GOVERNMENT OF INDIA MINISTRY OF POWER

RAJYA SABHA STARRED QUESTION NO.236 ANSWERED ON 11.08.2025

INSTALLATION OF SMART METERS

236 # SHRI MADAN RATHORE:

Will the Minister of **POWER** be pleased to state:

- (a) whether Government has directed the States to install smart meters;
- (b) if so, the details of the achievements so far;
- (c) the benefits distribution companies will have from installation of smart meters;
- (d) the benefits consumers will get after installing smart meters, whether installation of smart meters have been opposed at many places, if so, the reasons thereof; and
- (e) whether Government has approved infrastructure works to strengthen the distribution system in the States during the last three years, if so, the details thereof

ANSWER

THE MINISTER OF POWER

(SHRI MANOHAR LAL)

(a) to (e): A Statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) IN RESPECT OF RAJYA SABHA STARRED QUESTION NO.236 FOR REPLY ON 11.08.2025 REGARDING INSTALLATION OF SMART METERS ASKED BY SHRI MADAN RATHORE

(a) & (b): As per the Central Electricity Authority (Installation and Operation of Meters) (Amendment) Regulations, 2022, all consumers in areas with communication network, shall be supplied electricity with Smart Meters working in pre-payment mode, conforming to relevant Indian Standards (IS).

Government of India launched Revamped Distribution Sector Scheme (RDSS) in July 2021 to support the States/ UTs to improve the operational efficiencies and financial sustainability of distribution utilities, so as to provide quality and reliable supply of power. One of the key initiatives under the scheme is smart metering of consumers, distribution transformers and feeders. Under RDSS, 20.33 Cr smart meters have been sanctioned, out of which 2.57 Cr meters have been installed till date, of which 56 lakh functioning in prepaid mode.

Smart meters have also been installed by distribution utilities under their own schemes in addition to RDSS. Overall, 3.78 crore smart meters have been installed across the country, till date, out of which 1.22 Cr are functioning in pre-paid mode.

- (c): Benefits envisaged to distribution utilities after installation of smart meters are as below:
 - i. Automatic Energy accounting
 - ii. Improved Load forecasting
- iii. Optimization of power purchase costs
- iv. Reduction in losses by improvement in billing and collection
- v. Use of Data analytics to understand demand pattern
- vi. Important for large scale Renewable Energy Integration
- vii. Ease in real time update of tariffs
- (d): Benefits envisaged to consumers after installation of smart meters are as below:
 - i. Error free billing
 - ii. Convenience of recharge with small recharges
- iii. Emergency credit in meter to avoid disconnection on zero balance
- iv. Tracking of consumption

Initially there were some challenges in the implementation of smart metering works under the scheme due to inadequate awareness amongst consumer regarding benefits of smart meters. To improve consumer engagement and enhance confidence, the Ministry has issued various advisories/Standard operating Procedures (SoPs). These include following:

- 1. Installation of Pre-paid smart meters to be prioritised for Government establishments including Government colonies, followed by Commercial, Industrial and high load consumers.
- 2. Incentivising consumers for pre-paid meter installation through rebate in bill.
- 3. No penalty on consumer based on maximum demand recorded by smart meter.
- 4. Mechanism for recovery of past arrears in easy instalments.
- 5. Installation of check meters for enhancing confidence in accuracy of smart meters.
- 6. Advance alerts for balance and emergency credit to consumers before disconnection.

Ministry is regularly following up with the States and distribution utilities through nodal agencies (REC and PFC) and is handholding the utilities in resolving issues, if any. As a result, the works have started picking up pace and effort is being made to complete the works within the scheme timelines.

(e): Under RDSS, infrastructure works, including smart metering works, amounting to Rs. 2.82 lakh crore have been sanctioned for 32 States/ UTs. The sanctioned works include new/ upgradation of substations, distribution transformer, HT & LT lines, agricultural feeder segregation, household electrification, smart metering works etc. State-wise details are placed at Annexure.

ANNEXURE REFERRED TO IN PART (e) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 236 ANSWERED IN THE RAJY SABHA ON 11.08.2025 REGARDING INSTALLATION OF SMART METERS

State-wise total sanctioned costs under RDSS

(In Rs.Crores)

| Sl. No. | State/UT | Sanctioned Cost of Smart Metering | Sanctioned Cost of Infrastructure Works | Total Sanctioned Outlay |
|------------|---------------------------|--|--|-------------------------------|
| 1 | Andaman & Nicobar Islands | 54 | 462 | 516 |
| 2 | Andhra Pradesh | 4,128 | 10,710 | 14,838 |
| 3 | Arunachal Pradesh | 184 | 1,042 | 1,226 |
| 4 | Assam | 4,050 | 3,395 | 7,444 |
| 5 | Bihar | 2,021 | 9,983 | 12,004 |
| 6 | Chhattisgarh | 4,105 | 4,021 | 8,126 |
| 7 | Delhi | 13 | 324 | 337 |
| 8 | Goa | 469 | 247 | 716 |
| 9 | Gujarat | 10,642 | 6,089 | 16,731 |
| 10 | Haryana | 0 | 6,797 | 6,797 |
| 11 | Himachal Pradesh | 1,788 | 2,327 | 4,116 |
| 12 | Jammu & Kashmir | 1,064 | 5,034 | 6,098 |
| 13 | Jharkhand | 858 | 3,468 | 4,326 |
| 14 | Karnataka | 0 | 36 | 36 |
| 15 | Kerala | 8,231 | 3,108 | 11,339 |
| 16 | Ladakh | 0 | 876 | 876 |
| 17 | Madhya Pradesh | 8,911 | 9,674 | 18,584 |
| 18 | Maharashtra | 15,215 | 17,238 | 32,453 |
| 19 | Manipur | 121 | 627 | 748 |
| 20 | Meghalaya | 310 | 1,232 | 1,542 |
| 21 | Mizoram | 182 | 322 | 503 |
| 22 | Nagaland | 208 | 466 | 674 |
| 23 | Puducherry | 251 | 84 | 335 |
| 24 | Punjab | 5,769 | 3,873 | 9,642 |
| 25 | Rajasthan | 9,715 | 18,693 | 28,408 |
| 26 | Sikkim | 97 | 420 | 518 |
| 27 | Tamil Nadu | 19,235 | 9,568 | 28,803 |
| 28 | Telangana | 0 | 120 | 120 |
| 29 | Tripura | 319 | 598 | 917 |
| 30 | Uttar Pradesh | 18,956 | 21,782 | 40,739 |
| 31 | Uttarakhand | 1,106 | 1,815 | 2,921 |
| 32 | West Bengal | 12,670 | 7,223 | 19,893 |
| | Total | 1,30,671 | 1,51,653 | 2,82,324 |
