### GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA STARRED QUESTION NO.274 ANSWERED ON 21.12.2023

#### **ENERGY CONSERVATION PROGRAMMES**

#### **†\*274. SHRI MANSUKHBHAI DHANJIBHAI VASAVA:**

Will the Minister of POWER be pleased to state:

(a) whether the performance of the country with regard to energy conservation is not satisfactory as compared to other countries of the world;

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

(c) the details of energy conservation programmes being implemented by the Government; and

(d) the extent to which success has been achieved in meeting the set targets?

#### ANSWER

#### THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

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

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STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (d) IN RESPECT OF LOK SABHA STARRED QUESTION NO.274 FOR REPLY ON 21.12.2023 REGARDING ENERGY CONSERVATION PROGRAMMES ASKED BY SHRI MANSUKHBHAI DHANJIBHAI VASAVA:

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(a) & (b): The performance of India in respect to energy conservation has been one of the best in the world. India's average annual energy intensity improvement rate has been around 2.4% during the period from 2015 to 2020, whereas the global average rate of energy intensity improvement was only 1.4% over the same period in terms of Mega Joule/USD (2015 Purchasing Power Parity), as per the report of International Energy Agency.

(c) & (d) : The major programmes on Energy Conservation being implemented by the Government are Perform, Achieve and Trade, Standards and Labelling scheme of appliances, Unnat Jyoti by Affordable LEDs for All (UJALA) scheme, Energy Conservation Building Code and adoption of electric mobility etc. Details of these programme are at Annexure.

The implementation of various energy efficiency schemes/ programmes have led to the overall energy savings of 50.81 Million tonnes of Oil equivalent (MTOE) which is about 6.87% of the total primary energy supply of the country for the year 2022-23, reflecting the monetary savings of around Rs. 1,88,000 Crores and CO<sub>2</sub> emissions reduction of 307 million Tonnes (approx.) during the year 2022-23.

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#### ANNEXURE REFERRED TO IN PARTS (c) & (d) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 274 ANSWERED IN THE LOK SABHA ON 21.12.2023 REGARDING ENERGY CONSERVATION PROGRAMMES

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The major programmes on Energy Conservation being implemented are as under-

- i. Perform, Achieve and Trade (PAT): In respect of large energy intensive sectors, the Government is implementing a flagship program called Perform, Achieve and Trade (PAT). The scheme covers 1333 units from 13 sectors as on October, 2023, that has resulted in annual energy savings of about 25.9 million Tonnes of Oil Equivalent (MTOE) translating into avoiding of about 110.67 million tonne of CO2 emissions annually.
- ii. Standards and Labelling (S&L) scheme : In the appliances sector, Standards and Labelling (S&L) scheme of Bureau of Energy Efficiency (BEE) prescribes minimum energy performance norms for appliances / equipment. Under the program, the major energy consuming appliances are given star rating from 1 to 5 with 5 star as most efficient appliance. Based on star label, the consumer is facilitated for making informed choice regarding purchase of energy efficient appliances thereby saving electricity consumption. As on October, 2023, the scheme covers 35 appliances under the S&L programme. In the year 2022-23, this scheme has resulted in savings of 81.6 billion units of electricity and cost savings of Rs 49,017 Crores.
- iii. Unnat Jyoti by Affordable LEDs for All (UJALA) : Under this scheme the total quantity of energy efficient and affordable LEDs Bulbs and LED Tube lights distributed by EESL since its inception is 36.87 Crores and 72.19 lakhs respectively. The UJALA scheme has resulted in large-scale transformation in the LED industry and has enabled market creation of approximately 70 crores LED bulb annually. This has led to cumulative distribution of 419 crore LED bulbs and 151 crore LED Tube lights as on March, 2023 since the inception of UJALA scheme in 2015. This initiative has resulted in estimated savings of 176.19 billion units of electricity per annum and cost savings of INR 70,477 crore per annum.
- iv. The buildings sector is broadly categorized into Commercial and Residential buildings in order to promote energy efficiency. The updated Energy Conservation Building Code (ECBC) was launched in 2017 for the commercial buildings. Eco-Niwas Samhita (ENS) pertains to residential sector, and is taken up on priority. ECBC has been published by Central Government. Till October 2023, there are 24 States/UTs, which have notified the ECBC based on their regional climatic conditions.
- v. In the transport sector, the activities being implemented are efficiency improvement in the conventional fuel vehicles; adoption of electric mobility; and modal shift to Railways.

#### GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.2997 ANSWERED ON 21.12.2023

#### VIABILITY GAP FUNDING FOR BESS

#### 2997. SHRI MANNE SRINIVAS REDDY:

Will the Minister of POWER be pleased to state:

(a) whether the Government has approved Viability Gap Funding (VGF) for the development of Battery Energy Storage Systems (BESS) to support a battery-energy storage capacity of 4,000 megawatt hours, to be developed by 2030-31 and if so, the details thereof;

(b) whether the Government would offer incentives worth up to 40 per cent of capital costs to companies setting up of manufacturing units and the funding for the development of BESS scheme, with an initial outlay of Rupees 9,400 crore including a budgetary support of Rupees 3,760 crore with a minimum of 85 per cent of the BESS project capacity would be made available to Discoms and the selection of BESS developers for VGF grants would be carried out through a transparent and competitive bidding process to help the industry;

(c) if so, the details and present status thereof; and

(d) the details of VGF share by the Government/private companies and subsidies given to those who came forward till now, State/UT-wise?

#### ANSWER

#### THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

#### (SHRI R.K. SINGH)

(a) to (c): Yes, Sir. The Government has approved the scheme for Viability Gap Funding (VGF) for development of Battery Energy Storage Systems (BESS) with capacity of 4,000 megawatts hours (MWh).

Under the scheme, VGF to the extent of upto 40% of capital cost for BESS shall be provided by the Central Government. Public and private sector entities shall be selected through the bidding process to be conducted by the Implementing Agency(ies) as per the provisions of the Scheme and Bidding Guidelines for the development of BESS.

The projects under the scheme will be approved during a period of 3 years (2023-24 to 2025-26) and for passing on the scheme to consumers of the Discoms, at least 85% of the power from VGF-funded BESS projects shall be first offered to Discoms before making it available for others.

(d): The selection of developers under the VGF scheme has not commenced yet.

#### GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.3009 ANSWERED ON 21.12.2023

#### **ELECTRIFICATION OF TRIBAL VILLAGES**

#### **†3009. SHRI NABA KUMAR SARANIA:**

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

(a) the details of various schemes being implemented by the Government to provide electricity in each house of the country;

(b) whether it is a fact that electricity is not available in many tribal villages of the country;

(c) if so, the details thereof and the reasons therefor, State/UT-wise;

(d) the details of the tribal villages situated in various parts of the country, where electricity has been made available during the last five years and the current year, State/UT-wise; and

(e) the number of tribal people to whom electricity has been provided under BPL category across the country State/UT and district-wise?

#### ANSWER

#### THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a): Government of India launched Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) in December, 2014 for various rural electrification works including separation of agriculture and non-agriculture feeders, strengthening and augmentation of sub-transmission & distribution infrastructure, metering at distribution transformers/feeders/consumers and electrification of villages across the country. Works under the scheme has been completed and the scheme stands closed. 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 were electrified during the scheme.

Subsequently, Government of India launched the Pradhan Mantri Sahaj Bijli Har Ghar Yojana – Saubhagya in October, 2017 with the objective 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.

.....2.

Since the launch of Saubhagya scheme, as on 31.03.2021 all the States have reported 100% electrification of all the willing un-electrified households, identified before 31.03.2019. As reported by the States, 2.817 crore households have been electrified since the launch of Saubhagya, up to 31.03.2021. Further, a total of 4.43 lakh additional households have been electrified under DDUGJY. As such, as on 31.03.2022, a total of 2.86 crore households (including tribal households) have been electrified since the launch of Saubhagya. The scheme stands closed.

The construction of new households is a dynamic and continuous process. The Central Government in line with its commitment, is further supporting States under the ongoing Scheme of Revamped Distribution Sector Scheme(RDSS) for electrification of any left-out households, which existed before 31.03.2019 (period of execution of SAUBHAGYA) but were somehow missed out by the DISCOMs. Till date, the approval has been accorded for around 4.96 Lakh left-out households for electrification for the States of Rajasthan, Uttar Pradesh and Andhra Pradesh. The details in this regard are as given below:

State	No. of HHs Proposed	Approved Cost (Rs. in Cr.)		
Rajasthan	1,90,959	459.18		
Uttar Pradesh	2,99,546	338.46		
Andhra Pradesh	5,577	16.00		

In addition, all identified beneficiary Households of Particularly Vulnerable Tribal Groups (PVTG) across States under PM-JANMAN (Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan) are eligible for funding under RDSS as per guidelines.

(b) to (d) : As reported by the States, all the inhabited un-electrified census villages (including tribal villages) in the country were electrified by 28th April, 2018. A total of 18,374 villages were electrified during DDUGJY. There is no categorization specifically for Tribal areas with regard to electrification of census villages. The state wise details of villages electrified under DDUGJY are enclosed at Annexure-I.

(e): The details of BPL Households electrified from FY 2015-16 till September, 2017 under DDUGJY is enclosed at Annexure-II. Further, the details of households electrified since the launch (October, 2017) of Saubhagya including additional households sanctioned under DDUGJY till 31.03.2022 is enclosed at Annexure-III.

There is no bifurcation of tribal people and the electricity connections were provided to all the households, including BPL category households, as the Scheme provided universal access of electricity to all the households across the country.

