## GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA STARRED QUESTION NO.144 ANSWERED ON 01.08.2024

#### **UJALA SCHEME AND ITS IMPACT ON ENERGY SAVINGS**

#### \*144 SHRI BAIJAYANT PANDA:

Will the Minister of POWER be pleased to state:

(a) the details of the number of LED bulbs distributed by the Government under the UJALA scheme so far to save electricity; and

(b) the impact of the said scheme on energy savings and consumer electricity bills?

### ANSWER

#### THE MINISTER OF POWER

(SHRI MANOHAR LAL)

(a) & (b) : A Statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) & (b) IN RESPECT OF LOK SABHA STARRED QUESTION NO.144 FOR REPLY ON 01.08.2024 REGARDING UJALA SCHEME AND ITS IMPACT ON ENERGY SAVINGS ASKED BY SHRI BAIJAYANT PANDA

\*\*\*\*\*\*\*

(a): UJALA (Unnat Jyoti by Affordable LEDs for All) was launched on 5<sup>th</sup> January, 2015 to provide affordable, energy-efficient LED bulbs to consumers. Energy Efficiency Services Limited (EESL), a joint venture of CPSUs under Ministry of Power, was the implementing agency of this scheme. Under the scheme, an individual consumer could buy LED bulbs through DISCOMs or through designated Distribution Agencies (DA) appointed by EESL.

To date, over 36.9 crore LED bulbs have been distributed nationwide. The state-wise details of distribution of these bulbs are at Annexure.

(b): UJALA has been instrumental in annually conserving 48.4 billion units of electrical energy, and reducing electricity bills by Rs. 19,337 Cr by promoting energy-efficient lighting solutions.

\* \* \* \* \*

## ANNEXURE REFERRED TO IN PART (a) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 144 ANSWERED IN THE LOK SABHA ON 01.08.2024 REGARDING UJALA SCHEME AND ITS IMPACT ON ENERGY SAVINGS

SI. No.	States & UTs	No. of LEDs bulbs Distributed
1	Andaman Nicobar	400,000
2	Andhra Pradesh	22,040,227
3	Arunachal Pradesh	499,498
4	Assam	7,185,430
5	Bihar	19,608,609
6	Chandigarh	554,283
7	Chhattisgarh	10,822,335
8	Dadra & Nagar Haveli	163,808
9	Daman & Diu	142,623
10	Delhi	13,431,273
11	Goa	1,005,890
12	Gujarat	41,448,713
13	Haryana	15,608,119
14	Himachal Pradesh	8,648,483
15	Jammu and Kashmir	8,486,579
16	Jharkhand	13,645,874
17	Karnataka	24,264,486
18	Kerala	15,429,919
19	Ladakh	230,630
20	Lakshadweep	200,000
21	Madhya Pradesh	17,574,110
22	Maharashtra	21,986,569
23	Manipur	299,934
24	Meghalaya	433,789
25	Mizoram	615,332
26	Nagaland	1,099,038
27	Odisha	52,270,570
28	Puducherry	609,251
29	Punjab	3,016,739
30	Rajasthan	17,321,034
31	Sikkim	164,000
32	Tamil Nadu	4,363,183
33	Telangana	2,875,082
34	Tripura	1,054,437
35	Uttar Pradesh	26,295,737
36	Uttarakhand	5,673,850
37	West Bengal	9,229,228
	Total	368,698,662

#### Details of the number of LED bulbs distributed till June 2024

## 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.

.....3.

- 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

## GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.1635 ANSWERED ON 01.08.2024

#### HYDRO POTENTIAL IN THE COUNTRY

## 1635 SHRI DUSHYANT SINGH: SHRI RAJKUMAR CHAHAR:

Will the Minister of POWER be pleased to state:

(a) the details of the Power Purchase Agreement between Ratle Hydro Electric Power Corporation Limited (RHPCL) and Rajasthan Urja Vikas, IT Services Limited;

(b) whether the Government has taken any initiative to harness the hydro potential including the hydro pumped storage potential and if so, the details thereof;

(c) the details of the hydro potential in the country, State-wise; and

(d) the number of hydro projects in the country whose Detailed Project Reports (DPRs) have been concurred by the Central Electricity Authority (CEA) during the last ten years for taking up construction along with the number of DPRs under preparation, State-wise?

#### ANSWER

#### THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a): The Power Purchase Agreement (PPA) between Ratle Hydro Electric Power Corporation Limited (RHPCL) and Rajasthan Urja Vikas, IT Services Limited has been signed on 03.01.2024 for purchase of power from Ratle Hydroelectric Project for a period of 40 years at a tariff to be determined by the Central Electricity Regulatory Commission (CERC).

(b): The Government of India has taken following initiatives to harness the hydro potential including the hydro pumped storage potential:

i. Declaring large hydropower projects (capacity above 25 MW) as renewable energy source.

.....2.

- ii. Hydro Purchase Obligation (HPO) as a separate entity within Non-solar Renewable Purchase Obligation (RPO).
- iii. Tariff rationalization measures for bringing down hydropower tariff.
- iv. Budgetary support for Flood Moderation/Storage hydroelectric projects.
- v. Budgetary support towards cost of enabling infrastructure, i.e. roads/bridges.
- vi. Guidelines to promote development of Pumped Storage Projects (PSPs) in the country was issued on 10<sup>th</sup> April, 2023.
- vii. Waiver of Inter State Transmission System (ISTS) charges for hydroelectric projects and PSPs.
- viii. Reduction of timeline by Central Electricity Authority (CEA) for concurrence of Detailed Project Report (DPR).

(c): As per the reassessment study carried out by CEA during the period 2017-2023, the exploitable large hydro potential in the country is 1,33,410 MW. Further, the identified pumped storage potential is 1,76,280 MW. The State/UT-wise details are attached at Annexure-I.

(d): CEA has concurred 24 hydroelectric schemes including PSPs with an aggregate installed capacity of 15,569 MW during the last ten years. Further, 17 hydroelectric projects aggregating to 11,376 MW and 38 PSPs aggregating to 55,330 MW are under Survey & Investigation (S&I) for preparation of DPR. The State/UT-wise details are attached at Annexure-II.

\* \* \* \* \* \* \* \* \* \* \*

\*\*\*\*\*

#### <u>State/UT-wise details of Hydro Potential including Pumped Storage Potential</u> (Installed capacity - above 25 MW)

		As on 30.06.2024
	CONVENTIONAL	PUMPED STORAGE
Region/ State/ UT	Exploitable Potential(MW)	Exploitable Potential*(MW)
NORTHERN		•
Jammu & Kashmir	12264	
Ladakh	707	
Himachal Pradesh	18305	7260
Punjab	1301	
Haryana		
Rajasthan	411	9200
Uttarakhand	13481	1000
Uttar Pradesh	502	13440
Sub Total (NR)	46971	30900
WESTERN		
Madhya Pradesh	2819	8560
Chhattisgarh	1311	8925
Gujarat	550	6140
Maharashtra	3144	42955
Goa		
Sub Total (WR)	7824	66580
SOUTHERN		
Andhra Pradesh	2596	26420
Telangana	1302	8755
Karnataka	4414	7600
Kerala	2473	1200
Tamil Nadu	1785	16500
Sub Total (SR)	12570	60475
EASTERN		
Jharkhand	300	1500
Bihar	130	
Odisha	2825	4795
West Bengal	809	5500
Sikkim	6051	
Sub Total (ER)	10115	11795
NORTH EASTERN		
Meghalaya	2026	
Tripura		
Manipur	615	
Assam	643	320
Nagaland	325	
Arunachal Pradesh	50394	660
Mizoram	1927	5550
Sub Total (NER)	55930	6530
ALL INDIA	133410	176280

\* Exploitable Potential is subject to change due to addition/deletion of project and change in Installed capacity of Projects.

\*\*\*\*\*

## <u>State/UT-wise number of Hydro Schemes including Pumped Storage Projects</u> (PSPs) concurred by CEA during last ten years along with number of Projects <u>under Survey & Investigation (S&I) for preparation of DPR</u>

SI. No.	State/ UT	Number of Hydro Electric Schemes including PSPs concurred by CEA during last ten years	Number of Hydro Projects under S&I for preparation of DPR	Nos. of PSPs under S&I for preparation of DPR
1	Andhra Pradesh	2	-	16
2	Arunachal Pradesh	5	8	-
3	Assam	1	-	-
4	Himachal Pradesh	5	4	-
5	Jammu & Kashmir	6	1	-
6	Manipur	1	-	-
7	Meghalaya	2	1	-
8	West Bengal	1	1	-
9	Odisha	1	-	-
10	Uttarakhand	-	1	-
11	Kerala	-	1	-
12	Rajasthan	-	-	3
13	Uttar Pradesh	-	-	4
14	Madhya Pradesh	-	-	2
15	Maharashtra	-	-	10
16	Karnataka	-	-	3
	Total	24	17	38

\* \* \* \* \* \* \* \* \* \* \* \* \*

## GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.1643 ANSWERED ON 01.08.2024

#### **ELECTRIFICATION IN RURAL AND URBAN AREAS**

## †1643 SHRI PRADEEP KUMAR SINGH: SHRI RAJESH VERMA: SHRI HANUMAN BENIWAL:

Will the Minister of POWER be pleased to state:

(a) whether the Government has achieved the target of complete electrification of all rural and urban areas of the country and if so, the details thereof and if not, the reasons therefor;

(b) the details of the ratio of electrification throughout the country, Statewise;

(c) whether the Government conducts any study regarding the availability of supply of electricity in comparison to its demand in the States and if so, the reasons for the failure of power companies to ensure regular electricity supply to the rural and urban consumers during current year especially from the month of March, 2024 till date in Rajasthan State despite the availability of estimates of demand in this regard along with the details thereof;

(d) whether the Government has achieved the goal of providing round the clock electricity in all the urban and rural areas of the country and if so, the details thereof;

(e) the action/steps taken by the Government to strengthen the Integrated Power Development Scheme (IPDS) to supply 24X7 power to all areas in the country and time line fixed to achieve the target in this regard; and

(f) if not, the reasons therefor?

#### ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF POWER

#### (SHRI SHRIPAD NAIK)

(a) & (b): The Government of India implemented Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and Integrated Power Development Scheme (IPDS) to strengthen the sub-transmission and distribution networks in rural and urban areas respectively. As reported by the States, all the inhabited un-electrified census villages in the country were electrified by 28th April 2018. A total of 18,374 villages in the country were electrified during the scheme of DDUGJY.

.....2.

The State-wise details of the number of villages electrified are attached in Annexure-I.

Subsequently, the Government of India launched the Pradhan Mantri Sahaj Bijli Har Ghar Yojana (SAUBHAGYA) in October 2017 to achieve universal household electrification for providing electricity connections to all willing unelectrified households in rural areas and all willing poor households in urban areas in the country. Under SAUBHAGYA, all the States have reported 100% electrification of all the willing un-electrified households, identified before 31.03.2019. A total of 2.86 crore households in the country have been electrified since the launch of SAUBHAGYA.

The details of infrastructure works undertaken under DDUGJY/SAUBHAGYA and IPDS are placed at Annexure-II and Annexure-III respectively. The state-wise details of the number of households electrified are enclosed in Annexure-IV.

The construction of new households is a dynamic and continuous process. The Central Government is supporting States for electrification of unelectrified households left-out during SAUBHAGYA scheme, under the ongoing scheme of Revamped Distribution Sector Scheme (RDSS). In addition, all identified Particularly Vulnerable Tribal Groups (PVTG) un-electrified Households under PM-JANMAN (Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan) are being electrified under RDSS as per the scheme guidelines. Statewise details of household electrification under RDSS (PVTG+ additional Households) are placed at Annexure-V.

(c): The Annual Load Generation Balance Report (LGBR) published by the Central Electricity Authority outlines the anticipated month-wise Power Supply Position in terms of requirement and availability while simultaneously identifying the States/UTs with surplus power, which could be procured/ contracted by the States/UTs facing a deficit.

Months	Energy				Peak			
	Energy Requirement	Energy Supplied	Energy not Supplied		Peak Demand	Peak Met	Demand not Met	
	(MU)	(MU)	MU	%	( MW )	( MW )	(MW)	(%)
March, 2024	8,929	8,929	0	0	17,030	17,030	0	0
April, 2024	8,136	8,131	5	0.1	14,283	14,283	0	0
May, 2024	10,340	10,267	73	0.7	17,567	17,567	0	0
June, 2024*	10,470	10,347	123	1.2	17,774	17,774	0	0

The details of the actual Power Supply Position in Rajasthan from March 2024 to June 2024 are outlined below:

\*June Figures are provisional

- 2 -

.....3.

Above figures indicate that the gap between Energy Requirement and Energy Supplied between March 2024 to June 2024 is in the range of 0.1% to 1.2%. Even this gap between Energy Requirement and Energy Supplied is generally on account of constraints in the State transmission/distribution network etc.

(d) to (f) : There is adequate availability of power in the country. We have addressed the critical issue of power deficiency by adding 2,14,237 MW of generation capacity in the last ten years transforming our country from power deficit to power sufficient. We have increased the generation capacity by 79.5% from 2,48,554 MW in March 2014 to 4,46,190 MW in June 2024.

We have added 1, 95,181ckt kilometre of transmission lines since April 2014 connecting the whole country into one grid running on one frequency. This has enabled us to transfer 1,18,740 MW from one corner of the country to another. We strengthened the distribution system by implementing projects of 1.85 lac crores under DDUGJY/IPDS/SAUBHAGYA. Under the above distribution sector schemes, 2927 new sub-stations have been added, upgradation of 3965 existing sub-stations has been carried out, 6,92,200 Distribution Transformers have been installed, Feeder separation of 1,13,938 Circuit Kilometer (CKm) has been done and 8.5 Lakh Circuit Kilometer (CKm) of HT and LT lines have been added/upgraded across the States. Further, under the ongoing scheme of RDSS distribution infrastructure and smart metering works of Rs. 2.62 Lakh Cr. have been sanctioned, which are under execution.

As a result of these measures, the availability of power supply in rural areas has increased from 12.5 Hours in 2015 to 21.9 Hours in 2024. The power supply in urban areas has increased to 23.4 Hours in 2024. The gap between Energy Requirement and Energy Supplied has come down from 4.2% in 2013-14 to 0.1% in FY 2024-25 (till June, 2024).

Further, Electricity being a concurrent subject, supply and distribution of electricity to the consumers in a State/UT is within the purview of the respective State Government/Power Utility. Adequate quantum of power is available in the country. Making arrangement of appropriate quantum of power from various sources to meet the demand of electricity consumers in any State/UT is in the purview of the concerned State Government/Power Utilities. The Central Government only supplements the efforts of the State Governments by establishing power plants in Central Sector through Central Public Sector Undertakings (CPSUs) and allocating power from them to the various States/ UTs including the State of Rajasthan. The details of power supply position in the country in terms of Energy for the last ten years and the current year till June-2024 are given at Annexure-VI.

\* \* \* \* \* \* \* \* \* \* \* \*

\* \* \* \* \* \* \* \* \* \* \* \* \*

SI. No.	State	No. Of Villages Electrified under DDUGJY
1	Arunachal Pradesh	1483
2	Assam	2732
3	Bihar	2906
4	Chhattisgarh	1078
5	Himachal Pradesh	28
6	J&K	129
7	Jharkhand	2583
8	Karnataka	39
9	Madhya Pradesh	422
10	Maharashtra	80
11	Manipur	366
12	Meghalaya	1051
13	Mizoram	54
14	Nagaland	78
15	Odisha	3281
16	Rajasthan	427
17	Tripura	26
18	Uttar Pradesh	1498
19	Uttarakhand	91
20	West Bengal	22
	Total	18,374

## State-wise number of villages electrified under DDUGJY

\* \* \* \* \* \* \* \* \* \* \* \* \* \*

#### **ANNEXURE-II**

# ANNEXURE REFERRED IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 1643 ANSWERED IN THE LOK SABHA ON 01.08.2024

**Details of works executed under DDUGJY and SAUBHAGYA (since 2014-15):** 

Total closure project cost: Rs.1,26,544 Cr.

- a) Installation of 1933 nos. of new 33/11kV substations.
- b) Augmentation of 2356 nos. of 33/11kV substations.
- c) Laying of 8.017 Lakh CKm of HT and LT lines.
- d) Installation of 6,32,207 nos. of Distribution Transformers (DTRs).
- e) Installation of 1,90,41,387 nos. of Consumer meters/DT meters/Feeder meters.
- f) Laying of 1.139 Lakh CKm of 11kV Feeder separation lines.

#### **ANNEXURE-III**

# ANNEXURE REFERRED IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 1643 ANSWERED IN THE LOK SABHA ON 01.08.2024

**Details of works executed under IPDS:** 

Total closure Cost: Rs. 28,886 Cr.

- a) Installation of 994 nos. of new 33/11kV substations.
- b) Augmentation of 1609 nos. of 33/11kV substations.
- c) Laying of 33,884 CKm of HT and LT lines.
- d) Installation of 59,993 nos. of Distribution Transformers (DTRs).
- e) Installation of 89,67,566 nos. of Consumer meters/smart meters/prepaid meters/DT meters/Feeder meters/Boundary meters.

\* \* \* \* \* \* \* \* \* \* \*

\*\*\*\*\*\*

#### SI. Name of the States No of Households electrified No. 1 **Andhra Pradesh\*** 1,81,930 **Arunachal Pradesh** 2 47,089 3 Assam 23,26,656 Bihar 32,59,041 4 5 Chhattisgarh 7,92,368 **Gujarat\*** 41,317 6 7 Haryana 54,681 **Himachal Pradesh** 8 12,891 Jammu & Kashmir 3,77,045 9 10 Jharkhand 17,30,708 11 Karnataka 3,83,798 12 Ladakh 10,456 13 Madhya Pradesh 19,84,264 14 Maharashtra 15,17,922 15 Manipur 1,08,115 16 Meghalaya 2,00,240 17 Mizoram 27,970 18 Nagaland 1,39,516 19 Odisha 24,52,444 **Puducherry\*** 20 912 21 3,477 Punjab 22 Rajasthan 21,27,728 23 Sikkim 14,900 Tamil Nadu\* 2,170 24 Telangana 25 5,15,084 26 Tripura 1,39,090 27 **Uttar Pradesh** 91,80,571 28 Uttarakhand 2,48,751 West Bengal 29 7,32,290 Total 2,86,13,424

## No of Households electrified since the launch of SAUBHAGYA scheme including Additional Households achievement under DDUGJY

\*Not funded under SAUBHAGYA Scheme

\*\*\*\*\*

Household Electrification sanctioned under RDSS (PVTG+Addl HHs+ Vibrant Village Program)

	<b>/</b>				
SI. No.	Name of State	Sanctioned Outlay (Rs. Crores)	Sanctioned GBS (Rs. Crores)	Total Households Sanctioned	Households Electrified as on 18.07.2024
Α.	Addl. HHs Sanctioned und	er RDSS			
1	Rajasthan	459.18	275.51	190,959	62,160
2	Meghalaya	435.70	392.13	50,501	0
3	Mizoram	68.94	62.04	13,715	0
4	Nagaland	65.10	58.59	10,398	0
5	Uttar Pradesh	931.04	558.62	251,487	0
6	Andhra Pradesh	49.24	29.54	15,475	11,384
7	Jharkhand	7.47	4.48	872	0
8	Jammu & Kashmir	14.96	13.46	1,936	0
9	Bihar	119.57	71.74	21,658	0
10	Assam	785.55	706.99	127,111	0
	Total (A)	2,936.75	2,173.12	684,112	73,544
В.	Electrification works sand	tioned under R	DSS in Vibrant	Villages	
1	Himachal Pradesh	6.08	5.47	3,536	0
2	Arunachal Pradesh	20.18	18.16	1,683	0
3	Uttarakhand	13.08	11.77	1,154	0
	Total (B)	39.34	35.40	6,373	
C.	Household Electrification	through Grid Co	onnectivity und	ler PM-JANMA	N
	Sanctioned under RDSS				
1	Andhra Pradesh	88.71	53.23	25,054	22,245
2	Chhattisgarh	38.17	22.90	7,077	3,172
3	Jharkhand	53.39	32.03	9,134	0
4	Madhya Pradesh	136.07	81.65	27,358	7,517
5	Maharashtra	26.61	15.96	8,556	8,556
6	Rajasthan	40.34	24.20	17,633	9,815
7	Karnataka	3.77	2.26	1,615	811
8	Kerala	0.86	0.52	345	303
9	Tamil Nadu	29.89	17.94	10,673	4,781
10	Telangana	6.79	4.07	3,884	3,862
11	Tripura	61.52	55.37	11,664	2,367
12	Uttarakhand	0.41	0.37	221	667
13	Uttar Pradesh	1.10	0.66	316	157
	Total (C)	487.63	311.15	123,530	64,253
	Grand Total (A+B+C)	3,463.72	2,519.67	8,14,015	1,37,797

