GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA STARRED QUESTION NO.153 ANSWERED ON 01.08.2024

POWER GENERATION CAPACITY

*153 DR. MOHAMMAD JAWED: SMT. JYOTSNA CHARANDAS MAHANT:

Will the Minister of POWER be pleased to state:

- (a) the details of total power generation capacity in the country since 2015, year-wise;
- (b) the steps taken by the Government to increase production capacity since 2014;
- (c) the details of the contribution of coal to the total power generation capacity in the country during the last five years;
- (d) whether the cost per unit of power generation has risen due to the import of coal during the last few years and if so, the details thereof; and
- (e) the steps taken by the Government to reduce the production cost per unit of power generated and to upgrade the infrastructure for the purpose in the States of the country, especially in Bihar?

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 LOK SABHA STARRED QUESTION NO.153 FOR REPLY ON 01.08.2024 REGARDING POWER GENERATION CAPACITY ASKED BY DR. MOHAMMAD JAWED AND SMT. JYOTSNA CHARANDAS MAHANT

- (a): The year wise details of total power generation capacity in the Country from 2014-15 to 2024-25 (upto June 2024) are given at Annexure-I.
- (b): Government of India has taken following steps to increase the production capacity in the country since 2014:-
- (i) Increase in installed capacity from 2,48,554 MW in March 2014 to 4,46,190 MW in June 2024.
- (ii) Addition of 1,95,181 circuit kilometer (ckm) of transmission lines, 7,30,794 MVA of Transformation capacity and 82,790 MW of Inter-Regional capacity with capability of transferring 1,18,740 MW from one corner of the country to another.
- (iii) Waiver of ISTS charges on transmission of electricity generated from Solar, Wind, Pumped Storage Plants and Battery Energy Storage Systems.
- (iv) Renewable Purchase Obligations (RPOs) and Energy Storage obligations Trajectory till 2029-30.
- (v) Construction of Green Energy Corridors and putting in place 13 Renewable Energy Management Centres.
- (vi) Setting up of Ultra Mega Renewable Energy Parks to provide land and transmission to RE developers for installation of RE projects at large scale.
- (vii) Reduction of AT&C losses from 22.62% in 2013-14 to 15.40% in 2022-23. All current payment of GENCOs are up-to-date and the legacy dues of GENCOs have come down from Rs. 1,39,947 crore to Rs. 35,119 Crore.
- (viii) Under Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY), Integrated Power Development (IPDS) and Pradhan Mantri Sahaj Bijli Har Ghar Yojana-(SAUBHAGYA) schemes, 18,374 villages have been electrified and 2.86 crore household were provided electricity connections.
- (ix) Introduction of SHAKTI policy for transparent allocation of coal to Thermal Power plants. This enabled efficient domestic coal allocation to Thermal Power Plants and also ensured revival of various stressed Thermal Power Projects.
- (x) Construction of the Inter-State transmission system ahead of the generation capacity.

- (c): The details of the contribution of coal to the total power generation capacity in the country during the last five years and current year 2024-25 (Upto June) is given at Annexure-II.
- (d): The cost of generation of electricity from coal based power plant is dependent upon the price of coal and cost of freights and in case of blending also the price of the blended imported coal. The price of imported coal is linked with International Indices, source of origin and factors like ocean freight, insurance etc. which vary with international demand supply scenario. Further, every generating company consumes imported coal as per its requirement.

Average Power purchase cost has increased by 71 Paisa only between FY 2021-22 and FY 2022-23. This is because of increase in various costs – including increase in Transmission cost.