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#### **ANNEXURE-I**

## ANNEXURE REFERRED TO IN REPLY TO PARTS (b) TO (d) OF UNSTARRED QUESTION NO. 3009 ANSWERED IN THE LOK SABHA ON 21.12.2023

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	18374

# ANNEXURE REFERRED TO IN REPLY TO PART (e) OF UNSTARRED QUESTION NO. 3009 ANSWERED IN THE LOK SABHA ON 21.12.2023

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State wise Achievement of total BPL Households electrified from FY 2015 till September 2017 under DDUGJY				
SI.				
No.	State	<b>Total BPL Households electrified</b>		
1	Andhra Pradesh	664851		
2	Assam	101537		
3	Bihar	1976832		
4	Chhattisgarh	63756		
5	Gujarat	813		
6	J&K	1133		
7	Jharkhand	12391		
8	Karnataka	98821		
9	Kerala	24993		
10	Madhya Pradesh	561262		
11	Maharashtra	59		
12	Meghalaya	95		
13	Mizoram	447		
14	Nagaland	507		
15	Odisha	103857		
16	Rajasthan	149854		
17	Sikkim	1850		
18	Tamil Nadu	1976		
19	Telangana	849		
20	Tripura	41759		
21	Uttar Pradesh	1082986		
22	Uttarakhand	46		
23	West Bengal	34450		
	Total	4925124		

#### ANNEXURE REFERRED TO IN REPLY TO PART (e) OF UNSTARRED QUESTION NO. 3009 ANSWERED IN THE LOK SABHA ON 21.12.2023

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

		Additional Sance No of under Saul		tion allowed bhagya Further Additional Households sanctioned under DDUGJY		Additional s sanctioned DDUGJY		
SI. Name of the No. States	Name of the States	electrified from 11.10.2017 to 31.03.2019 as per Saubhagya Portal	No of Households reported electrified from 01.04.2019 to 31.03.2021	Total HHs electrified as on 31.03.2021 (A)	Households Sanctioned during 2021- 22	Households electrified (as on 31.03.2022) (B)	Grand Total(A+B)	
1	Andhra Pradesh*	1,81,930	0	1,81,930			1,81,930	
2	Arunachal							
	Pradesh	47,089	0	47,089	7859	0	47,089	
3	Assam	17,45,149	2,00,000	19,45,149	480249	381507	23,26,656	
4	Bihar	32,59,041	0	32,59,041			32,59,041	
5	Chhattisgarh	7,49,397	40,394	7,89,791	21981	2577	7,92,368	
6	Gujarat*	41,317	0	41,317			41,317	
7	Haryana	54,681	0	54,681			54,681	
8	Himachal Pradesh	12,891	0	12,891			12,891	
9	Jammu & Kashmir	3,77,045	0	3,77,045			3,77,045	
10	Jharkhand	15,30,708	2,00,000	17,30,708			17,30,708	
11	Karnataka	3,56,974	26,824	3,83,798			3,83,798	
12	Ladakh	10,456	0	10,456			10,456	
13	Madhya Pradesh	19,84,264	0	19,84,264	99722	0	19,84,264	
14	Maharashtra	15,17,922	0	15,17,922			15,17,922	
15	Manipur	1,02,748	5,367	1,08,115	21135	0	1,08,115	
16	Meghalaya	1,99,839	0	1,99,839	420	401	2,00,240	
17	Mizoram	27,970	0	27,970			27,970	
18	Nagaland	1,32,507	0	1,32,507	7009	7009	1,39,516	
19	Odisha	24,52,444	0	24,52,444			24,52,444	
20	Puducherry*	912	0	912			912	
21	Punjab	3,477	0	3,477			3,477	
22	Rajasthan	18,62,736	2,12,786	20,75,522	210843	52206	21,27,728	
23	Sikkim	14,900	0	14,900			14,900	
24	Tamil Nadu*	2,170	0	2,170			2,170	
25	Telangana	5,15,084	0	5,15,084			5,15,084	
26	Tripura	1,39,090	0	1,39,090			1,39,090	
27	Uttar Pradesh	79,80,568	12,00,003	91,80,571	334652	0	91,80,571	
28	Uttarakhand	2,48,751	0	2,48,751			2,48,751	
29	West Bengal	7,32,290	0	7,32,290			7,32,290	
	Total	2,62,84,350	18,85,374	2,81,69,724	11,83,870	4,43,700	2,86,13,424	

\* Not funded under Saubhagya

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#### GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.3029 ANSWERED ON 21.12.2023

#### **ELECTRIFICATION OF RURAL AND URBAN AREAS**

#### †3029. SHRI AJAY KUMAR MANDAL: SHRI RAMESH CHANDER KAUSHIK: SHRIMATI NAVNEET RAVI RANA: SHRI SUNIL KUMAR PINTU:

Will the Minister of POWER be pleased to state:

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

(b) the details of electrification ratio across the country, State/UT-wise including Sonipat district of Haryana;

(c) whether the Government has ensured 24-hour power supply in all the rural and urban areas of the country and if so, the details thereof;

(d) if not, the steps being taken to ensure 24-hour power supply in all the regions of the country;

(e) the time by which it is likely to be achieved; and

(f) the quantum of funds sanctioned, allocated and spent for various works to improve the power systems and supply in Karakat, Amravati, Singhbhum, Sitamarhi, Bhagalpur and Sonipat Parliamentary Constituencies during the previous years and the current year?

#### ANSWER

#### THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b): The Government of India implemented Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and Integrated Power Development Scheme (IPDS) to achieve the objective of connecting every village to electricity and strengthening the distribution network, including taking up separation of agriculture and non-agriculture feeders, metering at distribution transformers/feeders/consumers and the work related to Gas Insulated Sub-station, Underground cabling and Aerial bunched cabling. As reported by the States, all the inhabited un-electrified census villages in the country were electrified by 28th April, 2018. Haryana state had reported electrification of their villages before the launch of DDUGJY. A total of 18,374 villages of the country were electrified during the scheme. The state wise details of numbers of villages electrified are attached at Annexure-I.

.....2.

Subsequently, Government of India launched the Pradhan Mantri Sahaj Bijli Har Ghar Yojana – Saubhagya in October, 2017 with the objective to achieve universal household electrification for providing electricity connections to all willing un-electrified households in rural areas and all willing poor households in urban areas in the country.

Under Saubhagya, all the States (including Haryana) have reported 100% electrification of all the willing un-electrified households, identified before 31.03.2019. A total of 2.86 crore households of the country including 682 households of Sonipat district of Haryana have been electrified since the launch of Saubhagya. The state wise details of number of households electrified are enclosed at Annexure-II.

The construction of new households is a dynamic and continuous process. The Central Government in line with its commitment, is further supporting States for electrification of any left-out un-electrified households, which existed before 31.03.2019 (period of execution of SAUBHAGYA) but were somehow missed out by the DISCOMs, under the ongoing scheme of Revamped Distribution Sector Scheme (RDSS). Till date, the approval has been accorded for electrification of around 4.96 Lakh left-out households for the State of Rajasthan, Uttar Pradesh and Andhra Pradesh. The details in this regard are as given below:

State	No. of HHs Proposed	Approved Cost (Rs. in Cr.)		
Rajasthan	1,90,959	459.18		
Uttar Pradesh	2,99,546	338.46		
Andhra Pradesh	5,577	16.00		

In addition, all identified beneficiary Households of Particularly Vulnerable Tribal Groups (PVTG) across States, including Odisha and West Bengal, under PM-JANMAN (Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan) are eligible for funding under RDSS as per guidelines.

(c) to (e): The power sector in India has been transformed in the last nine years from a power deficit to a power sufficient nation. Generation capacity addition totaling to 1,93,794 MW from various sources has been done. The generation capacity has been increased by 70 percent from 2,48,554 MW in March 2014 to 4,25,536 MW in October 2023.

Apart from this, 1,87,849 circuit kilometer (CKm) of transmission lines, 6,82,767 MVA of transformation capacity and 80,590 MW of Inter-Regional capacity has been added connecting the whole country into one grid running on one frequency with the capability of transferring 1,16,540 MW from one corner of the country to another.

.....3.

Further, because of the efforts made by the Government of India through implementation of IPDS and DDUGJY, the sub-transmission and distribution network were strengthened as a result of which the AT&C losses of DISCOMs have reduced from 25.72% in the year 2014-15 to 15.41% in the year 2022-23 (provisional).

Under the above distribution sector Schemes, projects worth ₹1.85 lakh Cr. were executed under which, 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/changed 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 20.6 Hours in 2023. The power supply in urban areas has increased to 23.78 Hours in 2023.

Government of India also approved the ongoing Revamped Distribution Sector Scheme (RDSS) in 2021 with an outlay of ₹ 3,03,758 crore including Gross Budgetary Support (GBS) of ₹97,631 crore from Central Government to strengthen the power distribution sector of the country. The execution period of the scheme is from FY 2021-22 to FY 2025-26. Further, Supply and distribution of electricity to all consumers is ensured by the State Power Utilities with the goal of achieving 24x7 power supply along with improving the financial viability of State owned Power Distribution Companies.

(f): There was no upfront allocation of funds for any State/District under Saubhagya & DDUGJY scheme. Funds were released for sanctioned projects in installments based on the reported utilization of the funds released in the previous installments and fulfillment of stipulated conditions. Further, Saubhagya scheme was sanctioned Discom-wise and funds were released to the respective Discoms for the approved work. The work was sanctioned circle-wise under IPDS.

The quantum of funds Sanctioned and disbursed for various works to improve the power system and supply in Karakat, Amravati, Singhbhum, Sitamarhi, Bhagalpur and Sonipat Parliamentary Constituencies during the previous years and the current year under DDUGJY, IPDS and RDSS is at Annexure-III.