The details of power supply position in the country in terms of Energy for the last ten years and the current year till June-2024

	Energy [in Million Units (MU)]					
Years	Energy Requirement	Energy Supplied	Energy	Energy not Supplied		
	( MU )	( MU )	( MU )	(%)		
2014-15	10,68,923	10,30,785	38,138	3.6		
2015-16	11,14,408	10,90,850	23,558	2.1		
2016-17	11,42,928	11,35,332	7,596	0.7		
2017-18	12,13,326	12,04,697	8,629	0.7		
2018-19	12,74,595	12,67,526	7,070	0.6		
2019-20	12,91,010	12,84,444	6,566	0.5		
2020-21	12,75,534	12,70,663	4,871	0.4		
2021-22	13,79,812	13,74,024	5,787	0.4		
2022-23	15,13,497	15,05,914	7,583	0.5		
2023-24	16,26,132	16,22,020	4,112	0.3		
2024-25 (Upto June, 2024)*	4,51,746	4,51,172	574	0.1		

\*Figures for June, 2024 are provisional

## GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.1645 ANSWERED ON 01.08.2024

### STATUS OF FLUE GAS DE-SULPHURISATION (FGD) INSTALLATION IN THERMAL POWER PLANTS

#### **1645 SHRI P P CHAUDHARY:**

Will the Minister of POWER be pleased to state:

(a) the current status of installation of Flue Gas De-sulphurisation (FGD) equipment in thermal power plants across the country;

(b) the details of the number of thermal power plants (TPPs) that have completed FGD installation, category-wise;

(c) whether any thermal power plants have faced delays in FGD installation and if so, the reasons for such delays and the steps taken to address them;

(d) the amount of environmental compensation collected from non-compliant thermal power plants so far, if any; and

(e) whether the Government proposes to revise the timelines or compensation structure for FGD installation and if so, the details thereof?

#### ANSWER

### THE MINISTER OF STATE IN THE MINISTRY OF POWER

#### (SHRI SHRIPAD NAIK)

(a): Currently, Flue Gas Desulfurization (FGD) is being installed in 537 units in Coal based Thermal Power Plants across the country. The current status of installation of FGD equipment in Thermal Power Plants across the country is given below:

FGD status	No. of units with Capacity
FGD installed	39 nos. (19,430 MW)
Contract awarded / under implementation	238 nos. (1,05,200 MW)
Under Various stages of tendering process	139 nos. (42,847 MW)
In pre-tendering process	121 nos. (36,683 MW)

.....2.

Category	<b>Completed FGD Installation (Units &amp; Capacity)</b>
Α	11 nos. (4,390 MW)
В	2 nos. (1,160 MW)
C	26 nos. (13,880 MW)
Total	39 nos. (19,430 MW)

(b): The details of the number of thermal power plants (TPPs) that have completed FGD installation(category-wise) are given below:

- 2 -

(c): Some thermal power plants have faced delays in installation of FGD. Major issues/challenges being faced during the implementation of FGD system in thermal power plants are as below:

i. FGD technology being new to our country, at present there are limited vendors with limited capacity to supply and install FGD components. Vendors' capacity for FGD installation is about 16-20 GW (33 to 39 units) in the country and time taken for installation is about 44 to 48 months. A sudden surge of demand has arisen, as all thermal generating units are to comply with SO2 emission norms within a short period which created huge gap between demand and supply of FGD equipment.

ii. India had manufacturing capability of 70% FGD components which has now increased to 80% with the passage of time. However, it still depends on the imports from other countries. Further, a huge foreign exchange for importing technology, equipment and skilled manpower from other countries is also required.

iii. The installation of FGD systems has also faced difficulties in terms of conceptualization, design challenges etc. Standardization could not be done as different sites have different requirements like space constraints, lay-out and orientation etc.

To address the above issues, vendors have been encouraged to enhance their capacity and to maximize the indigenous production of all FGD parts in order to reduce the import dependence.

(d) & (e): As per MoEF&CC Notification dated 05.09.2022, the time limits for implementation of the SO<sub>2</sub> emission norms by category A, B and C (based on plant's location) coal-fired thermal power plants are December 2024, December 2025 and December 2026 respectively. The coal-fired thermal power plants are required to comply with the SO<sub>2</sub> emission norms within these stipulated timelines, failing which environmental compensation for non-compliance with SO<sub>2</sub> emission norms shall be imposed on the thermal power plants accordingly.

. . ...

\* \* \* \* \* \* \* \* \*

## GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.1711 ANSWERED ON 01.08.2024

#### **INCREASE IN DEMAND FOR ELECTRICITY**

#### **†1711 SHRI SATPAL BRAHAMCHARI:**

Will the Minister of POWER be pleased to state:

(a) whether the demand for electricity in many villages across the country is drastically increasing due to Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and Integrated Power Development Scheme (IPDS) run by the Government;

(b) if so, the details thereof, State and district-wise including Haryana;

(c) whether the Government is facing difficulty to manage the huge increase in power demand;

(d) if so, the details thereof and the reasons therefor;

(e) the number of villages facing acute shortage of electricity, State and district-wise; and

(f) the steps taken/being taken by the Government to meet the said demand?

#### ANSWER

#### THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) to (e): Yes. However, there is adequate availability of power in the country. We have addressed the critical issue of power deficiency by adding 2,14,237 MW of generation capacity in the last ten years transforming our country from power deficit to power sufficient. We have increased the generation capacity by 79.5% from 2,48,554 MW in March 2014 to 4,46,190 MW in June, 2024.

We have added 1,95,181 ckt kilometre of transmission lines since April, 2014 connecting the whole country into one grid running on one frequency. This has enabled us to transfer 1,18,740 MW from one corner of the country to another.

.....2.

During the last ten (10) years, we have implemented Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and Integrated Power Development (IPDS) Schemes to achieve the objective of providing uninterrupted power supply by strengthening the sub-transmission and distribution network.

We have also implemented the Pradhan Mantri Sahaj Bijli Har Ghar Yojana- (SAUBHAGYA) with the objective to achieve universal household electrification for providing electricity connection to all willing un-electrified household in rural area and all willing poor household in urban areas in the country.

Under these schemes, with an investment of 1.85 lakh crores, 18,374 villages have been electrified and 2.86 crore household were provided electricity connections. As a result, 100% of the villages have been electrified. Besides this, 2927 new substations have been added, upgradation of 3965 existing sub stations has been carried out, 6,92,200 Distribution Transformers have been installed, 7833 agriculture Feeder separation has been done and 8.5 Lakh Circuit Kilometer (CKm) of HT and LT lines have been added/upgraded. As a result of these measures, the availability of power supply in rural areas has increased from 12.5 Hours in 2015 to 21.9 Hours in 2024. The power supply in urban areas has increased to 23.4 Hours in 2024. The gap between Energy Requirement and Energy Supplied has come down from 4.2% in 2013-14 to 0.1% in FY 2024-25 (till June, 2024). The details of actual power supply position in the country in terms of Energy for the last five years and the current year till June, 2024 are given below:

	Energy [in Million Units (MU)]							
Years	Energy Requirement		Energy S	Energy Not Supplied				
	(MU)	% Growth	(MU)	% Growth	(MU)	(%)		
2019-20	1,291,010	1.3	1,284,444	1.3	6,566	0.5		
2020-21	1,275,534	(-) 1.2	1,270,663	(-) 1.1	4,871	0.4		
2021-22	1,379,812	8.2	1,374,024	8.1	5,787	0.4		
2022-23	1,513,497	9.7	1,505,914	9.6	7,583	0.5		
2023-24	1,626,132	7.4	1,622,020	7.7	4,112	0.3		
2024-25 (upto June,	451,746		451,172		574	0.1		
2023-24 2024-25 (upto June, 2024)*	<u>1,626,132</u> 451,746		<u>1,622,020</u> 451,172	7.7	<u>4,112</u> 574			

\*Figures for June, 2024 are provisional

It may be seen from the above figures that the growth in Energy Supplied has been by and large commensurate to the growth in Energy Requirement in the country with only a marginal gap between the two. Even this gap between Energy Requirement and Energy Supplied is generally on account of constraints in the State transmission/distribution network, etc. The details of State-Wise/Region-Wise actual power supply position in the country, including the State of Haryana, in terms of Energy from FY 2019-20 to FY 2023-24 and the current year till June, 2024 are enclosed in Annexure-I (a)-(f).

It may be mentioned that the power supply position details are available for the State as a whole and the supply to various consumers/districts of the State is the prerogative of the respective State Government / Distribution Entity.

(f): The following steps have been taken by Govt. of India for meeting the increasing electricity demand in the country:

(i) In order to ensure an uninterrupted power supply for the nation's growth, the anticipated capacity addition (Under Construction and Identified) by 2032 is given below:

- a) Thermal capacity of minimum 80,000 MW by 2032.
- b) Hydro capacity of 25,010 MW by 2032.
- c) Nuclear capacity of 14,300 MW by 2032.
- d) Pump Storage Plants (PSP) capacity of 50,760 MW by 2032.
- e) Small Hydro Capacity of 510 MW by 2032.
- f) Solar Power Capacity of 1,43,980 MW by 2032.
- g) Wind Power Capacity of 23,340 MW by 2032.

Thus, total anticipated capacity addition by 2032 will be 3,37,900 MW.

(ii) Ministry has issued directions to imported coal-based plants under Section 11 of Electricity Act to operate and generate power to their full capacity. The direction has been extended till 15.10.2024 keeping in view the shortages during the evening peak periods.

(iii) Gas-based power plants of NTPC as well as other generators are being scheduled during high power demand period.

