GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.531
ANSWERED ON 06.02.2025

ADOPTION OF BATTERY SWAPPING TECHNOLOGY

531. SHRI ANURAG SINGH THAKUR:

Will the Minister of POWER
be pleased to state:

(a) the details of the measures taken/being taken by the Government to ensure uniform implementation of the 2024 Battery Swapping Guidelines across the country including collaboration with State Governments;

(b) the strategy framed by the Government to ensure equitable distribution of battery swapping stations in both urban and rural areas;

(c) the manner in which the public-private partnerships being leveraged to establish and expand battery-swapping infrastructure across the country;

(d) the details of the specific incentives or subsidies being planned to encourage the adoption of battery-swapping technology by small businesses and logistic operators;

(e) the manner in which the Government plan to address challenges related to interoperability of battery-swapping systems and standardization of technology; and

(f) whether there are any mechanisms for periodic review and monitoring of the environmental impact of battery-swapping infrastructure deployment 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) & (b): The Ministry of Power has issued "Guidelines for Installation and Operation of Battery Swapping and Charging Stations", vide OM dated 10th January 2025. These guidelines outline the standards and protocols to facilitate development of a nationwide network of Battery Swapping Stations (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 (SNA) responsible for coordinating with DISCOMs and the State Electricity Regulatory Commission (SERC) 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, Bureau of Energy Efficiency (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.

(c) & (d) : The guidelines emphasize the role of public-private partnerships (PPPs) in expanding the battery swapping infrastructure. Setting up BSS has been designated as a 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.

Further, tariff for supply of electricity to BSS has been simplified. It has been advised to make tariff single part and limited to "Average Cost of Supply" till 31st March, 2028.

(e): At present the battery swapping is evolving and full interoperability among all Electric Vehicle (EV) users is not envisaged.

(f): To address and mitigate the environmental impacts caused by disposal of waste batteries generated by producers of batteries, Ministry of Environment Forest and Climate Change (MoEFCC) vide notification dated 22.08.2022 notified the Battery Waste Management Rules, 2022 for environmentally sound management of waste batteries.

Under the Rules, producers have been given the obligations of Extended Producer Responsibility for the batteries that they introduce in the market to ensure effective collection and recycling/ refurbishment of waste batteries. Further, the entities involved in collection, segregation and treatment have been obligated to hand over the waste batteries to the registered recycler or refurbisher.

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