#### **ANNEXURE-I**

### ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 3029 ANSWERED IN THE LOK SABHA ON 21.12.2023

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	18374

#### **ANNEXURE-II**

# ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 3029 ANSWERED IN THE LOK SABHA ON 21.12.2023

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

		No of Housebolds	Additional Sanction allowed under Saubhagya		Further / Households under l		
SI. Name of No.	Name of the States	electrified from 11.10.2017 to 31.03.2019 as per Saubhagya Portal	No of Households reported electrified from 01.04.2019 to 31.03.2021	Total HHs electrified as on 31.03.2021 (A)	Households Sanctioned during 2021-22	Households electrified (as on 31.03.2022) (B)	Grand Total(A+B)
1	Andhra Pradesh*	1,81,930	0	1,81,930			1,81,930
2	Arunachal Pradesh	47,089	0	47,089	7859	0	47,089
3	Assam	17,45,149	2,00,000	19,45,149	480249	381507	23,26,656
4	Bihar	32,59,041	0	32,59,041			32,59,041
5	Chhattisgarh	7,49,397	40,394	7,89,791	21981	2577	7,92,368
6	Gujarat*	41,317	0	41,317			41,317
7	Haryana	54,681	0	54,681			54,681
8	Himachal Pradesh	12,891	0	12,891			12,891
9	Jammu & Kashmir	3,77,045	0	3,77,045			3,77,045
10	Jharkhand	15,30,708	2,00,000	17,30,708			17,30,708
11	Karnataka	3,56,974	26,824	3,83,798			3,83,798
12	Ladakh	10,456	0	10,456			10,456
13	Madhya Pradesh	19,84,264	0	19,84,264	99722	0	19,84,264
14	Maharashtra	15,17,922	0	15,17,922			15,17,922
15	Manipur	1,02,748	5,367	1,08,115	21135	0	1,08,115
16	Meghalaya	1,99,839	0	1,99,839	420	401	2,00,240
17	Mizoram	27,970	0	27,970			27,970
18	Nagaland	1,32,507	0	1,32,507	7009	7009	1,39,516
19	Odisha	24,52,444	0	24,52,444			24,52,444
20	Puducherry*	912	0	912			912
21	Punjab	3,477	0	3,477			3,477
22	Rajasthan	18,62,736	2,12,786	20,75,522	210843	52206	21,27,728
23	Sikkim	14,900	0	14,900			14,900
24	Tamil Nadu*	2,170	0	2,170			2,170
25	Telangana	5,15,084	0	5,15,084			5,15,084
26	Tripura	1,39,090	0	1,39,090			1,39,090
27	Uttar Pradesh	79,80,568	12,00,003	91,80,571	334652	0	91,80,571
28	Uttarakhand	2,48,751	0	2,48,751			2,48,751
29	West Bengal	7,32,290	0	7,32,290			7,32,290
	Total	2,62,84,350	18,85,374	2,81,69,724	11,83,870	4,43,700	2,86,13,424

\* Not funded under Saubhagya

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#### **ANNEXURE-III**

# ANNEXURE REFERRED TO IN REPLY TO PART (f) OF UNSTARRED QUESTION NO. 3029 ANSWERED IN THE LOK SABHA ON 21.12.2023

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#### Funds Sanctioned and disbursed by Gol under DDUGJY

SI. No.	State	Parliamentar y constituency	Districts covered	Closure Cost (Rs in Crore)		Grant disbursed (Rs in Crore)		Grant utilized (Rs in Crore)	
				RE*	DDUGJY	RE*	DDUGJY	RE*	DDUGJY
1	Bihar	Karakat	Rohtas	-	248.66	-	149.68	100%	
			Aurangabad	236.61	253.52	171.07	152.59		
		Sitamarhi	Sitamarhi	116.61	195.84	97.74	117.89	]	
		Bhagalpur	Bhagalpur	183.9	88.62	165.53	28.23		
2	Maharashtra	Amravati	Amravati	-	76.97	-	40.57		
3	Jharkhand	Singhbhum	West Singhbhum	-	212.91	-	128.17		
			Seraikela Kharsawan	29.18	114.69	26.27	69.01		
4	Haryana	Sonipat	Sonipat	-	10.19	-	6.13		
			Jind	-	18.43	-	11.1		
*proj	ects awarded a	fter 2014							

#### Funds Sanctioned and disbursed by Gol under IPDS

SI. No.	State	Parliamentary Constituency	Circles Covered	Closure Cost (Rs. in Crore	Eligible Gol Grant (Rs. in Crore)	Total Gol Grant Disbursed (Rs. in Crore)
		Karakat	Sasaram & Gaya Old	174	104	104
1	Bihar	Sitamarhi	Muzzaffarpur	150	90	90
		Bhagalpur	Bhagalpur & Bhagalpur (N)	140	84	84
2	Maharashtra	Amravati	Amravati	121	72	72
3	Jharkhand	Singhbhum	Chaibasa	40	24	24
4	Haryana	Sonipat	Sonipat	5	3	3

Funds Sanctioned and disbursed by Gol under RDSS

SI. No.	State	Parliamentary Constituency	Districts Covered	Approved Project Cost (Rs. In Crore	Eligible Gol Grant (Rs. In Crore)	Total Gol Grant Disbursed (Rs. in Crore)
1	Bihar	Karakat	Rohtas & Aurangabad	420.86	252.52	25.25
		Sitamarhi	Sitamarhi	147.36	88.42	9.28
		Bhagalpur	Bhagalpur	188.56	113.14	11.31
2	Maharashtra	Amravati	Amravati	290	174	9
3	Jharkhand	Singhbhum	West Singhbhum & Saraikela	155	93	5
4	Haryana	Sonipat	Sonipat	141	84	4

#### GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.3037 ANSWERED ON 21.12.2023

#### PUMPED STORAGE PROJECTS

#### 3037. SHRI JUAL ORAM: SHRI JAGDAMBIKA PAL:

Will the Minister of POWER be pleased to state:

(a) whether the Government has recently approved or proposes to introduce Viability Gap Funding (VGF) for Pumped Storage Projects (PSPs);

(b) if so, the time by which the guidelines would be issued in this regard;

(c) whether the Government is formulating a set of guidelines for allocation of PSPs to the private sector on a nomination basis;

(d) if so, whether the States have been consulted in this regard and if so, the details thereof;

(e) the details of the PSPs currently operational in the country, specifying their capacity and locations, State/UT-wise; and

(f) the details of new PSPs that have been initiated and are currently under construction along with their expected completion timelines, capacity and location-wise?

#### ANSWER

#### THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b): The Levelised cost of storage of Pumped Storage Projects is economically viable. Therefore, there are no plan to provide Viability Gap Funding for Pumped Storage Projects.

(c) & (d): Ministry of Power has notified Guidelines to promote development of Pumped Storage Projects (PSP) in the country on  $10^{th}$ April, 2023. There is no provision for allocation of PSPs to the private sector on nomination basis in the aforesaid guidelines.

At present, no proposal for allocation of PSPs to private sector on nomination basis is under consideration.

(e): The details of PSPs currently operational in the country, State / UT- wise, is given at Annexure-I.

(f): At present, four (4) no. of PSPs with aggregate installed capacity of 2780 MW are under construction in the country. The details are given at Annexure-II.

# ANNEXURE REFERRED TO IN REPLY TO PART (e) OF UNSTARRED QUESTION NO. 3037 ANSWERED IN THE LOK SABHA ON 21.12.2023

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S No.	Station	Installed Capacity (MW)
Gujarat	· · · ·	
1	Kadana *	240
2	SardarSarovar RBPH *	1,200
Maharash	tra	
3	Ghatgarh	250
4	Bhira	150
Tamil Nad	lu	
5	Kadamparai	400
Andhra Pr	adesh	
6	N J Sagar	705.6
7	Srisailam LBPH	900
West Beng	gal	
8	Purulia	900
	Total	4,745

#### PSPs currently installed in the country, State / UT- wise

Note: Kadana PSP & Sardar Sarovar RBPH are currently not operational in pumping mode.

# ANNEXURE REFERRED TO IN REPLY TO PART (f) OF UNSTARRED QUESTION NO. 3037 ANSWERED IN THE LOK SABHA ON 21.12.2023

#### **PSPs currently under construction**

SI.	Name of Project	State	River	IC (MW)	<b>Tentative Year of</b>
No.			Basin		Commissioning
1	Tehri PSS	Uttarakhand	Ganga	1000	2024-25
2	Pinnapuram	Andhra Pradesh	Pennar	1200	2024-25
3	Kundah PSP Ph-I, II & III	Tamil Nadu	Cauvery	500	2024-25
4	Koyna Left Bank *	Maharashtra	Krishna	80	2027-28
		2,780			

Note: Construction activities at Koyna Left Bank are currently stalled.

#### GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.3038 ANSWERED ON 21.12.2023

#### PRICE REGULATING POLICY FOR USE OF BIOMASS PELLETS

#### 3038. SHRI DUSHYANT SINGH:

Will the Minister of POWER be pleased to state:

(a) whether the Government is taking steps to foster a more robust market for biomass pellets and help stabilize the volatile raw biomass prices, ensuring a secure supply of eco-friendly fuel for country's growing power needs;

(b) if so, the details of the price regulating policy for biomass pellets used for co-firing in thermal power plants; and

(c) the other steps being taken by the Government to establish a more organised and equitable renewable energy market in the country, creating a conducive environment for sustainable energy growth and investment?

#### ANSWER

#### THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b) : With a view to promote and develop sustainable supply chain & at the same time to ensure faster procurement of biomass pellets for co-firing with coal in thermal power plants, the benchmark price for non-torrefied biomass pellets has been issued by Ministry of Power (MoP) on 23.08.2023 and 08.11.2023. The benchmark prices have been fixed as Rs 2.32, Rs 2.27 and Rs 2.24 per 1000 kcal (excluding GST & transportation cost from pellet manufacturing plant site to thermal power plant) for National Capital Region (NCR), Northern (excluding NCR) Region and Western Region respectively. This will also have a stability effect on the prices of raw biomass in the market.

(c): The Government has taken a number of steps from time to time as per need to create a conducive environment for sustainable energy growth, investment and to establish a more organized and equitable renewable market in

.....2.

the country. Some of these steps are enumerated under:

(i). Electricity (Promoting Renewable Energy through Green Energy Open Access) Rules, 2022 have been issued and the limit of open access has been reduced from 1 MW to 100 kW paving the way for small consumers for purchasing RE and there is no limit for Captive Consumers.

(ii). Electricity (Amendment) Rules, 2022 have been notified for implementation of "Uniform Renewable Energy Tariff for Central Pool".

(iii). Ministry of Power vide order dated 12th April, 2022 issued the revised scheme for 'Flexibility in Generation and Scheduling of Thermal/ Hydro Power Stations through bundling with Renewable Energy and Storage Power' with the objective of reducing dependence on fossil fuels, increasing RE capacity addition and increasing uptake of Renewable Energy by distribution licensees.