(iv) All the GENCOs including IPPs and Central generating stations have been advised to generate and maintain full availability on daily basis excluding the period of planned maintenance or forced outage.

(vi) Hydro based generation is being scheduled in a manner so as to conserve water for meeting demand during peak period.

(vii) Planned maintenance of generating units is being minimized during period of high demand.

viii) Government of India launched 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 in the country. Under the scheme distribution infrastructure and smart metering works of about Rs. 2.62 Lakh Cr have been sanctioned.

Further, Electricity being a concurrent subject, supply and distribution of electricity to the consumers in a State/UT is within the purview of the respective State Government/Power Utility. Adequate quantum of power is available in the country. Making arrangement of appropriate quantum of power from various sources to meet the demand of electricity consumers in any State/UT is in the purview of the concerned State Government/Power Utilities. The Central Government only supplements the efforts of the State Governments by establishing power plants in Central Sector through Central Public Sector Undertakings (CPSUs) and allocating power from them to the various States/UTs including the State of Haryana.

\* \* \* \* \* \* \* \* \* \* \*

\* \* \* \* \* \* \* \* \* \* \* \* \*

State-wise Comparison of Power Supply Position - Energy (FY 2024-25)					
(Figures in MU net)					
State/	e/ April, 2024 - June, 2024				
System /	Energy Requirement	Energy Supplied	Energy not Supplied		
Region	( MU )	( MU )	( MU )	(%)	
Chandigarh	578	578	0	0.0	
Delhi	11,614	11,606	8	0.1	
Haryana	19,332	19,321	11	0.1	
Himachal Pradesh	3,252	3,237	15	0.5	
Jammu & Kashmir	4,815	4,791	25	0.5	
Punjab	20,515	20,515	0	0.0	
Rajasthan	28,946	28,744	202	0.7	
Uttar Pradesh	48,846	48,765	80	0.2	
Uttarakhand	4,682	4,668	14	0.3	
Northern Region	142,980	142,626	354	0.2	
Chhattisgarh	11,106	11,104	2	0.0	
Gujarat	42,404	42,404	0	0.0	
Madhya Pradesh	25,240	25,217	23	0.1	
Maharashtra	53,338	53,334	5	0.0	
Dadra & Nagar Haveli and		,,	-		
Daman & Diu	2,696	2,696	0	0.0	
Goa	1,437	1,431	6	0.4	
Western Region	138,588	138,552	36	0.0	
Andhra Pradesh	20,501	20,501	0	0.0	
Telangana	19,411	19,411	0	0.0	
Karnataka	23,704	23,704	0	0.0	
Kerala	8.529	8.527	2	0.0	
Tamil Nadu	35,385	35,385	0	0.0	
Puducherry	970	970	0	0.0	
Lakshadweep (#)	18	18	0	0.0	
Southern Region	108.513	108.511	2	0.0	
Bihar	12.601	12.514	87	0.7	
DVC	6.762	6.761	1	0.0	
Jharkhand	4.140	4.089	52	1.3	
Odisha	11.996	11.991	5	0.0	
West Bengal	20.806	20.775	31	0.2	
Sikkim	137	137	0	0.0	
Andaman- Nicobar (#)	114	112	3	2.6	
Eastern Region	56.456	56.279	177	0.3	
Arunachal Pradesh	245	245	0	0.0	
Assam	3.314	3.309	5	0.1	
Manipur	264	264	0	0.0	
Meghalava	491	491	0	0.0	
Mizoram	166	166	0	0.0	
Nagaland	233	233	0	0.0	
Tripura	494	494	0	0.0	
North-Eastern Region	5.208	5.204	5	0.1	
All India	451.746	451.172	574	0.1	
(#) Lakshadweep and Andaman & Nicobar Islands are stand- alone systems, power supply position of these,					

(#) Lakshadweep and Andaman & Nicobar Islands are stand- alone systems, power supply position of these, does not form part of regional requirement and supply.

Note: Power Supply Position Report has been compiled based on the data furnished by State Utilities/ Electricity Departments.

\* \* \* \* \* \* \* \* \* \* \* \* \*

Statewise Comparison of Power Supply Position - Energy (EX 2023-24)					
State-wise	comparison of Fower Su	ppiy Position - Energy	(Figur) (Figur	es in MU net)	
State/	State/ April 2023 - March 2024				
Svstem /	Energy Requirement Energy Supplied Energy not Sup			t Supplied	
Region	(MU)	( MU )	(MU)	(%)	
Chandigarh	1.789	1.789	0	0.0	
Delhi	35.501	35.496	5	0.0	
Harvana	63.983	63,636	348	0.5	
Himachal Pradesh	12,805	12,767	38	0.3	
Jammu & Kashmir	20,040	19,763	277	1.4	
Punjab	69,533	69,528	5	0.0	
Rajasthan	107,422	106,806	616	0.6	
Uttar Pradesh	148,791	148,287	504	0.3	
Uttarakhand	15,644	15,532	112	0.7	
Northern Region	476,852	474,946	1,906	0.4	
Chhattisgarh	39,930	39,872	58	0.1	
Gujarat	145,768	145,740	28	0.0	
Madhya Pradesh	99,301	99,150	151	0.2	
Maharashtra	207,108	206,931	176	0.1	
Dadra & Nagar Haveli and Daman		,			
& Diu	10,164	10,164	0	0.0	
Goa	5,111	5,111	0	0.0	
Western Region	517,714	517,301	413	0.1	
Andhra Pradesh	80,209	80,151	57	0.1	
Telangana	84,623	84,613	9	0.0	
Karnataka	94,088	93,934	154	0.2	
Kerala	30,943	30,938	5	0.0	
Tamil Nadu	126,163	126,151	12	0.0	
Puducherry	3,456	3,455	1	0.0	
Lakshadweep (#)	64	64	0	0.0	
Southern Region	419,531	419,293	238	0.1	
Bihar	41,514	40,918	596	1.4	
DVC	26,560	26,552	8	0.0	
Jharkhand	14,408	13,858	550	3.8	
Odisha	41,358	41,333	25	0.1	
West Bengal	67,576	67,490	86	0.1	
Sikkim	544	543	0	0.0	
Andaman- Nicobar (#)	386	374	12	3.2	
Eastern Region	192,013	190,747	1,266	0.7	
Arunachal Pradesh	1,014	1,014	0	0.0	
Assam	12,445	12,341	104	0.8	
Manipur	1,023	1,008	15	1.5	
Meghalaya	2,236	2,066	170	7.6	
Mizoram	684	684	0	0.0	
Nagaland	921	921	0	0.0	
Tripura	1,691	1,691	0	0.0	
North-Eastern Region	20,022	19,733	289	1.4	
All India	1,626,132	1,622,020	4,112	0.3	
(#) Lakshadweep and Andaman & N	Nicobar Islands are stand	d- alone systems, pow	er supply posi	tion of these,	
does not form part of regional requirement and supply.					

Note: Power Supply Position Report has been compiled based on the data furnished by State Utilities/ Electricity Departments.

State-wise Comparison of Power Supply Position - Energy (FY 2022-23)					
(Figures in MU net					
State/	April, 2022 - March, 2023				
System /	Energy Energy Supplied Energy not Supplie		t Supplied		
Region	( MU )	( MU )	( MU )	(%)	
Chandigarh	1,788	1,788	0	0.0	
Delhi	35,143	35,133	10	0.0	
Haryana	61,451	60,945	506	0.8	
Himachal Pradesh	12,649	12,542	107	0.8	
Jammu & Kashmir	19,639	19,322	317	1.6	
Punjab	69,522	69,220	302	0.4	
Rajasthan	101,801	100,057	1,745	1.7	
Uttar Pradesh	144,251	143,050	1,201	0.8	
Uttarakhand	15,647	15,386	261	1.7	
Northern Region	463,088	458,640	4,449	1.0	
Chhattisgarh	37,446	37,374	72	0.2	
Gujarat	139,043	138,999	44	0.0	
Madhya Pradesh	92,683	92,325	358	0.4	
Maharashtra	187,309	187,197	111	0.1	
Dadra & Nagar Haveli and	10 018	10 018	0	0.0	
Daman & Diu	10,010	10,018	U	0.0	
Goa	4,669	4,669	0	0.0	
Western Region	477,393	476,808	586	0.1	
Andhra Pradesh	72,302	71,893	410	0.6	
Telangana	77,832	77,799	34	0.0	
Karnataka	75,688	75,663	26	0.0	
Kerala	27,747	27,726	21	0.1	
Tamil Nadu	114,798	114,722	77	0.1	
Puducherry	3,051	3,050	1	0.0	
Lakshadweep (#)	64	64	0	0.0	
Southern Region	371,467	370,900	567	0.2	
Bihar	39,545	38,762	783	2.0	
DVC	26,339	26,330	9	0.0	
Jharkhand	13,278	12,288	990	7.5	
Odisha	42,631	42,584	47	0.1	
West Bengal	60,348	60,274	74	0.1	
Sikkim	587	587	0	0.0	
Andaman- Nicobar (#)	348	348	0	0.1	
Eastern Region	182,791	180,888	1,903	1.0	
Arunachal Pradesh	915	892	24	2.6	
Assam	11,465	11,465	0	0.0	
Manipur	1,014	1,014	0	0.0	
Meghalaya	2,237	2,237	0	0.0	
Mizoram	645	645	0	0.0	
Nagaland	926	873	54	5.8	
Tripura	1,547	1,547	0	0.0	
North-Eastern Region	18,758	18,680	78	0.4	
All India	1,513,497	1,505,914	7,583	0.5	
(#) Lakshadweep and Andam	an & Nicobar Islands a	are stand- alone syste	ems, power supply p	osition of these,	
does not form part of regional requirement and supply.					

Note: Power Supply Position Report has been compiled based on the data furnished by State Utilities/ Electricity Departments.