- (e): Government of India have following steps to reduce the cost of power generation in the county:
- (i) Setting up of Power Exchanges to ensure fair, neutral, efficient and robust electricity price discovery.
- (ii) Introduction of flexibility in utilization of domestic coal by State/Central Generation Companies (GENCOs)
- (iii) Rationalization of linkage sources of State/Central Generating Companies (GENCOs) and Independent Power Producers (IPPs) with a view to optimize transportation cost has been allowed.
- (iv) Issuance of guidelines for tariff based bidding process for procurement of electricity under Section 63 of Electricity Act, 2003 to promote competitive procurement of electricity by distribution licensees.
- (v) Reduction of Aggregate Technical & Commercial (AT&C) losses under RDSS will improve the finances of the utilities, which will enable them to better maintain the system and buy power as per requirements; benefitting the consumers.
- (vi) Operationalisation of National Merit Order Dispatch with the objective of lowering the cost of electricity to consumers.

Further, the Government has taken following steps to upgrade the power infrastructure in the country including Bihar:

- 1. Under the SAUBHAGYA Scheme, a total of 2.86 crore households have been electrified across the country including 32,59,041 villages in Bihar.
- 2. Under DDUGJY Scheme, a total of 18,374 villages were electrified under the scheme including 2,906 in Bihar.

- 3. Under RDSS, projects worth Rs. 2.62 lakh crore for distribution infrastructure works and 19.80 crore smart consumer meters, 52.18 lakh smart DT meters and 1.88 lakh smart feeder meters have been sanctioned at National level. In Bihar, distribution infrastructure and smart metering works of Rs. 9,222 crore (with Government Budgetary Support of Rs. 4,733 crore) has been sanctioned.
- 4. As against minimum 80,000 MW thermal capacity targeted to be added by 2031-32, 28,400 MW Thermal Capacity is under construction which includes Buxar TPP (SJVN) and Barh-I STPP (Unit#3) in Bihar with capacity of 1320 MW (2x660 MW) and 660 MW respectively. In addition, 18,087.5 MW Hydro Capacity and 7,000 MW Nuclear Capacity are also expected to be operationalized by 2031-32.
- 5. The upgradation in the transmission infrastructure includes projects for addition of 21,766 ckm transmission line and 1,77,755 MVA transformation capacity targeted to be completed by 2026-27. This includes 1,000 MVA each of transformation capacity at Banka Substation and Lakhisarai Substation with likely completion schedule of May 2025 in Bihar.
- 6. Under Power System Development Fund (PSDF), a total of 188 projects have been approved for improvement of State, Regional and National Power System. In Bihar, Renovation & Upgradation of Grid Sub-station project and project of installation of Capacitor Bank have been completed under PSDF. Implementation of Sub-Station Automation System project is under execution in Bihar.

ANNEXURE REFERRED TO IN PART (a) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 153 ANSWERED IN THE LOK SABHA ON 01.08.2024 REGARDING POWER GENERATION CAPACITY

The year wise details of total power generation capacity (utilities) from 2014-15 to 2024-25 (Upto June, 2024)

Year	Installed Capacity (in MW)	
2014-15	2,75,895	
2015-16	3,06,330	
2016-17	3,28,146	
2018-19	3,45,631	
2018-19	3,57,871	
2019-20	3,71,334	
2020-21	3,83,521	
2021-22	3,99,497	
2022-23	4,16,059	
2023-24	4,41,970	
2024-25 (up to June 24)	4,46,190	

ANNEXURE REFERRED TO IN PART (c) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 153 ANSWERED IN THE LOK SABHA ON 01.08.2024 REGARDING POWER GENERATION CAPACITY

The details of the contribution of coal to the total power generation capacity in the country during the last five years and current year 2024-25 (Upto June 2024).

Year	Total Installed Capacity	Coal Based Capacity	Share of Coal Based Capacity in Total Installed Capacity
	(MW)	(MW)	(%)
31-3-2020	3,70,106	1,98,525	53.6
31-3-2021	3,82,151	2,02,675	53.0
31-3-2022	3,99,497	2,04,080	51.1
31-3-2023	4,16,059	2,05,235	49.3
31-3-2024	4,41,970	2,10,969	47.7
30-6-2024	4,46,190	2,10,969	47.3