(iv). To promote the addition of renewable energy generation in the country, waiver of Inter-State Transmission (ISTS) charges has been provided for electricity generated from solar, wind, hydro-pumped storage projects (PSP), and Battery Energy Storage Systems (BESS) for a fixed duration.

(v). Government vide notification dated 20th Oct 2023 mandated all designated consumers, including electricity distribution licensees, captive users, and open-access consumers, to replace a specific portion of their electricity consumption with renewable energy sources, in accordance with the trajectory outlined in the notification.

(vi). Ministry of Power vide order dated 27<sup>th</sup> February 2023 has mandated that any coal/lignite-based thermal generating station commencing Commercial Operation on or after April 1, 2023, must establish renewable energy generating capacity equivalent to a minimum of forty percent (40%) of its thermal capacity or procure and supply renewable energy equivalent to such capacity as per the specified time lines.

(vii). The Government has introduced the Real-Time Market (RTM), Green Term Ahead Market (GTAM), and Green Day Ahead Market (GDAM) to accommodate a greater amount of renewable energy sources and to promote competition along with the deepening of the electricity markets.

(viii). The trajectory for Renewable Purchase Obligation (RPO) up to the year 2029-30 has been specified and penal provisions have been introduced for non-compliance under Energy Conservation Act, 2001. For RE procured beyond the obligation, tradable Renewable Energy Certificates can be issued.

#### GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.3059 ANSWERED ON 21.12.2023

#### **GRAM UJALA SCHEME**

#### †3059. SHRI SANJAY SETH: SHRIMATI VEENA DEVI:

Will the Minister of POWER be pleased to state:

(a) the features and aim of Gram Ujala Scheme along with the targets set and achieved thereunder;

(b) the details of the States where the scheme has been implemented/proposed to be implemented by the Government;

(c) whether several regions of Jharkhand alongwith Vaishali and Muzaffarpur districts of Bihar has been identified or selected under the first phase of Gram Ujala Scheme;

(d) if so, the details along with the outcome thereof with special reference to Jharkhand and Bihar;

(e) the quantum of funds allocated/released to Jharkhand and Bihar under the said scheme;

(f) the details of steps taken/being taken by the Government to make the beneficiaries aware about the said scheme;

(g) whether the Government proposes to start the second phase of Gram Ujala Scheme; and

(h) if so, the details thereof and the time by which it is likely to be started?

#### ANSWER

#### THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b) : Aiming to promote efficient use of energy at residential level in rural areas, Gram UJALA programme was launched in Arrah District, Bihar and Varanasi District, Uttar Pradesh in March 2021. Under this scheme, around one crore LED bulb of 7W and 12W, at affordable price, were distributed to the rural consumers in five States, namely Uttar Pradesh, Bihar, Andhra Pradesh, Telangana and Karnataka.

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(c) & (d) : Gram UJALA was not implemented in the State of Jharkhand. The scheme was implemented in Vaishali and Muzaffarpur districts of Bihar, where 1,98,634 and 82,742 LED bulbs were distributed respectively. In Bihar, around 37.62 Lakh LED bulbs were distributed under the Scheme in the rural areas.

(e): There is no budgetary allocation by States/Central Govt. for funding the Gram Ujala Scheme. This is a self financing initiative of Energy Efficiency Services Limited with the revenues to be realized through Carbon Credits.

(f): Various awareness activities such as local/national media outreach information dissemination through radio/TV and other modes of media like banners, posters, leaflets etc are being regularly carried out for promoting the usage of LED bulbs amongst the beneficiaries.

(g) to (h): Expansion of Gram Ujala Scheme would be subject to outcome of the above scheme in terms of financial viability.

#### GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.3066 ANSWERED ON 21.12.2023

#### STRENGTH OF HIGH TENSION ELECTRIC POWER POLES/WIRES

#### **3066. SHRI PARBHUBHAI NAGARBHAI VASAVA:**

#### Will the Minister of POWER

be pleased to state the details of steps taken as on date, by the Union Government, in coordination with the State Government of Gujarat, for regular checking of strength of high tension electric power poles/wires as there have been some incidents of collapse of high tension electric power poles/wires in other States as on date?

#### ANSWER

#### THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

#### (SHRI R.K. SINGH)

As per Electricity Act 2003, distribution of electricity is a licensed activity and it is the duty of the respective distribution licensee to develop and maintain an efficient, safe and economical distribution system in its area of supply. Hence, it is the responsibility of the distribution utilities to take measures required for operation and maintenance of distribution system including checking the strength of poles/ wires of HT/ LT lines to maintain quality and reliable power supply in its area of operation. Further, high tension and extra high tension lines and conductors are checked during routine patrolling, fault tripping and breakdown by utility staff, wherein, the parts of towers/ poles like cross arms, insulators, hard-wares & conductors, jumpers are checked at regular interval for its healthiness. Also, foundations, stub, members of towers/ H-frame structures are assessed and rectification are done under normal course, while stub strengthening, deterioration of structures are replaced under R&M plan on yearly basis.

CEA (Measures relating to Safety and Electric Supply) Regulations, 2023, specify safety measures for construction, operation and maintenance of power stations, sub-stations, transmission and distribution lines. It lays down the

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safety measures required for electrical installations, overhead lines and others. These regulations are applicable to electrical installations, which encompass electrical plants, electric lines, and individuals or entities involved in activities such as electricity generation, transmission, distribution, supply or consumption.

Further, CEA (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations, 2022, have provisions for strengthening of poles/ wires in disaster prone areas/ coastal areas:

- i. In coastal areas, higher strength poles like rail poles or spun poles are to be used or underground cables are to be used.
- ii. Suitable insulating paint shall preferably be provided on bare conductors in coastal areas to prevent corrosion.

CEA also prepared "Report of Task Force on Cyclone Resilient Robust Electricity Transmission and Distribution (T&D) Infrastructure in Coastal Area" in May, 2021, which was circulated to all the States by Ministry of Power in June, 2021, to take the measures suggested in the Report for dealing with and minimizing the impact of cyclones.

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#### GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.3068 ANSWERED ON 21.12.2023

#### **ELECTRIFICATION OF HOUSEHOLDS UNDER SAUBHAGYA YOJANA**

#### 3068. SHRI RANJEETSINGH NAIK NIMBALKAR: SHRI DEVJI M. PATEL: SHRI SUDHAKAR TUKARAM SHRANGARE: SHRI BIDYUT BARAN MAHATO: SHRI NARANBHAI KACHHADIYA:

Will the Minister of POWER be pleased to state:

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

(b) if so, the details thereof, State/UT-wise including Chhattisgarh and Maharashtra;

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

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

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

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

(g) whether the Government has approved/sanctioned any new project for electrification of households across the country, State/UT-wise including Chhattisgarh and Maharashtra; and

(h) if so, the details thereof?

#### ANSWER

#### THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) to (c): 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, including the households in the State of Maharashtra and Chhattisgarh, were provided electricity connection.

.....2.

Further during the last 9 years, the Government of India has implemented the scheme of Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and the Integrated Power Development Scheme (IPDS) for strengthening the distribution system. Under the above Schemes, project worth ₹1.85 lakh Cr. were executed under which 18,374 villages were electrified; 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/changed. As a result of these measures, the availability of power supply in rural areas has increased from 12.5 Hours in 2015 to 20.6 Hours in 2023. The power supply in urban areas has increased to 23.78 Hours in 2023. The aforesaid Schemes stand closed as on 31-03-2022.

Further, Government of India also approved the ongoing Revamped Distribution Sector Scheme (RDSS) in 2021 with an outlay of Rs. 3,03,758 Crore including Gross Budgetary Support (GBS) of Rs.97,631 Crore from Central Government.

The state wise details (including Maharashtra and Chhattisgarh) of number of household covered and grant disbursed under Saubhagya are enclosed at Annexure-I and Annexure-II respectively.

(d): The details of challenges faced under Saubhagya schemes are as under:

- (i) Households scattered in inaccessible & remote areas
- (ii) Difficult & Hilly terrain, inclement weather, Riverine/Marshy/Snow bound areas

(iii) Transportation of material by Head loading, Helicopters, Bamboo Bridges, Rafts, Boats, etc.

- (iv) Poor/inadequate power infrastructure
- (v) Located in Left Wing Extremism affected areas
- (vi) Forest areas requiring clearance

(vii) Non-availability of materials (like Poles, Distribution Transformers, Meters, etc) at local level

(viii) Various Right of Way issues.

(e) to (h): Government of India in line with its commitment is supporting States under the ongoing RDSS Scheme for electrification of those un-electrified household which were left out under SAUBHAGYA. The Government of India has approved norms for electrification of such left out households under RDSS (copy enclosed at Annexure-III) and States/UTs have been requested to submit their proposal. Till date, the approval has been accorded for around 4.96 Lakh left-out households for electrification for the State of

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Rajasthan, Uttar Pradesh and Andhra Pradesh. The details in this regard are as given below:

State	No. of HHs Proposed	Approved Cost (Rs. in Cr.)		
Rajasthan	1,90,959	459.18		
Uttar Pradesh	2,99,546	338.46		
Andhra Pradesh	5,577	16.00		

In addition, all identified beneficiary Households of Particularly Vulnerable Tribal Groups (PVTG) across States, including Chhattisgarh and Maharashtra, under PM-JANMAN (Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan) are eligible for funding under RDSS as per guidelines.

## ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 3068 ANSWERED IN THE LOK SABHA ON 21.12.2023

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

		No of Households	Additional Sa under Saubha	Additional Sanction allowed under Saubhagya		Further Additional Households sanctioned under DDUGJY		
SI. No.	Name of the States	electrified from 11.10.2017 to 31.03.2019 as per Saubhagya Portal	No of Households reported electrified from 01.04.2019 to 31.03.2021	Total HHs electrified as on 31.03.2021 (A)	Households Sanctioned during 2021- 22	Households electrified (as on 31.03.2022) (B)	Grand Total(A+B)	
1	Andhra Pradesh*	181,930	0	181,930			181,930	
2	Arunachal	-						
	Pradesh	47,089	0	47,089	7859	0	47,089	
3	Assam	1,745,149	200,000	1,945,149	480249	381507	2,326,656	
4	Bihar	3,259,041	0	3,259,041			3,259,041	
5	Chhattisgarh	749,397	40,394	789,791	21981	2577	792,368	
6	Gujarat*	41,317	0	41,317			41,317	
7	Haryana	54,681	0	54,681			54,681	
8	Himachal Pradesh	12,891	0	12,891			12,891	
9	Jammu & Kashmir	377.045	0	377.045			377.045	
10	Ibarkhand	1-530-708	200,000	1.730.708			1.730.708	
11	Karnataka	356-974	26,824	383.798			383.798	
12	Ladakh	10.456		10.456			10.456	
13	Madhva Pradesh	1.984.264	0	1.984.264	99722	0	1.984.264	
14	Maharashtra	1.517.922	0	1.517.922			1.517.922	
15	Manipur	102.748	5.367	108.115	21135	0	108.115	
16	Meghalaya	199,839	0	199,839	420	401	200,240	
17	Mizoram	27.970	0	27.970		-	27.970	
18	Nagaland	132,507	0	132,507	7009	7009	139,516	
19	Odisha	2,452,444	0	2,452,444			2,452,444	
20	Puducherry*	912	0	912			912	
21	Punjab	3,477	0	3,477			3,477	
22	Rajasthan	1,862,736	212,786	2,075,522	210843	52206	2,127,728	
23	Sikkim	14,900	0	14,900			14,900	
24	Tamil Nadu*	2,170	0	2,170			2,170	
25	Telangana	515,084	0	515,084			515,084	
26	Tripura	139,090	0	139,090			139,090	
27	Uttar Pradesh	7,980,568	1,200,003	9,180,571	334652	0	9,180,571	
28	Uttarakhand	248,751	0	248,751			248,751	
29	West Bengal	732,290	0	732,290			732,290	
	Total	26,284,350	1,885,374	28,169,724	1,183,870	443,700	28,613,424	

\*Not funded under Saubhagya

#### **ANNEXURE-II**

# ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 3068 ANSWERED IN THE LOK SABHA ON 21.12.2023

(Rs. in crore)

SI. 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

Note: Saubhagya scheme was launched in October, 2017

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## ANNEXURE REFERRED TO IN REPLY TO PARTS (e) TO (h) OF UNSTARRED QUESTION NO. 3068 ANSWERED IN THE LOK SABHA ON 21.12.2023

#### Norms for electrification of left out HHs under RDSS

- i. The cost of electrification [which includes network augmentation cost (DT, HT, and LT) upto electric poles] in a Fully unelectrified habitation shall not exceed Rs 22,500 per HH and in a partially electrified habitation shall not exceed Rs 11,250 per HH.
- ii. For Special category States and desert areas, the cost of electrification may be considered as 1.5 times the cost of electrification (i.e. Rs 33,750 for Fully unelectrified habitations and Rs 16875 partially electrified habitations) mentioned above.
- iii. GOI grant for household electrification would as per funding pattern for distribution infrastructure works under RDSS.
- iv. The cost related to service connections downstream from the pole will not be under RDSS purview and it shall be carried out by the DISCOMs through their own funds.
- v. Only cases of un-electrified households (prior to Saubhagya) identified before 31.03.2019 would be considered
- vi. Fully unelectrified habitations with more than 10 households will only be considered for financial assistance under RDSS. However, in case of Special category states and desert areas, fully unelectrified habitations with more than 5 households will be considered. Further, for partially electrified habitations, habitations with any number of un-electrified households can be considered.
- vii. All remaining unelectrified HH to be provided metered connection only.
- viii. The defaulters whose connections have been disconnected should not be provided new connections under the scheme. However, the utilities may consider settlement of old dues and reconnection as per their norms or rules or regulations in this regards out of the preview of this scheme.
- ix. The HH of migratory nature living in temporary campsites would not be covered under the scheme. However, such HHs would be eligible for electricity connections at their place of permanent residence as per the guidelines.
- x. Some of the farmers/villages have also built houses in farms and they may also have another place of living in the main village. Extension of grid to such individuals scattered households in farmland may not be viable and cost effective and therefore shall not be covered under the scheme. However, such HHs would be eligible for electricity connections at their place of permanent residence as per the guidelines.
- xi. Any cost over and above the abovementioned cost norms will have to be borne by concerned State/ Discoms.
- xii. Fund release shall be based on actual expenditure within the cost norms.

xiii. The release of funds for HH electrification works shall be contingent upon submission of electrified HH details. An advance of 30% to be released to DISCOMs on per HH basis and remaining 70% shall be released when the connection to the household is energized and consumer details (Consumer Name, Consumer Address, Consumer No, Connection release date, Meter No etc.). are submitted by the DISCOM. DISCOM to submit these details generated from the DISCOM's billing system for fund release under RDSS. Such details shall be uploaded on a Web-portal similar to that of Saubhagya scheme.

The proposal for household electrifications under RDSS shall be submitted as per format enclosed below by concerned Discoms. The Nodal agency will carry out appraisal of the DPR submitted by the Discoms and submit its recommendation to MC for consideration.

#### **DPR template for Household Electrification works**

Name of District	Name of Block	Name of Revenue village with Census Code	Name of Majra/ Habitation	Total No. of Households	No. of Households already electrified	No. of unelectrified Households	Estimated cost of electrification

#### DISCOM Name:

The Monitoring Committee in its 19th meeting has approved application of existing norms for Special category States and Desert areas for electrification of left out households in following areas of all States/UTs also.

Areas notified under 5th and 6th Schedule of Constitution

LWE affected districts identified by MHA

Sub-districts with population density of less than 150 persons/Sq Km Nodal agencies to submit the proposal received from states as per above norms.

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#### GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.3075 ANSWERED ON 21.12.2023

#### **ENERGY CONSERVATION BUILDING CODE**

#### **3075. SHRI SUNIL DATTATRAY TATKARE:**

Will the Minister of POWER be pleased to state:

(a) whether it is fact that around a large share of total electricity consumption is consumed by buildings and that figure is expected to become higher in the next twenty years;

(b) if so, the details thereof;

(c) whether Energy Conservation Building Code is implemented in the country to ensure that buildings are built in a sustainable manner; and

(d) if so, the details thereof?

#### ANSWER

#### THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b) : Presently, around 33% of the total electricity consumption is in commercial and residential category of consumers. Category-wise consumption for the next twenty years has not been estimated, however, as per the twentieth Electric Power Survey Report, prepared by Central Electricity Authority, the combined consumption of electricity in commercial and residential category of consumers is estimated to be around 40% of the total electricity consumption by the year 2031-32.

(c) to (d): The Energy Conservation Building Code has been developed with an objective that new Commercial buildings are constructed with features that enable reduction in energy consumption. The responsibilities for implementation of Energy Conservation Building Code lies with the State Government. Till October, 2023; 24 States/UTs had notified 'The Energy Conservation Building Code' in their respective States.

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#### GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.3083 ANSWERED ON 21.12.2023

#### WATER CONSUMPTION IN THERMAL POWER PLANTS

#### **3083. SHRI P. RAVINDHRANATH:**

#### Will the Minister of POWER

be pleased to state the steps being taken by the Government to reduce water consumption in thermal power plants, using other than sea water, across the country, in accordance with recently amended notification, issued by the Ministry of Environment, Forest and Climate Change?

#### ANSWER

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a): Ministry of Environment, Forest and Climate Change (MoEF&CC) vide Notification dated 07.12.2015, further amended on 28.06.2018 has notified the water consumption norms for Thermal Power Plants. Subsequently, the timelines to comply the same have been revised vide MoEF&CC Notification on 05.09.2022.

To comply with the norms, following measures have been adopted by Thermal Power Plants to reduce the water consumption:

- Adoption of Air Cooled Condenser (ACC) technology ACC is being implemented in NTPC at two number of projects i.e., North Karanpura STPP (3x660 MW) and Patratu STPP (3x800 MW). Out of which, the 1<sup>st</sup> unit of North Karanpura has been commissioned on 18.01.2023.
- ii. Mandatory use of treated sewage water for thermal power plants located within 50 km radius of Sewage Treatment Plants (STP)- Government of India has notified new Tariff Policy on 28.01.2016, wherein it is mandated that the thermal power plant(s) including the existing plants located within 50 km radius of STP of Municipality / local bodies / similar organization shall, in the order of their closeness to STP, mandatorily use treated sewage water produced by these bodies. As on date, 8 Nos. of coal, lignite and gas based thermal power plants in the country are using STP water in their plants.
- iii. Dry fly ash handling system and High Concentration Slurry Disposal System (HCSD)
  These ash handling techniques reduce the ash handling water requirement thereby reducing the plant water consumption.
- iv. Ash Water Re-circulation System (AWRS) are implemented where water from ash pond is recovered and reused in the system.
- v. Zero water discharge system The waste water generated in the plant is used for low grade applications like ash handling, coal dust suppression and gardening etc. The balance waste water is appropriately treated and recycled back in to the consumptive water system to reduce net water consumption of the plant.

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#### GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.3099 ANSWERED ON 21.12.2023

#### IMPLEMENTATION OF THE UJJWAL DISCOM ASSURANCE YOJANA

#### 3099. SHRI D.M. KATHIR ANAND:

Will the Minister of POWER be pleased to state:

(a) whether according to the C&AG's report, the implementation of the Ujjwal DISCOM Assurance Yojana (UDAY) in Tamil Nadu Generation and Distribution Corporation (TANGEDCO) between 2016-17 and 2019-20 has not helped TANGEDCO to improve its finances as its debt has gone up from Rs. 81,312 crore in September 2015 to Rs. 1.23 lakh crore on March 2020;

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

(c) whether the Government proposes to provide additional financial support to TANGEDCO for the completion of its power projects at North Chennai Stage-III, Kunda and Udangudi and if so, the details thereof; and

(d) the total amount extended as loans to TANGEDCO by the Union Government from June 2021 onwards?