State-wise Comparison of Power Supply Position - Energy (FY 2021-22)					
	(Figures in MU net)				
	April, 2021 - March, 2022				
State/ System /	Energy Requirement	Energy Supplied	Energy not Supplied		
Region	( MU )	( MU )	( MU )	(%)	
Chandigarh	1,606	1,606	0	0.0	
Delhi	31.128	31,122	6	0.0	
Haryana	55,499	55,209	290	0.5	
Himachal Pradesh	12,115	12,088	27	0.2	
Jammu & Kashmir	19,957	18,434	1,524	7.6	
Punjab	62,846	62,411	436	0.7	
Rajasthan	89,814	89,310	504	0.6	
Uttar Pradesh	129,448	128,310	1,138	0.9	
Uttarakhand	15,521	15,426	94	0.6	
Northern Region	417,934	413,915	4,019	1.0	
Chhattisgarh	31,908	31,872	35	0.1	
Gujarat	123,953	123,666	287	0.2	
Madhya Pradesh	86,501	86,455	46	0.1	
Maharashtra	172,823	172,809	14	0.0	
Daman & Diu	2,594	2,594	0	0.0	
Dadra & Nagar Haveli	6,839	6,839	0	0.0	
Goa	4,448	4,448	0	0.0	
Western Region	429,065	428,683	383	0.1	
Andhra Pradesh	68,413	68,219	194	0.3	
Telangana	70,539	70,523	16	0.0	
Karnataka	72,437	72,417	20	0.0	
Kerala	26,579	26,570	9	0.0	
Tamil Nadu	109,816	109,798	18	0.0	
Puducherry	2,894	2,893	1	0.0	
Lakshadweep (#)	56	56	0	0.0	
Southern Region	350,678	350,421	258	0.1	
Bihar	36,216	35,761	455	1.3	
DVC	23,741	23,736	4	0.0	
Jharkhand	11,148	10,590	558	5.0	
Odisha	38,339	38,332	7	0.0	
West Bengal	54,001	53,945	57	0.1	
Sikkim	610	609	0	0.0	
Andaman- Nicobar (#)	335	327	8	2.3	
Eastern Region	164,054	162,973	1,081	0.7	
Arunachal Pradesh	875	874	1	0.1	
Assam	10,844	10,825	19	0.2	
Manipur	1,019	1,018	1	0.1	
Meghalaya	2,256	2,243	13	0.6	
Mizoram	656	644	12	1.8	
Nagaland	852	851	1	0.1	
Tripura (*)	1,578	1,578		0.0	
North-Eastern Region	18,079	18,033	<u> </u>	0.3	
	1,3/9,812	1,3/4,U24	5,/8/	U.4	
(#) Laksnadweep and Anda	man & Nicobar Islands	are stand- alone sys	stems, power supply	position of these,	
(*) Excludes one region	a requirement and ene	iyy supplied.			
Note: Dower Supply Doci	tion Renort has been a	compiled based on	the data furniched	by State Iltilities/	
Electricity Departments.	ten nepert nas been (	Jempilea Masea Oli		ay otate otinites/	

State-wise Comparison of Power Supply Position - Energy (FY 2020-21)					
(Figures in MU net					
State/	April, 2020 - March, 2021				
System /	Energy Requirement	Energy Supplied	Energy no	t Supplied	
Region	( MU )	( MU )	( MU )	(%)	
Chandigarh	1,523	1,523	0	0.0	
Delhi	29,560	29,555	4	0.0	
Haryana	53,161	53,108	53	0.1	
Himachal Pradesh	10,186	10,130	56	0.5	
Jammu & Kashmir	19,773	17,222	2,551	12.9	
Punjab	58,445	58,377	67	0.1	
Rajasthan	85,311	85,205	106	0.1	
Uttar Pradesh	124,367	123,383	984	0.8	
Uttarakhand	13,827	13,818	8	0.1	
Northern Region	396,151	392,323	3,829	1.0	
Chhattisgarh	30,472	30,449	22	0.1	
Gujarat	111,622	111,622	0	0.0	
Madhya Pradesh	83,437	83,437	0	0.0	
Maharashtra	150,679	150,663	16	0.0	
Daman & Diu	2,223	2,223	0	0.0	
Dadra & Nagar Haveli	5,497	5,497	0	0.0	
Goa	4,083	4,083	0	0.0	
Western Region	388,013	387,975	38	0.0	
Andhra Pradesh	62,080	62,076	4	0.0	
Telangana	66,998	66,994	4	0.0	
Karnataka	68,851	68,831	19	0.0	
Kerala	25,118	25,102	16	0.1	
Tamil Nadu	101,194	101,189	5	0.0	
Puducherry	2,644	2,644	0	0.0	
Lakshadweep (#)	56	56	0	0.0	
Southern Region	326,885	326,836	48	0.0	
Bihar	34,171	34,018	153	0.4	
DVC	21,368	21,368	0	0.0	
Jharkhand	9,953	9,675	278	2.8	
Odisha	29.848	29.848	0	0.0	
West Bengal	51.644	51.543	100	0.2	
Sikkim	546	546	0	0.0	
Andaman- Nicobar (#)	346	323	23	6.7	
Eastern Region	147,530	146,999	531	0.4	
Arunachal Pradesh	719	714	5	0.7	
Assam	10,192	9,815	377	3.7	
Manipur	974	969	5	0.5	
Meghalava	2.031	2.005	26	1.3	
Mizoram	728	723	4	0.6	
Nagaland	826	822	4	0.5	
Tripura (*)	1.484	1.481	3	0.2	
North-Eastern Region	16.955	16.531	424	2.5	
All India	1.275.534	1.270.663	4.871	0.4	
(#) Lakshadweep and Anda	man & Nicobar Islands	are stand- alone svs	stems, power supply	position of these.	
does not form part of regional requirement and energy supplied.					

(\*) Excludes energy exported to Bangladesh.

Note: Power Supply Position Report has been compiled based on the data furnished by State Utilities/ Electricity Departments.

\* \* \* \* \* \* \* \* \* \* \* \* \*

State-wise Comparison of Power Supply Position - Energy (FY 2019-20)					
	(Figures in MU net				
State/	April, 2019 - March, 2020				
System /	Energy Requirement	Energy Supplied	Ener	gy not Supplied	
Region	( MU )	( MU )	(MU)	(%)	
Chandigarh	1,732	1,732	0	0.0	
Delhi	33,086	33,077	9	0.0	
Haryana	54,505	54,492	13	0.0	
Himachal Pradesh	10,424	10,353	71	0.7	
UT of J&K and Ladakh	20,025	16,259	3,767	18.8	
Punjab	56,776	56,770	6	0.0	
Rajasthan	81,281	81,222	58	0.1	
Uttar Pradesh	122,549	121,004	1,545	1.3	
Uttarakhand	14,472	14,376	96	0.7	
Northern Region	394,851	389,285	5,566	1.4	
Chhattisgarh	30,111	30,107	4	0.0	
Gujarat	113,940	113,939	1	0.0	
Madhya Pradesh	76,172	76,172	0	0.0	
Maharashtra	155,167	155,166	0	0.0	
Daman & Diu	2,574	2,574	0	0.0	
Dadra & Nagar Haveli	6,528	6,528	0	0.0	
Goa	4,350	4,350	0	0.0	
Western Region	388,841	388,836	5	0.0	
Andhra Pradesh	65,452	65,414	38	0.1	
Telangana	68,306	68,303	3	0.0	
Karnataka	72,799	72,796	3	0.0	
Kerala	26,315	26,265	50	0.2	
Tamil Nadu	108,816	108,812	4	0.0	
Puducherry	2,847	2,846	1	0.0	
Lakshadweep (#)	46	46	0	0.0	
Southern Region	344,535	344,436	99	0.0	
Bihar	31,627	31,533	94	0.3	
DVC	22,429	22,427	2	0.0	
Jharkhand	8,941	8,872	69	0.8	
Odisha	29,692	29,692	0	0.0	
West Bengal	52,948	52,824	124	0.2	
Sikkim	554	554	0	0.0	
Andaman- Nicobar ( <i>#)</i>	346	323	23	6.7	
Eastern Region	146,191	145,902	289	0.2	
Arunachal Pradesh	753	749	4	0.5	
Assam	9,804	9,288	516	5.3	
Manipur	924	917	6	0.7	
Meghalaya	2,112	2,064	48	2.3	
Mizoram	647	643	4	0.7	
Nagaland	814	809	5	0.7	
Tripura (*)	1,538	1,515	23	1.5	
North-Eastern Region	16,591	15,984	607	3.7	
All India	1,291,010	1,284,444	6,566	0.5	
(#) Lakshadweep and Andama	n & Nicobar Islands are st	and- alone systems, pov	ver supply po	sition of these,	
does not form part of regional requirement and energy supplied.					

(\*) Excludes energy exported to Bangladesh.

Note: Power Supply Position Report has been compiled based on the data furnished by State Utilities/ Electricity Departments.

\* \* \* \* \* \* \* \* \* \* \* \* \* \*

## GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.1717 ANSWERED ON 01.08.2024

#### **NEW POWER PLANTS IN ODISHA**

#### 1717 SMT. MALVIKA DEVI:

Will the Minister of POWER be pleased to state:

(a) whether the Government proposes to set up any new power plants in the future in the eastern part of the country, particularly in Odisha and if so, the details thereof;

(b) the steps taken/being taken by the Government to ensure that new renewable sources are used to generate power instead of old ones; and

(c) the details of the subsidy schemes introduced by the Government under solar, wind and hydro power?

#### ANSWER

#### THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a): As per Section 7 of Electricity Act, 2003 setting up of a thermal power plant is a de-licensed activity in the country and any generating company may establish, operate and maintain a generating station without obtaining a license under this Act if it complies with the technical standards relating to connectivity with the grid. However, as per Section 8 (1) of the Electricity Act, 2003, any generating company intending to set up a hydro generating station shall prepare and submit to the Central Electricity Authority (CEA) for its concurrence, a scheme estimated to involve a capital expenditure exceeding such sum (presently, Rs. 1000 crore), as may be fixed by the Central Government, from time to time, by notification.

Thermal Capacity of 20,200 MW has been identified for eastern region of country, which includes 6,640 MW particularly in the state of Odisha. Details are attached at Annexure.

.....2.

