GOVERNMENT OF INDIA MINISTRY OF POWER

LOK SABHA UNSTARRED QUESTION NO.643 ANSWERED ON 06.02.2025

BATTERY SWAPPING STATIONS

†643. SHRI SANJAY UTTAMRAO DESHMUKH:

Will the Minister of POWER be pleased to state:

- (a) the details of the establishment of battery swapping stations both in urban and rural areas in the country, State-wise;
- (b) whether the Government has any proposal to expand the same and if so, the details thereof;
- (c) whether the Government has any strategy to implement these guidelines and co-operate with the State Governments so that the strategic establishment of battery swapping stations both in urban and rural areas can be ensured;
- (d) if so, the details thereof;
- (e) the manner in which the Government sees the role of public-private partnership in the expansion of battery swapping infrastructure;
- (f) whether the Government considers electricity to be an important factor in the lives of common people; and
- (g) if so, the steps taken/being taken by the Government to provide round the clock electricity to the people by 2025?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a): As on 27th January, 2025, as per data available with Bureau of Energy Efficiency (BEE), 2611 battery swapping stations (BSS) have been deployed across the country. State-wise details are at Annexure.

- (b): To ensure widespread availability of BSS, the Ministry of Power in its *Guidelines for Installation and Operation of Battery Swapping and Charging Stations* issued on 10th January 2025, recommended establishing BSS on both sides of highways, expressways and major roads, and in urban areas as specified.
- (c) & (d): The Ministry of Power has issued "Guidelines for Installation and Operation of Battery Swapping and Charging Stations" on 10th January 2025. These guidelines outline the standards and protocols to facilitate development of a nationwide network of BSS. Key features involving State Governments in implementing these guidelines are:-
 - (i) A State level Steering Committee chaired by Secretary in-charge of Energy, comprising Secretaries of Transport, Municipal Administration and Urban Development, and other relevant officials, will plan and monitor the implementation of BSS Infrastructure at the State level.
 - (ii) Each state will designate a State Nodal Agency responsible for coordinating with DISCOMs and the State Electricity Regulatory Commission to facilitate electricity connections for BSS.
 - (iii) A Central Steering Committee chaired by the Additional Secretary, Ministry of Power including Members from relevant Ministries, State representative, BEE, and the Central Electricity Authority(CEA) will periodically review the implementation of the guidelines.
 - (iv) BEE will work collaboratively with DISCOMs and State Government entities for implementation of the guidelines.
- (e): The guidelines emphasize the role of public-private partnerships in expanding the battery swapping infrastructure. Setting up BSS has been designated as de-licensed activity, simplifying the process for businesses.

To make the land available at affordable rates, it has been suggested that public land be made available to Government or Public entities on a revenue-sharing model at ₹ 1 per kWh. For private entities, the land may be made available through a competitive bidding process at a floor price of ₹ 1 per kWh. Additionally, public tenders involving government land for the establishment of BSS have been suggested to be kept technology agnostic. State Governments have been advised to permit round-the-clock operations for BSS.

- (f) & (g): Electricity being a concurrent subject, supply and distribution of electricity to the consumers is within the purview of the respective State Government/Power Utility. The steps taken by the Government to provide round the clock electricity to the people are as follows:
 - 1. There is adequate availability of power in the country. Present installed generation capacity of the country is 462 GW. Government of India has addressed the critical issue of power deficiency by adding 230 GW of generation capacity since April, 2014 transforming the country from power deficit to power sufficient.
 - 2. As per the Electricity (Rights of Consumers) Rules, 2020, the distribution licensee shall supply 24x7 power to all consumers. However, the Commission may specify lower hours of supply for some categories of consumers like agriculture.
 - 3. To optimize power resources and ensure adequate generation capacity, the Ministry of Power (MoP) notified rules in December 2022, followed by detailed guidelines in June 2023. These guidelines mandate preparation of a Long-term National Resource Adequacy Plan (LT-NRAP) by the Central Electricity Authority, outlining the optimal generation mix for the next decade to meet national demand at least cost. All the States, in consultation with CEA, have prepared their "Resource Adequacy Plans (RAPs)", which are dynamic 10 year rolling plans and includes power generation as well as power procurement planning.
 - 4. To ensure the power availability at the Discom's periphery, Inter and Intra-State Transmission System has been planned and implementation of the same is taken up in matching time frame of generation capacity addition. As per the National Electricity Plan, about 1,91,474 ckm of transmission lines and 1274 GVA of transformation capacity is planned to be added (at 220 kV and above voltage level) during the ten year period from 2022-23 to 2031-32.
 - 5. Government of India has been supporting the States/ UTs through schemes like Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY), Integrated Power Development Scheme (IPDS), Pradhan Mantri Sahaj Bijli Har Ghar Yojana (SAUBHAGYA) to improve access and quality of power supply to all consumers. These schemes stand closed as on 31.03.2022. Under these scheme, projects worth Rs. 1.85 lakh Cr. were executed for strengthening of power distribution infrastructure. A total of 18,374 villages were electrified under the DDUGJY and 2.86 Cr households were electrified during SAUBHAGYA.
 - 6. Further, Government of India launched the Revamped Distribution Sector Scheme (RDSS) in July, 2021 with the objective of improving the

quality and reliability of power supply to consumers through a financially sustainable and operationally efficient Distribution Sector. Under the scheme, infrastructure works worth Rs. 2.78 lakh Cr. have been sanctioned for the distribution utilities.

7. Government of India is further supporting States for grid electrification of left-out households during SAUBHAGYA, under the ongoing scheme of RDSS. In addition, all identified households belonging to Particularly Vulnerable Tribal Group (PVTG) under PM-JANMAN (Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan) and tribal households under DA-JGUA (Dharti Aaba Janjatiya Gram Utkarsh Abhiyan) are being sanctioned for on-grid electricity connection under RDSS, as per the Scheme guidelines.

The works sanctioned under RDSS also include-

- a. Works worth Rs. 4,535 Cr. have been sanctioned for electrification of 9,97,680 households including PVTG households identified under PM-JANMAN and tribal households identified under DA-JGUA.
- b. Works worth Rs. 1,067 Cr. for extension of electricity distribution infrastructure to far flung Border Areas in the States of Himachal Pradesh, Uttarakhand, Sikkim, Arunachal Pradesh and UT of Ladakh.

With collective efforts of Centre and States/UTs, the average hours of supply in rural and urban areas have improved to 21.9 hrs and 23.4 hrs, respectively, in FY 2024.

ANNEXURE

ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 643 ANSWERED IN THE LOK SABHA ON 06.02.2025

State / UT wise deployed BSS

SI. No.	State	No. of BSS
1	Andhra Pradesh	2
2	Bihar	48
3	Delhi	878
4	Haryana	171
5	Karnataka	347
6	Kerala	20
7	Madhya Pradesh	2
8	Maharashtra	24
9	Orissa	2
10	Punjab	22
11	Rajasthan	104
12	Telangana	146
13	Uttar Pradesh	839
14	Uttarakhand	5
15	West Bengal	1
Total		2,611