#### ANSWER

#### THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b): UDAY was launched with an overall aim of operational and financial turnaround of State owned Distribution Utilities (DISCOMs) through efficiency improvements and financial restructuring. As a result, State Power Distribution Utilities reported improvements which include reduction in Aggregate Technical & Commercial (AT&C) losses from 23.66% in FY2017 to 20.93% in FY2020. Similarly, AT&C losses of Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO) reduced from 18.23% in FY2017 to 13.60% in FY2020 and preliminary report shows that losses of TANGEDCO have further reduced to 10.23% in FY2023.

Recognising that the liabilities of the State owned Utilities are the contingent liabilities of the States themselves, UDAY envisaged the States taking over of 75% of the debt of the DISCOMs as on 30.09.2015 by issuing State Development Loan (SDL) Bonds. The UDAY Memorandum of Understanding (MoU) for

.....2.

Tamil Nadu was signed on 9th January, 2017. As per the MoU, the outstanding debt of TANGEDCO was Rs 81,312 Crores at the end of September 2015 out of which DISCOM debt was Rs 30,420 Crores while the remaining corresponded to Generation business. Government of Tamil Nadu (GoTN) was to take over 75% of outstanding "DISCOM debt" as on 30<sup>th</sup> September 2015 i.e. Rs 22,815 Crores during 2016-17. In line with the MoU, GoTN has taken over the DISCOM debt of Rs 22,815 Crore by issuing Non-SLR Bonds during FY 2016-17. Further, this amount of Rs 22,815 Crore was transferred as Grant by GoTN to TANGEDCO progressively upto FY 2021-22. Year-wise detail given in Annexure-I.

After 2016, most of the capacity additions towards Generation and Distribution strengthening projects have been undertaken by TANGEDCO through financial assistance obtained from Financial Institutions and Banks, which is a reason for increase in debt. Moreover, tariff revision has not been effected every year as per UDAY guidelines, which is also a reason for increase in debt.

Further, as per MoU, GoTN was to takeover future losses of TANGEDCO in graded manner till FY 2020-21. As against the target of Rs 10,132 Crores, GoTN took over losses of Rs 9,366 Crores till FY 2021-22. Year-wise detail given in Annexure-II. Furthermore, Government of Tamil Nadu has consented to take over 100% losses of TANGEDCO of the current year, during the next year from the FY 2021-22 onwards. Accordingly the losses of TANGEDCO for the FY 21-22 has been taken over to the tune of Rs.11,954.64 Cr during the FY 2022-23.

(c): Details of loans sanctioned to TANGEDCO by REC Ltd. for North Chennai Stage-II TPS, Kunda HEP and Udangudi TPS project are tabulated below:-

Sr. No.	Name of the	Original Loan amount	Additional loan amount
	project	sanctioned by REC (Rs. In Cr.)	(Rs. In Cr.)
1)	North Chennai	5,006.99	1,036.75
	Stage – III TPS		(sanctioned by REC)
2)	Kunda HEP	1,450.00	1,270.82
			(sanctioned by REC)
3)	Udangudi TPS	10,453.00	Proposal under
	project		consideration with PFC

(d): The details of loans sanctioned to TANGEDCO from the central financial institutions from June, 2021 are below:

1.	REC Ltd	Rs.24,090 Crore
2.	Power Finance Corporation (PFC) Ltd.	Rs.17,121 Crore
	Total	Rs. 41,211 Crore

### ANNEXURE REFERRED IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 3099 ANSWERED IN THE LOK SABHA ON 21.12.2023

Year	Total Debt to be taken Over as per MoU	Transfer as Grant as per MoU	Actual debt taken Over	Actual grant
2016-17	75%	4563	75%	-
2017-18	-	4563	-	4563
2018-19	-	4563	-	4563
2019-20	-	4563	-	4563
2020-21	-	4563	-	4563
2021-22	-	-	-	4563
Total	75%	22,815	75%	22,815

#### Table (1): Actual transfer as grant is described in the following table:-

### ANNEXURE REFERRED IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 3099 ANSWERED IN THE LOK SABHA ON 21.12.2023

## Table (2) : Loss takeover: As per MoU, GoTN was to takeover future losses of TANGEDCOin graded manner. The actual loss takeover by GoTN is as below:

Particulars	Profit/(Loss) Before Tax **	Loss to be taken over by State Govt	Actual Loss takeover by GoTN
2016-17	(4349)	-	-
2017-18 @5% of PY Loss	(7761)	217	217
2018-19 @10% of PY Loss	(12,623)	776	776
2019-20 @25% of PY Loss	(11,965)	3156	-
2020-21 @50% of PY Loss	(13,407)	5983	3000 ^
2021-22	-	-	5373 ^
Total	(50,105)	10,132	9366

\*\* as per PFC Report on Annual Performance of State Power Utilities ^ as per TANGEDCO Audited Accounts for 2020-21

#### GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.3118 ANSWERED ON 21.12.2023

#### PERSONS DISPLACED DUE TO SETTING UP OF POWER PROJECTS

#### **3118. SHRI CHANDRA PRAKASH CHOUDHARY:**

Will the Minister of POWER be pleased to state:

(a) the number of persons that have been displaced due to the setting up of various power projects particularly Chandrapur Thermal Power Station (CTPS) and Bokaro Thermal Power Station (BTPS) in the region of Jharkhand since the enactment of Damodar Valley Corporation Act, 1948;

(b) the measures being taken by the Government to ensure adequate and proper rehabilitation of affected persons and the number of displaced persons who have been provided alternate accommodation facilities under the Right of Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 and any other laws, project-wise;

(c) the number of displaced people who have been given employment under the Government policy, schemes and any other law in Jharkhand, project-wise; and

(d) the number of displaced persons who have been given compensation in lieu of land acquisition in Jharkhand, project-wise?

#### ANSWER

#### THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

#### (SHRI R.K. SINGH)

(a): Project-wise details of the persons affected due to the setting up of various power projects, particularly CTPS & BTPS of Damodar Valley Corporation (DVC), in Jharkhand region are as under:

Project Name	Chandrapur	Bokaro	Koderma	Tilaiya	Maithon	Panchet
	TPS*	TPS*	TPS*	HEP**	HEP**	HEP**
Total number of persons affected	829	1697	7410	16120	28030	41461

\*TPS -Thermal Power Station; \*\*HEP – Hydro Electric Project

(b): All the land parcels acquired for setting up of various power projects of DVC in the region of Jharkhand were acquired under the provision of the Land Acquisition Act 1894. Land acquisition and rehabilitation for projects namely BTPS, CTPS, Tilaiya Hydro Electric Project, Maithon Hydro Electric Project and Panchet Hydro Electric Project were completed by the year 1963 and for KTPS project, the land acquisition and rehabilitation were completed before the year 2013. DVC had provided compensation or alternate land as per the option availed by the affected families. Details of the affected families who opted for the alternate land, are as under:

Project Name	Bokaro TPS	Chandrapur TPS	Koderma TPS	Tilaiya HEP	Maithon HEP	Panchet HEP
Number of affected families	371	480	Not Applicable***	2691	5211	10339
Number of affected families who opted for alternate land	35	NIL	Not Applicable***	1001	57	NIL

\*\*\*All 7410 persons belonging to the affected families at KTPS opted for cash compensation.

(c): The details of employment given by DVC, project-wise, are as under:

Description	Chandrapur	Bokaro	Koderma	Tilaiya	Maithon	Panchet
	TPS	TPS	TPS	HEP	HEP	HEP
Number of affected persons given employment	152	133	Not Applicable***	12	194	90

\*\*\*All 7410 persons belonging to the affected families at KTPS opted for Cash Compensation

(d): The compensation was provided family wise in respect of the projects namely BTPS, CTPS, Tilaiya HEP, Maithon HEP and Panchet HEP. In case of KTPS, the compensation was provided to the individuals. The details of number of families, who have been given compensation *in lieu* of land acquisition, project-wise, are as under:

Description	Chandrapur TPS	Bokaro TPS	Koderma TPS	Tilaiya HEP	Maithon HEP	Panchet HEP
Total no. of families accepted Land for Land	NIL	35	Not Applicable	1001	57	NIL
Totalno.offamiliesacceptedcash compensation	480	336	7410****	1683	5154	10339

\*\*\*\*All 7410 persons belonging to the affected families at KTPS opted for cash compensation.

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

#### GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.3131 ANSWERED ON 21.12.2023

#### **POWER CONSUMPTION DEMAND**

#### 3131. SHRI SISIR KUMAR ADHIKARI:

Will the Minister of POWER be pleased to state:

(a) whether it is a fact that average demand ofpower consumption in the country is 215 Gigawatt and supply during peak time stood at 192 Gigawatt, which causes massive power-cut in different parts of the country;

(b) if so, whether the Government proposes to enhance power supply as per the increasing demand of consumption and if so, the details thereof; and

(c) the details of growth in demand and supply of Power during the last five years and the proposals to meet up the demand of power consumption by 2030 thereof?

#### ANSWER

#### THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

#### (SHRI R.K. SINGH)

(a): The Power sector has been transformed in the past few years. The demand has increased rapidly due to (i) rapid economic growth in recent years, (ii) providing new connections to 2.86 crore households and (iii) increase in hours of supply from 12.5 hrs (2014-15) to 20.6 hrs (2022-23) in rural areas & the supply in urban areas is 23.8 hrs and we have met the demand. The peak demand has gone up from 135918 MW in 2013-14 to 243271 MW in September 2023. This is a rise of almost 79% and the demand has been met. There has been 50.8% increase in energy requirement in the country as compared to 2014. A series of concerted measures have led to 70% increase in generation capacity from 248554 MW in March 2014 to 425536 MW in October 2023.

The details of All India Power Supply Position of the country during the months of April 2023 to November, 2023 are given at Annexure-I. The gap between Energy Requirement and Energy Supplied during the period from April, 2023 to November, 2023 is in the range of 0.1% to 0.6%. Even this gap between Energy Requirement and Energy Supplied was generally on account of factors, other than adequacy of power availability in the country e.g. constraints in state transmission network, distribution network, financial constraints of DISCOMs etc.