Further, information regarding Hydro Projects in eastern region including Odisha which have been concurred by Central Electricity Authority is given below:

SI.	Name of Project	State
No.		
1.	Upper Indravati Pumped Storage Project (600 MW)	Odisha
2.	Rammam-III HEP (800MW)	West Bengal
3.	Turga Pumped Storage Project (1000 MW)	West Bengal
4.	Teesta-St IV Hydro Electric project (520 MW)	Sikkim

(b): Measures taken by the Government to promote renewable energy sources in the country:

- i. Waiver of Inter State Transmission System (ISTS) charges for inter-state sale of solar and wind power for projects to be commissioned by 30th June 2025.
- ii. Declaration of trajectory for Renewable Consumption Obligation (RCO) up to the year 2029-30.
- iii. Setting up of Ultra Mega Renewable Energy Parks to provide land and transmission to RE developers for installation of RE projects at large scale.
- iv. Schemes such as Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM), Solar Rooftop Phase II, 12000 MW CPSU Scheme Phase II; PM Surya Ghar: Muft Bijli Yojana.
- v. Laying of new transmission lines and creating new sub-station capacity under the Green Energy Corridor Scheme for evacuation of renewable power.
- vi. Notification of standards for deployment of solar photovoltaic system/devices.
- vii. Standard Bidding Guidelines for tariff based competitive bidding process for procurement of Power from Grid Connected Solar PV and Wind Projects.
- viii. Government has issued orders that power shall be dispatched against Letter of Credit (LC) or advance payment to ensure timely payment by distribution licensees to RE generators.
  - ix. Notification of Promoting Renewable Energy through Green Energy Open Access Rules, 2022

.....3.

x. Notification of "The Electricity (Late Payment Surcharge and related matters) Rules (LPS rules).

- 3 -

- xi. Launch of Green Term Ahead Market (GTAM) to facilitate sale of Renewable Energy Power through exchanges.
- xii. National Green Hydrogen Mission launched with an aim to make India a global hub for production, utilization and export of Green Hydrogen and its derivatives.
- xiii. Notification of prescribed trajectory for RE power bids to be issued by Renewable Energy Implementation Agencies from FY 2023-24 to FY 2027-28.
- xiv. Permitting Foreign Direct Investment (FDI) up to 100 percent under the automatic route

(c): Central Government has introduced the following subsidy schemes/ measures under solar, wind and hydro power, which are enlisted below:

- i. Budgetary Support for Flood Moderation/Storage Hydro Electric Projects (HEPs).
- ii. Budgetary Support towards Cost of Enabling Infrastructure, i.e. roads/bridges.
- iii. Waiver of ISTS Charges on the transmission of power from new Hydro Power Projects, for which construction work is awarded and PPA is signed on or before 30.06.2025. Subsequently, part waiver of ISTS charges, in steps of 25% from 01.07.2025 to 01.07.2028, have been extended for HEPs for which construction work is awarded and PPA is signed up to 30.06.2028.
- iv. Waiver of ISTS charges extended to PSPs for which construction work is awarded up to 30.06.2025, subject to certain conditions. Subsequently, part waiver of ISTS charges, in steps of 25% from 01.07.2025 to 01.07.2028, have been extended for PSPs for which construction work is awarded up to 30.06.2028.
- v. PM Surya Ghar: Muft Bijli Yojana
- vi. Central Public Sector Undertaking (CPSU) Scheme Phase-II (Government Producer Scheme) for grid-connected Solar Photovoltaic (PV) Power Projects by the Government Producers
- vii. PLI Scheme 'National Programme on High Efficiency Solar PV Modules'
- viii. Solar Park Scheme
- ix. PM-KUSUM scheme

\* \* \* \* \* \* \* \* \* \* \*

\*\*\*\*\*

### THERMAL PROJECTS OF THE EASTERN REGION INCLUDING ODISHA TO BE COMMISSIONED BY 2031-32

SI. No.	Name of Project	State	Total Capacity (In MW)
1	Darlipalli-II	Odisha	800
2	New Nabi Nagar- II	Bihar	2400
3	Patratu Stage II	Jharkhand	1600
4	Raghunathpur TPS, PH-II	West Bengal	1320
5	Durgapur TPS	West Bengal	800
6	Koderma TPS, PH-II	Jharkhand	1600
7	ChandrapuraExtn TPS	Jharkhand	800
8	NLC Talabira STPS	Odisha	800
9	Buxar TPP-II	Bihar	800
10	Mahanadi Basin Power	Odisha	1600
11	IB Valley Extn St-III, (Unit 5 & 6)	Odisha	1320
12	Tenughat St II	Jharkhand	1320
13	Santaldih TPS, St-II, Unit 3 & 4	West Bengal	1600
14	Barkeshwar TPS, St-II,Unit 3	West Bengal	660
15	Durgapur Projects Limited	West Bengal	660
16	Ind Bharat Extn.	Odisha	800
17	NSL, Nagapatnam Power and Insfrastructure Ltd, Talcher, Angul	Odisha	1320

#### (Status as on 25.07.2024)

## GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.1725 ANSWERED ON 01.08.2024

#### SOLAR POWER PLANTS THROUGH NTPC

#### **1725 SHRI VISHNU DATT SHARMA:**

Will the Minister of POWER be pleased to state:

(a) whether the Government has any proposal to set up solar power plants through National Thermal Power Corporation (NTPC) in Panna, Katni and Chhatarpur districts of Khajuraho Lok Sabha Constituency keeping in view the requirement of energy;

(b) if so, the details regarding the status of the project along with the timeline for execution of the same; and

(c) if not, the reasons therefor?

#### ANSWER

#### THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) to (c): NTPC Renewable Energy Limited (NREL), a subsidiary of NTPC Ltd., is executing a Solar Project having a capacity of 630 MW at Barethi (District-Chhatarpur) in Khajuraho Lok Sabha Constituency under Engineering, Procurement & Construction (EPC) mode sanctioned by the Ministry of New & Renewable Energy (MNRE) under the Solar Parks scheme.

The Land for the development of the project has been transferred to NREL. Notice Inviting Tender (NIT) for EPC Package and Pooling Substation Package have been issued by NREL and Tender is expected to be awarded by September, 2024. The expected date of completion of the project is March, 2026.

## GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.1758 ANSWERED ON 01.08.2024

#### TAPOVAN VISHNUGAD HYDRO POWER PROJECT

### 1758 SHRI SUKHDEO BHAGAT: DR. AMAR SINGH:

Will the Minister of POWER be pleased to state:

(a) the details of scheduled commercial banks which have extended loans for National Thermal Power Corporation (NTPC) Tapovan-Vishnugad Hydro Power Project;

(b) the details of number of Public Sector Banks and Private Sector Banks of the said Scheduled Commercial banks; and

(c) whether the Government conducted any geological, geophysical and geotechnical studies before sanctioning the project and if so, the details thereof?

#### ANSWER

#### THE MINISTER OF STATE IN THE MINISTRY OF POWER

#### (SHRI SHRIPAD NAIK)

(a) & (b) : No project specific loan for development of Tapovan Vishnugad Hydro Electric Project (520 MW) was taken by National Thermal Power Corporation (NTPC) from any Scheduled Commercial Bank. The project has been financed through common pool of borrowings of NTPC under the Balance Sheet financing mode wherein NTPC arranged borrowing from following Scheduled Commercial Banks:-

S. No.	Name of Bank	Sector		
1.	Axis Bank			
2.	HDFC Bank Ltd	Drivete		
3.	ICICI Bank	Private		
4.	Jammu & Kashmir Bank	1		
5.	Bank of Baroda			
6.	Bank of India			
7.	Punjab National Bank	Dublia		
8.	State Bank of India	Public		
9.	UCO Bank			
10.	Union Bank			

(c): MoU for development of Tapovan Vishnugad Hydro Electric Power Project (520 MW) was signed between the Government of Uttaranchal (now Uttarakhand) and NTPC Ltd. on 31.12.2002. Further, Central Electricity Authority (CEA), in consultation with Geological Survey of India (GSI), Central Water Commission (CWC), Central Soil and Material Research Station (CSMRS), accorded Techno-Economic Clearance on 11.08.2004. As a part of the concurrence process, NTPC has conducted geological, geophysical and geotechnical investigations such as borehole drilling, exploratory drifting, petrographic studies, plate load tests and In-situ stress tests etc. The investment approval of the project was accorded by the NTPC Board on 16.11.2006.

### GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.1796 ANSWERED ON 01.08.2024

#### **CONVENTIONAL AND NON-CONVENTION SOURCES OF ENERGY**

#### **1796 SHRI ANIL YESHWANT DESAI:**

Will the Minister of POWER be pleased to state:

(a) whether India is self sufficient in the field of energy demands and supply and if so, the details thereof;

(b) the details of different conventional and non-conventional sources of energy and their share to meet the energy demand;

(c) the details of the steps taken to increase the production of the green energy in the country; and

(d) the details of public and private companies taking active initiatives in this field?

#### ANSWER

#### THE MINISTER OF STATE IN THE MINISTRY OF POWER

#### (SHRI SHRIPAD NAIK)

(a): There is adequate availability of power in the country. We have addressed the critical issue of power deficiency by adding 2,14,237 MW of generation capacity in the last ten years transforming our country from power deficit to power sufficient. We have increased the generation capacity by 79.5% from 2,48,554 MW in March 2014 to 4,46,190 MW in June 2024.

We have added 1,95,181 ckt kilometre of transmission lines since April 2014 connecting the whole country into one grid running on one frequency. This has enabled us to transfer 1,18,740 MW from one corner of the country to another. We strengthened the distribution system by implementing projects of 1.85 lac crores under DDUGJY/IPDS/SAUBHAGYA. Under the above distribution sector schemes, 2927 new sub-stations have been added, upgradation of 3965 existing sub-stations has been carried out, 6,92,200 Distribution Transformers have been installed, Feeder separation of 1,13,938 Circuit Kilometer (Km) has been done and 8.5 Lakh Circuit Kilometer (CKm) of HT and LT lines have been added/upgraded across the States. As a result of these measures, the availability of power supply in rural areas has increased from 12.5 Hours in 2015 to 21.9 Hours in 2024. The power

supply in urban areas has increased to 23.4 Hours in 2024. The gap between Energy Requirement and Energy Supplied has come down from 4.2% in 2013-14 to 0.1% in FY 2024-25 (till June, 2024). Even this gap between Energy Requirement and Energy Supplied is generally on account of constraints in the State transmission/distribution network and financial constraints of DISCOMs etc

The details of power supply position in the country in terms of Energy for the last ten years and the current year till June-2024 are given at Annexure-I.

