI R.K. SINGH)

(a) The electricity produced from wind energy projects was 64.54 billion units during April, 2022-January, 2023. The state-wise details of electricity produced from wind power projects in last three financial years, including current year (upto 31<sup>st</sup> January, 2023), are given at **Annexure I**.

(b) & (c) The Government has taken several steps to promote renewable energy, including wind energy, in the country. These, inter alia, include;

- permitting Foreign Direct Investment (FDI) up to 100 percent under the automatic route,
- waiver of Inter State Transmission System (ISTS) charges for inter-State sale of solar and wind power for projects to be commissioned by 30th June 2025,
- declaration of trajectory for Renewable Purchase Obligation (RPO) up to the year 2030,
- setting up of Ultra Mega Renewable Energy Parks to provide land and transmission to RE developers on a plug and play basis,
- laying of new transmission lines and creating new sub-station capacity for evacuation of renewable power,
- setting up of Project Development Cell for attracting and facilitating investments,
- Standard Bidding Guidelines for tariff based competitive bidding process for procurement of Power from Grid Connected Solar PV and Wind Projects,

- Government has issued orders that power shall be dispatched against Letter of Credit (LC) or advance payment to ensure timely payment by distribution licensees to RE generators,
- Notification of Promoting Renewable Energy through Green Energy Open Access Rules 2022,
- Notification of Late Payment Surcharge and related matters Rules 2022.
- Notification of Electricity Amendment Rules 2022 with provision of Uniform Renewable Energy Tariff for Central Pool.

In addition to the above, the following steps have been taken specifically for promoting wind energy:

- Declaration of trajectory for Wind Renewable Purchase Obligation (Wind RPO) up to the year 2030,
- Concessional custom duty exemption on certain components required for manufacturing of wind electric generators,
- Generation Based Incentive (GBI) is being provided to the wind projects commissioned on or before 31 March 2017,
- Technical support including wind resource assessment and identification of potential sites through the National Institute of Wind Energy, Chennai.

(d) The overall energy storage capacity developed in the country as on 13.03.23 is 4745.60 MW from Hydro Pumped Storage Projects (PSPs) and 39.12 MWh from Battery Energy Storage System (BESS). However, this energy storage capacity is not specific to any particular technology.

In order to promote and develop energy storage capacity in the country, following measures have been taken:

- Legal Status for Energy Storage Systems has been issued by Ministry of Power (MoP) on 29th January, 2022 wherein Energy Storage System (ESS) has been designated as a Power System element which can be utilized as a Generator, Transmission or Distribution element.
- MoP issued Guidelines for Procurement and Utilization of Battery Energy Storage Systems (BESS) as part of Generation, Transmission and Distribution assets, along with Ancillary Services.
- Energy Storage Obligations (4% by 2029-30) have been notified vide MoP Order dated 22nd July, 2022.
- Waiver of ISTS Charges on Hydro PSP, BESS Projects commissioned up to 30.06.2025 has been provided vide MoP Order dated 23rd November, 2021. The waiver shall be applicable for a period of 25 years for Hydro PSP or for a period of 12 years for BESS or for a period subsequently notified for future projects by the Central Government from the date of commissioning of the power plant.
- RE Bundling Scheme for Scheduling of Thermal/ Hydro Power Stations through bundling with Renewable Energy and Hydro Power have been notified vide Order dated 12th April, 2022.
- In Budget 2023-24, Government of India announced a Viability Gap Funding support for 4,000 MWh BESS.

(e) As per reply given in parts (b) & (c) of the question.

# Annexure I referred to in reply to part (a) of the Lok Sabha Unstarred Question No. 2721 for 16.03.2023

Electricity Production from Wind Power Projects during last three years including the current financial year (up to 31.01.2023)

CTATE	FY 2019-20 (in MUs)	FY 2020-21 (in MUs)	FY 2021-22 (in MUs)	April, 2022- January, 2023 (Million
STATE				Units)
Andhra Pradesh	7626.63	6557.75	7134.58	6691.66
Gujarat	13748.53	13058.52	17854.77	17062.81
Karnataka	10148.66	9610.91	9491.62	8657.01
Kerala	119.76	130.42	136.41	165.18
Madhya Pradesh	4425.99	3913.45	4346.66	4000.28
Maharashtra	7984.27	6384.74	7085.98	6553.88
Rajasthan	6172.70	5708.27	6493.19	5467.08
Tamil Nadu	14126.93	14564.99	15821.18	15703.60
Telangana	238.25	220.91	275.69	244.61
Others	54.66	0	0	0
Total	64646.38	60149.95	68640.07	64546.10