(b) & (c): The details of All India Power Supply Position in terms of Energy and Peak during last five (05) years are given at Annexure-II. There is adequate availability of power in the country. We have addressed the critical issue of power deficiency by adding 193794 MW of generation capacity in the past nine (09) years transforming our country to

.....2.

power sufficiency. As a result, the gap between Peak demand and peak demand met has come down from 4.5% in 2013-14 to 1.4% in 2023-24 (upto November-23) and the gap between Energy Requirement and Energy Supplied has come down from 4.2% in 2013-14 to 0.3% in 2023-24 (up to November-23).

Central Electricity Authority (CEA) conducts Electric Power Survey (EPS) of the country every five years for estimating the electricity demand of the country on medium and long term basis as obligated under Section 73(a) of the Electricity Act-2003. As per 20th Electric Power Survey (EPS) report published in November 2022, the peak electricity demand in the country in 2030-31 is expected to be 350670 MW.

We have taken following steps to meet the increased demand for power in the country:-

- (i) In order to ensure an uninterrupted power supply for the nation's growth, the anticipated capacity addition between 2023-32 is given below:
  - a) 27180 MW of Thermal Capacity is under construction, 12000 MW has been bid out and 19000 MW under clearances. The total anticipated Thermal capacity addition by 2031-2032 will be 87910 MW.
  - b) 18033.5 MW of Hydro Capacity (including stalled projects) is under construction and the total anticipated Hydro capacity addition by 2031-2032 is likely to be 42014 MW.
  - c) 8000 MW of Nuclear Capacity is under construction and the total anticipated Nuclear capacity addition by 2031-2032 will be 12200 MW.
  - d) 78935 MW of Renewable Energy Capacity is also currently under construction and the anticipated RE capacity addition by 2031-32 will be 322000 MW.

Thus, total 132148.5 MW of Capacity is under construction and the total anticipated capacity addition by 2031-2032 is likely to be 464124 MW.

(ii) 1,87,849 circuit kilometer (ckm) of transmission lines, 6,82,767 MVA of Transformation capacity and 80,590 MW of Inter-Regional capacity has been added connecting the whole country into one grid running on one frequency with the capability of transferring 1,16,540 MW from one corner of the country to another. India's grid has emerged as one of the largest unified grids in the world. Connecting the whole country into one grid has transformed the country into one unified power market. Distribution Companies can buy power at cheapest available rates from any generator in any corner of the country thereby enabling cheaper electricity tariffs for consumers.

- (iii) India has committed to augment non fossil fuel based installed electricity generation capacity to over 500000 MW by 2030. Transmission plan for integration of 500000 MW RE capacity by 2030 is being implemented in a phase manner commensurate with RE capacity addition. At present about 179000 MW of non fossil fuel generation capacity is already integrated.
- (iv) Setting up of Ultra Mega Renewable Energy Parks to provide land and transmission to RE developers for installation of RE projects at large scale.
- (v) We have reformed the Electricity market by adding the Real Time Market (RTM), Green Day Ahead Market (GDAM), Green Term Ahead Market (GTAM), High Price Day Ahead Market (HP-DAM) in Power Exchanges. Also, DEEP Portal (Discovery of Efficient Electricity Price) for e-Bidding and e-Reverse for procurement of short-term power by DISCOMs was introduced.
- (vi) Govt have constructed Green Energy Corridors and put in place 13 Renewable Energy Management Centres. Presently Renewable Energy Capacity is 178000 MW and 78935 MW is under installation.
- (vii) We have made the Power Sector viable. The AT&C losses have come down from 22.62% in 2013-14 to 15.41% in 2022-23. All current payment of Gencos are upto-date and the legacy dues of Gencos have come down from Rs. 1.35 lakh crore to Rs. 6000 Crore. The subsidy payment to DISCOMS on account of subsidies announced by State Government are up-to-date.

#### **ANNEXURE-I**

### ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 3131 ANSWERED IN THE LOK SABHA ON 21.12.2023

## The details of All India Power Supply Position of the country during the months of April, 2023 to November, 2023

Months		Energy					Peak		
	Energy	Energy	Energy	not	Peak	Peak	Demand	not	
	Requirement	Supplied	Supplied		Demand	Met	Met		
	(MU)	(MU)	(MU)	(%)	(MW)	(MW)	(MW)	(%)	
April, 2023	1,30,414	1,30,082	332	0.3	2,16,142	2,15,972	170	0.1	
May, 2023	1,36,846	1,36,504	342	0.2	2,21,718	2,21,423	295	0.1	
June, 2023	1,40,520	1,40,276	244	0.2	2,24,106	2,23,292	814	0.4	
July, 2023	1,40,618	1,40,419	199	0.1	2,09,039	2,08,952	87	0.0	
August, 2023	1,52,176	1,51,324	852	0.6	2,38,824	2,36,295	2,529	1.1	
September, 2023	1,41,827	1,41,299	528	0.4	2,43,271	2,39,931	3,340	1.4	
October, 2023	1,39,832	1,39,441	391	0.3	2,22,160	2,21,539	621	0.3	
November, 2023	1,20,653	1,20,562	91	0.1	2,04,861	2,04,605	256	0.1	
April to November, 2023(*)	11,02,887	10,99,907	2,980	0.3	2,43,271	2,39,931	3,340	1.4	

\* Provisional

### ANNEXURE REFERRED TO IN REPLY TO PARTS (b) & (c) OF UNSTARRED QUESTION NO. 3131 ANSWERED IN THE LOK SABHA ON 21.12.2023

The details of All India Power Supply Position in terms of Energy during last 5 years.

Year	Energy Req	uirement	Energy Supplied Energy N Supplied			Not ed
	(MU)	% Growth	(MU)	% Growth	(MU)	(%)
2018-19	1,274,595	5.0	1,267,526	5.2	7,070	0.6
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	15,11,847	9.6	15,04,264	9.5	7,583	0.5
2022-23 (upto November, 2022)	10,15,908	-	10,10,203	-	5,705	0.6
2023-24 (upto November, 2023)	11,02,887	8.6	10,99,907	8.9	2,980	0.3

The details of All India Power Supply Position in terms of Peak during last 5 years.

	Peak Der	nand	Peak Met		Demand Not Met	
Year	(MW)	% Growth	(MW)	% Growth	(MW)	%
2018-19	177,022	7.9	175,528	9.2	1,494	0.8
2019-20	183,804	3.8	182,533	4.0	1,271	0.7
2020-21	190,198	3.5	189,395	3.8	802	0.4
2021-22	203,014	6.7	200,539	5.9	2,475	1.2
2022-23	2,15,888	6.3	2,07,231	3.3	8,657	4.0
2022-23 (upto November, 2022)	2,15,888	-	2,07,231	-	8,657	4.0
2023-24 (upto November, 2023)	2,43,271	12.7	2,39,931	15.8	3,340	1.4

#### GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.3171 ANSWERED ON 21.12.2023

#### STREET LIGHTING NATIONAL PROGRAMME

#### 3171. SHRI VIJAY KUMAR DUBEY:

Will the Minister of POWER be pleased to state:

(a) whether the Government proposes to replace conventional street lights with LED lights in Uttar Pradesh under Street Lighting National Programme (SLNP);

(b) if so, the details thereof; and

(c) the quantum of funds allocated under SLNP to Uttar Pradesh during the last three years and the current year?

#### ANSWER

#### THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b) : Under the Street Lighting National Programme, the Energy Efficiency Services Limited is implementing projects to replace conventional street lights with energy efficient LED street lights in all the States including Uttar Pradesh. So far, Energy Efficiency Services Limited has replaced/installed 12,90,949 nos. of Energy Efficient Street Lights in the State of Uttar Pradesh.

(c): The Street Lighting National Programme is a self-financing programme, where an agreement is signed between the client Urban Local Body and Energy Efficiency Services Limited. No budgetary support is provided by Government of India for SLNP.

#### GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.3181 ANSWERED ON 21.12.2023

#### **HIGH POWER TEST FACILITY**

#### **3181. SHRIMATI APARAJITA SARANGI:**

Will the Minister of POWER be pleased to state:

(a) whether the Government has given any assistance for modernization of existing Synthetic Test Facility at High Power Laboratory, Bengaluru during the last three years and the current year;

(b) if so, the details thereof; and

(c) the time by which the said Test Facility is likely to be completed at High Power Laboratory, Bengaluru?

#### ANSWER

#### THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b) : Yes, Sir. A project component titled "Modernization of the existing synthetic test facility at High Power Laboratory, Bengaluru, was sanctioned by Ministry of Power on 21<sup>st</sup> January, 2022 to Central Power Research Institute (CPRI). The outlay of the project component is Rs. 40.00 Crore.

(c): As per the sanction order, the project completion duration is 36 months from the date of release of  $1^{st}$  Installment. However, the project could not be started by CPRI due to:

- (i) No reputed vendors were ready to manufacture the equipment required for the project;
- (ii) No response from the Original Equipment Manufacturer (OEM) and other prospective reputed global vendors; and
- (iii) The Expression of Interest (EOI) was tendered and in spite of several extensions no response was received.

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#### GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.3203 ANSWERED ON 21.12.2023

#### ALLOCATION OF FUNDS UNDER IPDS AND DDUGJY

#### 3203. DR. JAYANTA KUMAR ROY: SHRIMATI SANGEETA KUMARI SINGH DEO:

Will the Minister of POWER be pleased to state:

(a) the quantum of funds allocated and utilized under Integrated Power Development Scheme (IPDS) and Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) in Jalpaiguri and Balangir districts of West Bengal and Odisha respectively during the last five years and the current year;

(b) the details of various projects being run by the Government to ensure supply of electricity in rural areas of the said districts during the said period; and

(c) the details of efforts being made by the Government to meet the demand of electricity in tribal dominated rural areas of the said districts?

#### ANSWER

#### THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a): The Government of India launched the Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and the Integrated Power Development Scheme (IPDS) to achieve the objective of providing uninterrupted power supply by strengthening the sub-transmission and distribution network, including taking up works like Gas Insulated Sub-station, Underground cabling, Aerial bunched cable etc.

