GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.757
ANSWERED ON 04.12.2025

SOLAR POWER CAPACITY IN RAJASTHAN

†757. SHRI RAHUL KASWAN:

Will the Minister of POWER be pleased to state:

(a) the total installed power capacity (MW/GW) currently in Rajasthan along with the increase therein during the last five years;

(b) whether new transmission lines, Grid Sub Stations and Green Energy Corridors are being developed in a phased manner to connect solar projects to the power grid in the State and if so, the details thereof;

(c) whether any grid connectivity issues have been identified in Rajasthan's solar production areas such as Bikaner, Jaisalmer, Churu and Phalodi and if so, the details thereof;

(d) whether there is any plan on implementing battery storage systems pumped hydro storage or grid stabilization technology for solar energy intergradation and if so, the details thereof; and

(e) whether the Government is working towards any major investment policy reforms or international collaborations to develop Rajasthan as a national green energy hub and if so, the details thereof?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a): As on 31.10.2025, the total installed Generation Capacity of Rajasthan was 54.77 GW. The installed Generation Capacity of Rajasthan was 22.02 GW on 31.03.2020. During the last five years i.e. from 31.03.2020 to 31.10.2025, 32.75 GW generation capacity has been added in Rajasthan. The yearly installed Generation Capacity of Rajasthan from 31.03.2020 to 31.10.2025 is given at Annexure-I.

(b): For creation of transmission infrastructure, Intra State Green Energy Corridor (GEC) scheme is being implemented by the Ministry of New and Renewable Energy (MNRE) in 10 States including Rajasthan. Under GEC Phase-I, 1,054 ckm transmission lines and 1,915 MVA capacity substations for evacuation of approx. 2,400 MW of Renewable Energy (RE) has been commissioned in Rajasthan.

Under GEC Phase-II, 659 ckm of transmission lines and 2,191 MVA capacity substations for evacuation of 2,478 MW RE capacity is under implementation.

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The details of transmission lines developed/ being developed under GEC-I and GEC-II are given at Annexure-II.

(c) : There are total of 33 Inter State Transmission System (ISTS) projects under construction in Rajasthan for strengthening the grid infrastructure and facilitating RE evacuation from the State. According to Central Transmission Utility of India Ltd. (CTUIL), connectivity applications of about 133 GW have been received on ISTS in various RE complexes of Rajasthan. Accordingly, transmission system for about 73 GW capacity have been evolved and are under various stages of implementation and for balance 60 GW capacity, transmission scheme is yet to be evolved.

Further, according to State Government of Rajasthan, intra state RE connectivity has been granted by Rajasthan Rajya Vidyut Prasaran Nigam Limited (RVPNL) as per the application received.

(d) : In order to ensure Grid stability and facilitate integration of variable Renewable Energy, a total of 73.93 GW/ 411.40 GWh energy storage capacity requirement comprising of 47.24 GW/ 236.22 GWh of Battery Energy Storage System (BESS) capacity and 26.69 GW/ 175.18 GWh of Pumped Storage System (PSP) has been estimated by 2031-32. This energy storage capacity is expected to increase upto 470 GW/2674 GWh (360 GW/1984 GWh BESS and 110 GW/690GWh PSP) in the country due to larger amount of RE capacity addition to achieve the net zero target by 2070.

In Rajasthan, 1000 MW / 2000 MWh BESS is being established, of which 500 MW/ 1000 MWh capacity has been awarded to successful developers under the State Component with VGF support of ₹27 lakh per MWh, and the remaining 500 MW / 1000 MWh has been awarded by NVVN under the Central Component (CPSU Scheme) for installation in Rajasthan.

Further, under the PSDF Scheme, the Ministry of Power has allocated 4000 MWh BESS capacity to Rajasthan on 09.06.2025 with VGF support of ₹18 lakh per MWh. Out of this, Letter of Award (LOAs) for 1000 MW / 2000 MWh have been issued on 31.10.2025 by Rajasthan Rajya Vidyut Utpadan Nigam Ltd. (RVUNL), while price bids has been opened for the remaining 500 MW / 2000 MWh.

In addition, under Rajasthan Integrated Clean Energy Policy, 2024 (RICEP-2024), 10 GW capacity is targeted by year 2030 for Energy Storage & Hydro Projects in the State. Presently under this policy, 2,450 MW solar capacity at Pugal Solar Power Park, along with 2450 MW/5000 MWH Energy Storage System capacity is being implemented.

(e) : State Govt. has issued Rajasthan Integrated Clean Energy Policy, 2024 (RICEP-2024). This policy aims to provide a comprehensive action plan for establishing a Green Energy eco system and catalysing a systemic response to the opportunities and challenges of this sector. Further, State has introduced Rajasthan Investment Promotion Scheme (RIPS-2024) for investment including in RE in State to provide big boost to the renewable-energy (RE) sector.

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ANNEXURE-I

ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 757 ANSWERED IN THE LOK SABHA ON 04.12.2025

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The yearly installed Generation Capacity of Rajasthan from 31.03.2020 to 31.10.2025

Year	Installed Generation Capacity (GW)
31-03-2020	22.02
31-03-2021	22.64
31-03-2022	30.13
31-03-2023	35.74
31-03-2024	40.09
31-03-2025	47.12
31-10-2025	54.77

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ANNEXURE-II

ANNEXURE REFERRED IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 757 ANSWERED IN THE LOK SABHA ON 04.12.2025

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Details of transmission lines developed/ being developed under GEC-I and GEC-II:

I. Green Energy Corridor Phase-I:

i. 400KV GSS at Jaisalmer-2 along with associated transmission lines.
ii. 220kV GSS Chhatargarh along with associated lines.
iii. 220 KV D/C Akal- Jaisalmer-2 line (75 Km).
iv. LILO of one circuit of 400kV D/C Akal-Jodhpur (new) line at 400kV GSS Jaisalmer-2 (Approx. 10 kM).
v. 1 No. 400kV Quad Moose feeder bay and 2 Nos. 220kV bays at 400kV GSS Jaisalmer-2.
vi. Supply & ETC of (+) 3x500 MVA & (-) 2x315 MVA Power Transformers at Akal & Jaisalmer-2.
vii. Supply of 2x160 MVA, 220/132kV Transformer and 1x 40/50MVA 132/33KV Transformer and Supply of Conductor for transmission lines.

II. Green Energy Corridor Phase-II:

i. Construction of 400 kV GSS Udaipur along with associated transmission line and Construction of 220 kV GSS Dungarpur along with associated transmission lines.
ii. Construction of 400 kV GSS Hanumangarh along with associated transmission line.
iii. Construction of 220/132 kV, 1X160 MVA GSS at Dalot (Upg.) [Distt.- Pratapgarh] alongwith Bay work and associated transmission lines.

Note:
GSS: Grid Sub-Stations
LILO: Line In Line Out
ETC: Erection, Testing & Commissioning

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