(b): The details of the different conventional and non-conventional sources of energy as on 30.06.2024 and their share to meet energy demand in the country are given at Annexure-II.

(c): The Government has taken the following steps to increase the green energy production in the country:

- (i) Permitting Foreign Direct Investment (FDI) in Renewable energy sector up to 100 percent under the automatic route.
- (ii) Waiver of Inter State Transmission System (ISTS) charges for inter-state sale of solar and wind power for projects to be commissioned by 30th June 2025.
- (iii) Declaration of trajectory for Renewable Purchase Obligation (RPO) up to the year 2029- 30.
- (iv) Setting up of Ultra Mega Renewable Energy Parks to provide land and transmission to RE developers for installation of RE projects on a large scale.
- (v) Schemes such as Pradhan Mantri KisanUrja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM), PM Surya Ghar Muft Bijli Yojana, National Programme on High Efficiency Solar PV Modules, National Green Hydrogen Mission, Development of 1 GW Offshore Wind Energy Projects, etc.
- (vi) Laying of new transmission lines and creating new sub-station capacity under the Green Energy Corridor Scheme for evacuation of renewable power.
- (vii) Standard Bidding Guidelines for tariff based competitive bidding process for procurement of Power from Grid Connected Solar PV and Wind Projects.
- (viii) Notification of Promoting Renewable Energy through Green Energy Open Access Rules 2022.
- (ix) Launch of Green Term Ahead Market (GTAM) to facilitate sale of Renewable Energy Power through exchanges.
- (x) National Green Hydrogen Mission launched with an aim to make India a global hub for production, utilization and export of Green Hydrogen and its derivatives.

(d): The details of major Renewable Energy (RE) developers (Public and Private) in the country are given at Annexure-III.

\* \* \* \* \* \* \* \* \* \* \* \*

The details of power supply position in the country in terms of Energy for the last ten years and the current year till June-2024

		Energy [in Million Units (MU)]				
Years	Energy Requirement	Energy Supplied	Energy	not Supplied		
	( MU )	( MU )	( MU )	(%)		
2014-15	10,68,923	10,30,785	38,138	3.6		
2015-16	11,14,408	10,90,850	23,558	2.1		
2016-17	11,42,928	11,35,332	7,596	0.7		
2017-18	12,13,326	12,04,697	8,629	0.7		
2018-19	12,74,595	12,67,526	7,070	0.6		
2019-20	12,91,010	12,84,444	6,566	0.5		
2020-21	12,75,534	12,70,663	4,871	0.4		
2021-22	13,79,812	13,74,024	5,787	0.4		
2022-23	15,13,497	15,05,914	7,583	0.5		
2023-24	16,26,132	16,22,020	4,112	0.3		
2024-25 (Upto June, 2024)*	4,51,746	4,51,172	574	0.1		

\*Figures for June, 2024 are provisional

\*\*\*\*\*\*\*\*

The details of the different conventional and non-conventional sources of energy as on 30.06.2024 and their share to meet energy demand in the country

Sources		Installed	% age share of	
		Capacity (MW)	Total	
<b>Conventional Sour</b>	ces :			
	Coal	2,10,969.50	47.28	
	Lignite	6,620.00	1.48	
Thermal	Gas	24,818.21	5.56	
	Diesel	589.20	0.13	
	Total Thermal	2,42,996.91	54.46	
Nuclear		8,180.00	1.83	
Large Hydro		46,928.17	10.52	
Sub-total (Conve	entional Sources)	2,98,105.08	66.81	
Non-Conventional	1			
<b>_</b>	Small Hydro		4.40	
Renewable	Power	5,005.25	1.12	
Energy Sources	Wind Power	46,656.37	10.46	
	<b>Bio-Power</b>	10,948.71	2.45	
Large Hydro)	Solar Power	85,474.31	19.16	
Sub-total (Non-Conventional Sources)		1,48,084.64	33.19	
Total Instal	led Capacity	4,46,189.72	100.00	

\*\*\*\*\*

SI. No.	Major RE Developers	SI. No.	Major RE Developers
Publ	ic		
1	NTPC LTD.	5	DVC
2	SJVNL	6	OIL INDIA LTD.
3	NHPC	7	ONGC
4	THDC		
Priva	ate		
8	ACME ENERGY PVT LTD.	18	ALFANAR WIND
9	ADANI ENERGY PVT.LIMITED	19	APRAAVA ENERGY PRIVATE LIMITED (AEPL)
10	AMP ENERGY GREEN PRIVATE LIMITED	20	Green Infra Wind Energy Limited
11	AMPLUS AGES PRIVATE LIMITED	21	POWERICA WIND
12	AVAADA PVT LTD	22	SITAC WIND
13	AYANA RENEWABLE PVT LTD	23	SRIJAN WIND
14	RENEW SOLAR ENERGY PVT LTD	24	TORRENT SOLARGEN LIMITED
15	AZURE POWER PRIVATE LTD	25	GREEN INFRA
16	TATA POWER LIMITED	26	JSW RENEW ENERGY TWO LTD
17	SERENTICA RENEWABLES INDIA 4 PRIVATE LIMITED_BKN2		

## List of major Renewable Energy (RE) developers (Public and Private)

\* \* \* \* \* \* \* \* \* \* \*

## GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.1801 ANSWERED ON 01.08.2024

#### **ELECTRIFICATION OF HOUSEHOLD UNDER SAUBHAGYA YOJANA**

#### **1801 SHRI C N ANNADURAI:**

Will the Minister of POWER be pleased to state:

(a) the total quantity of power generated in the country during the last three years and the current year;

(b) whether the Government has achieved complete electrification of households under Saubhagya Yojana;

(c) if so, the details thereof, State/UT-wise including Tamil Nadu;

(d) the financial assistance provided by the Government under Saubhagya Yojana, State/UT-wise;

(e) whether any challenge has been faced during the implementation of the said scheme and if so, the details thereof;

(f) whether the Government is having any plan for electrification of any left out household;

(g) if so, whether the Government has issued any directions in this regard and if so, the details thereof;

(h) whether the Government has approved/sanctioned any new project for electrification of households across the country including Tamil Nadu; and

(i) if so, the details thereof, State/UT-wise?

#### ANSWER

#### THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : The total quantity of power generated in the country during the last three years and the current year (upto June, 2024) is given at Annexure-I.

(b) to (g): Government of India launched Pradhan Mantri Sahaj Bijli Har Ghar Yojana (SAUBHAGYA) in October, 2017 with the objective to achieve the universal household electrification in the Country. Under SAUBHAGYA, all willing un-electrified household in rural areas and all willing poor household in urban areas of the Country were provided electricity connection. A total of 2.86 Crore households of the country were provided electricity connection. The details of State-wise Household Electrification and grant disbursed are given at Annexure–II and Annexure-III.

.....2.

Government of India is further supporting States under the ongoing Revamped Distribution Sector Scheme (RDSS) for electrification of those unelectrified households which were left out under SAUBHAGYA.

In addition, all identified Particularly Vulnerable Tribal Groups (PVTG) Households under Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan (PM-JANMAN) for on-grid electricity connection are eligible for funding under RDSS.

The following challenges were faced during implementation of Saubhagya scheme:

- (i) Households scattered in inaccessible & remote areas.
- (ii) Difficult & Hilly terrain, inclement weather, Riverine/Marshy/Snow bound areas.
- (iii) **Poor/inadequate power infrastructure.**
- (iv) Locations in Left Wing Extremism affected areas.
- (v) Forest areas requiring clearance.
- (vi) Non-availability of materials (like Poles, Distribution Transformers, Meters, etc.) at local level.
- (vii) Various Right of Way issues.

(h) & (i) : The State/UT-wise details of Household electrification (including Tamil Nadu) under RDSS (PVTG+Addl HHs) are given at Annexure-IV.

\* \* \* \* \* \* \* \* \* \*

#### **ANNEXURE-I**

# ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 1801 ANSWERED IN THE LOK SABHA ON 01.08.2024

# The total quantity of power generated in the country during the last three years and the current year (upto June, 2024)

(All figures are in Million Units)

	2021-22	2022-23	2023-24	2024-25 (Upto June)
Total Power Generated	1,491,859.37	1,624,465.61	1,739,091.19	484,000.61

SI. No.	Name of the States	No of Households electrified from 11.10.2017 to 31.03.2022
1	Andhra Pradesh*	181,930
2	Arunachal Pradesh	47,089
3	Assam	2,326,656
4	Bihar	3,259,041
5	Chhattisgarh	792,368
6	Gujarat*	41,317
7	Haryana	54,681
8	Himachal Pradesh	12,891
9	Jammu & Kashmir	377,045
10	Jharkhand	1,730,708
11	Karnataka	383,798
12	Ladakh	10,456
13	Madhya Pradesh	1,984,264
14	Maharashtra	1,517,922
15	Manipur	108,115
16	Meghalaya	200,240
17	Mizoram	27,970
18	Nagaland	139,516
19	Odisha	2,452,444
20	Puducherry*	912
21	Punjab	3,477
22	Rajasthan	2,127,728
23	Sikkim	14,900
24	Tamil Nadu*	2,170
25	Telangana	515,084
26	Tripura	139,090
27	Uttar Pradesh	9,180,571
28	Uttarakhand	248,751
29	West Bengal	732,290
	Total	28,613,424

State-wise electrification of households since launch of Saubhagya Scheme including Additional Households achievement under DDUGJY

\* Not funded under Saubhagya

Г

1

#### The details of State wise grant disbursed

(Rs. in Crores)

S. No.	Name of the States	Grant Released to the States/UTs under Saubhagya
1	Arunachal Pradesh	160
2	Assam	705
3	Bihar	491
4	Chhattisgarh	379
5	Haryana	8
6	Himachal Pradesh	2
7	J&K	51
8	Jharkhand	284
9	Karnataka	48
10	Kerala	66
11	Ladakh	-
12	Madhya Pradesh	554
13	Maharashtra	218
14	Manipur	91
15	Meghalaya	206
16	Mizoram	41
17	Nagaland	54
18	Orissa	323
19	Punjab	1
20	Rajasthan	305
21	Sikkim	2
22	Telangana	17
23	Tripura	267
24	Uttar Pradesh	1,815
25	Uttarakhand	50
26	West Bengal	169
	Total	6,305