There was no upfront allocation of funds for any State/UT under Integrated Power Development Scheme (IPDS) and Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) schemes. Funds were released for sanctioned projects in instalments based on the reported utilization of the funds released in the previous instalments and fulfilment of stipulated conditions.

The Distribution Infrastructure work under IPDS was sanctioned Circle wise as per scheme guidelines based on the Detailed Project Report (DPR) submitted by the Utility with recommendation of State level Distribution reforms committee. Under IPDS, the details of Gol grant released to Jalpaiguri circle, West Bengal

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#### and Balangir Circle, Odisha is as under:

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State	Circle	Eligible Project closure cost	Total Gol Grant disbursed*
West Bengal	Jalpaiguri	40	24
Odisha	Balangir	47	28

\*Based on admissibility as per scheme Guidelines

The details of funds allocated and utilized under DDUGJY in Jalpaiguri District, West Bengal and Balangir District, Odisha is as follows:

				(Rs. in crore
State	District	Scheme	Closure cost	GBS released
West Bengal	Jalpaiguri	DDUGJY	157.64	114.8
		DDUGJY-RE-XII		
		Plan*	228.16	126.93
Odisha	Balangir	DDUGJY	73.79	44.42

\*RE projects awarded after 2014.

(b) & (c) : The power sector in India has been transformed from a power deficit to a power sufficient nation. Generation capacity addition totaling to 1,93,794 MW from various sources has been achieved – increasing the capacity by 70 percent from 2,48,554 MW in March 2014 to 4,25,536 MW in October 2023.

Apart from this, 1,87,849 circuit kilometer (CKm) of transmission lines, 6,82,767 MVA of transformation capacity and 80,590 MW of Inter-Regional capacity has been added connecting the whole country into one grid running on one frequency with the capability of transferring 1,16,540 MW from one corner of the country to another.

Under the Government of India schemes of IPDS and DDUGJY, the subtransmission and distribution network were strengthened as a result of which the AT&C losses of DISCOMs have reduced from 25.72% in the year 2014-15 to 15.41% in the year 2022-23 (provisional).

The Government of India also implemented the Pradhan Mantri Sahaj Bijli Har Ghar Yojana (SAUBHAGYA) with the objective to achieve the universal household electrification by providing electricity connections to all willing unelectrified household in rural areas and all willing poor household in urban areas in the Country. Under the above distribution sector Schemes, projects worth ₹1.85 lakh Cr. were executed under which 18,374 villages of the Country, have been electrified and 2.86 Crore households of the Country, were provided electricity connections. As such, 100% of the villages of the country, were electrified for which saturation certificate was also given.

Besides this, 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/changed 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 20.6 Hours in 2023. The power supply in urban areas has increased to 23.78 Hours in 2023.

Government of India also approved the ongoing Revamped Distribution Sector Scheme (RDSS) in 2021 with an outlay of ₹ 3,03,758 crore including Gross Budgetary Support (GBS) of ₹97,631 crore from Central Government to strengthen the power distribution sector of the country. Under the Scheme, Government is also supporting States for electrification of those un-electrified household which were left out under SAUBHAGYA.

In addition, all identified beneficiary Households of Particularly Vulnerable Tribal Groups (PVTG) across States, including Odisha and West Bengal, under PM-JANMAN (Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan) are eligible for funding under RDSS as per guidelines.

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#### GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.3210 ANSWERED ON 21.12.2023

#### **ELECTRIFICATION OF HOUSEHOLDS**

#### 3210. SHRI NALIN KUMAR KATEEL: SHRI D.K. SURESH:

Will the Minister of POWER be pleased to state:

(a) the details of schemes being implemented by the Government to provide last mile electrical connectivity and to ensure electrification of all rural and urban households, scheme-wise;

(b) the total number of households electrified under various schemes during the last five years and the current year, State/UT and year-wise;

(c) whether the Government proposes to provide solar energy systems to electrify every households in the country; and

(d) if so, the details thereof?

#### ANSWER

#### THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

The Government of India implemented Deeen Dayal Upadhyaya Gram Jyoti (a) & (b) : Yojana (DDUGJY) and Integrated Power Development Scheme (IPDS) to strengthen the distribution system. Subsequently, Pradhan Mantri Sahaj Bijli Har Ghar Yojana (Saubhagya) was launched by Government of India in October, 2017 with the objective to achieve universal household electrification throughout the country. Under this scheme, electricity connections were provided to all willing un-electrified households in rural areas and all willing poor un-electrified households in urban areas. The electrification was carried out by State DISCOMs/Power Departments with funds provided by the Central Government under the Scheme. After electrification, the State DISCOMs/Power Departments were asked to certify that all willing un-electrified households were electrified. All the participating States certified that they have electrified all willing unelectrified households. A total of 2.86 crore households were provided electricity connection up-to 31.03.2022. The state wise details of number of household covered during the last 5 years are at Annexure. Both the above mentioned schemes SAUBHAGYA and DDUGJY have been closed on 31.03.2022.

The construction of new houses is a dynamic and continuous process. The Central Government in line with its commitment, is further supporting States under the ongoing Revamped Distribution Sector Scheme (RDSS) for electrification of any left-out households, which existed before 31.03.2019 (period of execution of SAUBHAGYA) but were somehow missed out by the DISCOMs. Till date, the approval has been accorded for around 4.96 Lakh left-out households for electrification for the State of Rajasthan, Uttar Pradesh and Andhra Pradesh. The details in this regard are as given below:

State	No. of HHs Proposed	Approved Cost (Rs. in Cr.)		
Rajasthan	1,90,959	459.18		
Uttar Pradesh	2,99,546	338.46		
Andhra Pradesh	5,577	16.00		

(c) & (d) : Under Off-grid & Decentralized Solar PV Applications Programme Phase-II, which was under implementation till 31.3.2017, the Ministry of New and Renewable Energy was providing financial support for electrification of Households through off-grid solar systems. Later, considering that Government targeted to electrify all villages in the country under Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) Scheme, and household electrification is targeted under Pradhan Mantri Sahaj Bijli Har Ghar Yojana - Saubhagya scheme, the financial support for electrification of HHs through off-grid solar systems was discontinued under Off-grid & Decentralized Solar PV Applications Programme Phase-III of MNRE.

Recently, the Union Cabinet on 29.11.2023, approved Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan (PM JANMAN) with total outlay of Rs. 24,104 crores (Central Share: Rs. 15,336 crore and State Share: Rs.8,768 crore) to focus on eleven critical interventions through nine-line Ministries for implementation. The Mission, inter-alia, covers electrification of one lakh un-electrified households through off-grid solar systems in Particularly Vulnerable Tribal Groups (PVTG) areas located in 18 States namely Andhra Pradesh, Bihar, Chhattisgarh, Gujarat, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Odisha, Rajasthan, Tamil Nadu, Telangana, Tripura, Uttar Pradesh, Uttarakhand and West Bengal, and UT of Andaman & Nicobar, where electricity supply through the grid is not techno-economically feasible. The New Solar Power Scheme under the Mission to be implemented by MNRE, has provision of providing solar off-grid systems or Solar mini grid for electrification of PVTG HHs at the rate of Rs. 50000 per Household or as per actual cost.

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#### ANNEXURE

# ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 3210 ANSWERED IN THE LOK SABHA ON 21.12.2023

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#### State-wise electrification of households during the last 5 years, since launch of Saubhagya Scheme including Additional Households covered under DDUGJY

	Name of the States	No of	Additional Sanction allowed under Saubhagya Further Additional Households sanctioned under DDUGJY		dditional sanctioned DUGJY		
SI. No.		electrified from 11.10.2017 to 31.03.2019 as per Saubhagya Portal	No of Households reported electrified from 01.04.2019 to 31.03.2021	Total HHs electrified as on 31.03.2021 (A)	Households Sanctioned during 2021- 22	Households electrified (as on 31.03.2022) (B)	Grand Total(A+B)
1	Andhra Pradesh*	1,81,930	0	1,81,930			1,81,930
2	Arunachal Pradesh	47,089	0	47,089	7859	0	47,089
3	Assam	17,45,149	2,00,000	19,45,149	480249	381507	23,26,656
4	Bihar	32,59,041	0	32,59,041			32,59,041
5	Chhattisgarh	7,49,397	40,394	7,89,791	21981	2577	7,92,368
6	Gujarat*	41,317	0	41,317			41,317
7	Haryana	54,681	0	54,681			54,681
8	Himachal Pradesh	12,891	0	12,891			12,891
9	Jammu & Kashmir	3,77,045	0	3,77,045			3,77,045
10	Jharkhand	15,30,708	2,00,000	17,30,708			17,30,708
11	Karnataka	3,56,974	26,824	3,83,798			3,83,798
12	Ladakh	10,456	0	10,456			10,456
13	Madhya Pradesh	19,84,264	0	19,84,264	99722	0	19,84,264
14	Maharashtra	15,17,922	0	15,17,922			15,17,922
15	Manipur	1,02,748	5,367	1,08,115	21135	0	1,08,115
16	Meghalaya	1,99,839	0	1,99,839	420	401	2,00,240
17	Mizoram	27,970	0	27,970			27,970
18	Nagaland	1,32,507	0	1,32,507	7009	7009	1,39,516
19	Odisha	24,52,444	0	24,52,444			24,52,444
20	Puducherry*	912	0	912			912
21	Punjab	3,477	0	3,477			3,477
22	Rajasthan	18,62,736	2,12,786	20,75,522	210843	52206	21,27,728
23	Sikkim	14,900	0	14,900			14,900
24	Tamil Nadu*	2,170	0	2,170			2,170
25	Telangana	5,15,084	0	5,15,084			5,15,084
26	Tripura	1,39,090	0	1,39,090			1,39,090
27	Uttar Pradesh	79,80,568	12,00,003	91,80,571	334652	0	91,80,571
28	Uttarakhand	2,48,751	0	2,48,751			2,48,751
29	West Bengal	7,32,290	0	7,32,290			7,32,290
	Total	2,62,84,350	18,85,374	2,81,69,724	11,83,870	4,43,700	2,86,13,424

\* Not funded under Saubhagya

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