#### **ANNEXURE-IV**

# ANNEXURE REFERRED IN REPLY TO PARTS (h) & (i) OF UNSTARRED QUESTION NO. 1801 ANSWERED IN THE LOK SABHA ON 01.08.2024

\*\*\*\*\*

The State/UT-wise details of Household electrification (including Tamil Nadu) under RDSS (PVTG+Addl HHs)

e		Sanctioned	Sanctioned	Total	Households	
3. No	Name of State	Outlay (Rs.	GBS (Rs.	Households	Electrified as	
NO.		Crores)	Crores)	Sanctioned	on 18.07.2024	
Α.	A. Addl. HHs Sanctioned under RDSS					
1	Rajasthan	459.18	275.51	1,90,959	62,160	
2	Meghalaya	435.70	392.13	50,501	0	
3	Mizoram	68.94	62.04	13,715	0	
4	Nagaland	65.10	58.59	10,398	0	
5	Uttar Pradesh	931.04	558.62	2,51,487	0	
6	Andhra Pradesh	49.24	29.54	15,475	11,384	
7	Jharkhand	7.47	4.48	872	0	
8	Jammu & Kashmir	14.96	13.46	1,936	0	
9	Bihar	119.57	71.74	21,658	0	
10	Assam	785.55	706.99	1,27,111	0	
	Total (A)	2,936.75	2,173.12	6,84,112	73,544	
В.	<b>Electrification works sar</b>	nctioned unde	r RDSS in Vibr	ant Villages		
1	Himachal Pradesh	6.08	5.47	3,536	0	
2	Arunachal Pradesh	20.18	18.16	1,683	0	
3	Uttarakhand	13.08	11.77	1,154	0	
	Total (B)	39.34	35.40	6,373		
C.	Household Electrification	n through Grid	<b>Connectivity</b>	under PM-JAN	MAN	
	Sanctioned under RDSS					
1	Andhra Pradesh	88.71	53.23	25,054	22,245	
2	Chhattisgarh	38.17	22.90	7,077	3,172	
3	Jharkhand	53.39	32.03	9,134	0	
4	Madhya Pradesh	136.07	81.65	27,358	7,517	
5	Maharashtra	26.61	15.96	8,556	8,556	
6	Rajasthan	40.34	24.20	17,633	9,815	
7	Karnataka	3.77	2.26	1,615	811	
8	Kerala	0.86	0.52	345	303	
9	Tamil Nadu	29.89	17.94	10,673	4,781	
10	Telangana	6.79	4.07	3,884	3,862	
11	Tripura	61.52	55.37	11,664	2,367	
12	Uttarakhand	0.41	0.37	221	667	
13	Uttar Pradesh	1.10	0.66	316	157	
	Total (C)	487.63	311.15	1,23,530	64,253	
	Grand Total (A+B+C)	3,463.72	2,519.67	8,14,015	1,37,797	

### GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.1810 ANSWERED ON 01.08.2024

#### **CENTRALLY SPONSORED SCHEMES FOR ELECTRIFICATION**

#### **†1810 SHRI UMMEDA RAM BENIWAL:**

Will the Minister of POWER be pleased to state:

(a) the details of Centrally Sponsored Schemes for electrification being run in Rajasthan, especially in the rural and urban areas and hamlets of Barmer-Jaisalmer Parliamentary Constituency;

(b) the details of the amount of budget granted by the Government for the said schemes in Rajasthan; and

(c) the details of the physical progress made towards the target of completing the work in the said schemes, district-wise?

#### ANSWER

#### THE MINISTER OF STATE IN THE MINISTRY OF POWER

#### (SHRI SHRIPAD NAIK)

(a) & (b): The Central Government is supporting States for electrification of households which were missed out under SAUBHAGYA, under the ongoing scheme of Revamped Distribution Sector Scheme (RDSS). Under the scheme, works amounting to Rs. 459.18 Cr (with Government Budgetary Support (GBS) of Rs. 275.51 Cr) have been sanctioned for electrification of 1,90,959 left out households for the State of Rajasthan. This also includes Rs. 155.75 Cr sanctioned (with GBS of Rs. 93.45 Cr) for electrification of 54,197 households in Barmer-Jaisalmer Parliamentary Constituency.

The district-wise number of households to be electrified in Rajasthan under RDSS is at Annexure-I.

In addition, Rs. 40.34 Cr has been sanctioned (with GBS of Rs. 24.20 Cr) for electrification of 17,633 Particularly Vulnerable Tribal Groups (PVTG) households for the district of Baran in Rajasthan.

(c): The details of physical progress of sanctioned electrification works in Rajasthan are given at Annexure-II.

\* \* \* \* \* \* \* \* \*

#### **ANNEXURE-I**

# ANNEXURE REFERRED IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 1810 ANSWERED IN THE LOK SABHA ON 01.08.2024

SI. No	Districts	Number of Households sanctioned	Sanctioned Cost (Rs. In Cr.)
1	Banswara	14,990	25.30
2	Dungarpur	4,189	7.07
3	Nagaur & Didwana-uchaman	15,615	25.57
4	Pratapgarh	890	1.50
5	Rajsamand	9,501	10.75
6	Sikar	77	0.12
7	Udaipur	34,590	58.37
8	Beawar	41,396	112.92
9	Bikaner	14,458	46.79
10	Churu	6,379	21.24
11	Hanumangarh	2,057	3.24
12	Jaisalmer	12,801	42.83
13	Jalore	5,221	14.75
14	Jodhpur	20,993	66.94
15	Pali	1,223	3.73
16	Sriganganagar	1,598	4.72
17	Sirohi	4,981	13.33
	Total	1,90,959	459.18

\*\*\*\*\*\*\*

### **ANNEXURE-II**

# ANNEXURE REFERRED IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 1810 ANSWERED IN THE LOK SABHA ON 01.08.2024

SL	District	Physical Progress till 22,07,2024		
No.		(Number of households electrified)		
1	Banswara	9,068		
2	Dungarpur	4,189		
3	Pratapgarh	705		
4	Rajsamand	9,501		
5	Udaipur	15,268		
6	Salumbar	4,848		
7	Sikar	41		
8	Naguar	3,875		
9	Didwana-kuchaman	3,376		
10	Beawar	2,839		
11	Bikaner	1,823		
12	Churu	961		
13	Hanumangarh	444		
14	Jaisalmer	882		
15	Jalore	725		
16	Jodhpur	2,388		
17	Pali	256		
18	Sriganganagar	364		
19	Sirohi	756		
Total		62,309		

.....2.

## **Barmer-Jaisalmer Parliamentary Constituency**

SI.No	Parliamentary Constituency	Physical Progress till 22.07.2024	
		(Number of households electrified)	
1	Barmer-Jaisalmer	3,721	

## **PVTG household details**

SI.No	District	Physical Progress till 22.07.2024	
		(Number of households electrified)	
1	Baran	6,930	

## GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.1829 ANSWERED ON 01.08.2024

#### STREET LIGHTING NATIONAL PROGRAMME

## 1829 SHRI NAVASKANI K: SHRI C N ANNADURAI: SHRI SELVAM G:

Will the Minister of POWER be pleased to state:

(a) whether the Government proposes to implement Street Lighting National Programme (SLNP) in the country, particularly in Tamil Nadu and if so, the details thereof;

(b) the details of total street lights that have already been replaced in the country with LED bulbs and the estimated quantity of energy saved as a result thereof;

(c) whether there is any proposal to replace street lights in all the States under the SLNP;

(d) if so, the details thereof and the time by which these are likely to be replaced;

(e) whether the Government has demanded utilization certificates of funds from the concerned authorities and if so, the details thereof;

(f) whether any actual target for fund utilization has been fixed for the said purpose and if so, the details thereof and the achievements made thereon, State/UT-wise; and

(g) whether the Government also provides funds to Gram Panchayats for street lighting in villages and if so, the details thereof during the last three years and the current year, State/UT-wise?

#### ANSWER

#### THE MINISTER OF STATE IN THE MINISTRY OF POWER

#### (SHRI SHRIPAD NAIK)

(a): Street Lighting National Programme (SLNP) was launched on January 5, 2015, to replace conventional street lights with smart and energy-efficient LED

.....2.

streetlights across the country. This is a voluntary programme being implemented through Energy Efficiency Services Limited (EESL), a joint venture of Central Public Sector Undertakings (CPSUs) under Ministry of Power, in selffinancing mode. Till date no request from the State Government of Tamil Nadu has been received for implementing this programme.

(b): Till 30 June 2024, EESL has installed 1,31,10,745 (Annexure) LED Street Lights in the country, which has resulted in estimated energy savings of about 8,806 Million Units (MU) per year.

(c) & (d) : The Street Lighting National Programme is still operational in the country.

(e) to (g): Ministry of Power has not allotted any budget for SLNP program, as the programme is implemented by EESL in self-financing mode.

#### ANNEXURE

# ANNEXURE REFERRED IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 1829 ANSWERED IN THE LOK SABHA ON 01.08.2024

#### \*\*\*\*\*

Sr.	States & UTs	No. of LED Street Lights
No.	States & UTS	Installed
1	Andhra Pradesh	29,47,706
2	Telangana	17,07,716
3	Tamil Nadu	7,876
4	Port Blair	14,995
5	Maharashtra	11,14,328
6	Kerala	4,33,979
7	Karnataka	13,226
8	Goa	2,07,183
9	Lakshadweep	1,000
10	West Bengal	94,198
11	Jharkhand	5,54,091
12	Bihar	5,75,922
13	Rajasthan	10,73,238
14	Gujarat	9,03,519
15	Uttar Pradesh	12,90,949
16	Uttarakhand	1,33,511
17	Chhattisgarh	3,81,199
18	Odisha	3,53,808
19	Madhya Pradesh	2,95,417
20	Delhi	3,87,896
21	Jammu & Kashmir	1,88,860
22	Himachal Pradesh	63,332
23	Punjab	1,27,267
24	Chandigarh	46,496
25	Haryana	85,139
26	Sikkim	1,073
27	Tripura	76,426
28	Assam	28,875
29	Pondicherry	1,520
	Total	1,31,10,745

\* \* \* \* \* \* \* \* \* \* \* \* \* \*