

**GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.716
ANSWERED ON 07.12.2023**

DECREASE IN ELECTRICITY DEMAND

†716. SHRI MALOOK NAGAR:

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

- (a) whether electricity demand has been decreased in various parts of the country during the last one year;**
- (b) if so, the details of demand and supply of electricity across the country during the last two years; and**
- (c) the reasons for decrease in demand of electricity in the country?**

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) to (c) : No, Sir. The demand of power has increased in different parts of the country during the last one year. The details of Power Supply Position in various regions of the country during the year 2022-23 (April, 2022 to March, 2023) as compared to 2021-22 (April, 2021 to March, 2022) and the Power Supply Position during the year 2023-24 (April, 2023 to October, 2023) as compared to corresponding period of the previous year 2022 (April, 2022 to October, 2022) are given at Annexure.

ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 716 ANSWERED IN THE LOK SABHA ON 07.12.2023

The details of Power Supply Position in various regions of the country during the year 2022-23 (April, 2022 to March, 2023) as compared to 2021-22 (April, 2021 to March, 2022)

Region	(Figures in MU net)					
	April,2022 - March,2023		April,2021 - March,2022		% Change	
	Energy Requirement (MU)	Energy Supplied (MU)	Energy Requirement (MU)	Energy Supplied (MU)	Energy Requirement (%)	Energy Supplied (%)
Northern Region	463,088	458,640	417,934	413,915	10.8	10.8
Western Region	475,743	475,157	429,065	428,683	10.9	10.8
Southern Region	371,467	370,900	350,678	350,421	5.9	5.8
Eastern Region	182,791	180,888	164,054	162,973	11.4	11
North-Eastern Region	18,758	18,680	18,079	18,033	3.8	3.6
All India	1,511,847	1,504,264	1,379,812	1,374,024	9.6	9.5

The Power Supply Position during the year 2023 (April, 2023 to October, 2023) as compared to corresponding period of the previous year 2022 (April, 2022 to October, 2022)

Regions	(Figures in MU net)					
	April, 2023 - October, 2023		April, 2022 - October, 2022		% Change	
	Energy Requirement	Energy Supplied	Energy Requirement	Energy Supplied	Energy Requirement	Energy Supplied
Northern Region	302,137	300,889	297,268	294,208	1.6	2.3
Western Region	300,251	299,936	269,359	268,874	11.5	11.6
Southern Region	244,141	243,915	210,868	210,312	15.8	16.0
Eastern Region	123,055	122,197	116,275	114,941	5.8	6.3
North-Eastern Region	12,649	12,407	11,673	11,615	8.4	6.8
All India	982,233	979,344	905,443	899,950	8.5	8.8

**GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.734
ANSWERED ON 07.12.2023**

ENERGY STORAGE SYSTEM

734. SHRI RAVNEET SINGH BITTU:

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

- (a) whether the Government has notified the National Framework for promoting energy storage system and if so, the details thereof;**
- (b) whether the Government has set a target for achieving 50 per cent cumulative installed capacity from non-fossil fuel-based energy sources by 2030;**
- (c) if so, the details thereof and the progress achieved in this regard;**
- (d) whether the National Framework for promoting energy storage system would help accelerate the transition towards renewable energy system; and**
- (e) if so, the details thereof and if not, the reasons therefor?**

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) : Yes, Sir. The Government issued a 'National Framework for promoting Energy Storage Systems' in August, 2023 for the development and deployment of Energy Storage Systems to facilitate energy transition in the country.

(b) & (c) : As per the updated Nationally Determined Contribution (NDC) submitted to the United Nations Framework Convention for Climate Change (UNFCCC), India has committed to achieve 50 percent cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030. As on 31.10.2023, a total of 186.46 GW (43.8%) non-fossil fuel-based capacity has been installed in the country out of an overall installed electricity capacity of 425.5 GW.

(d) & (e): India's energy mix is set to undergo a transition from fossil fuel sources to non-fossil fuel based sources dominated by Renewable Energy (RE) in the future. However, solar and wind energy are not available round the clock. To facilitate transition from fossil fuel-based sources to RE sources, it is crucial to make RE dispatchable and available round the clock. Energy Storage Systems (ESS) play a key role in achieving this objective by storing energy generated from RE sources when it is available for use when the sun is not shining or the wind is not blowing. They also help in addressing RE variability, enhancing grid stability, facilitating energy/peak shifting, providing ancillary support services and fostering greater integration of RE. The National Framework for promoting Energy Storage Systems will encourage and create an ecosystem for development of Energy Storage based on requirements and financial feasibility, to guarantee affordable, clean, reliable and environmentally sustainable power for everyone.

**GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.754
ANSWERED ON 07.12.2023**

ELECTRICITY DEMAND IN JHARKHAND

754. SHRI VISHNU DAYAL RAM:

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

- (a) whether electricity consumption has increased in the country during the last three years and the current year and if so, the details thereof, State/UT-wise including Jharkhand;**
- (b) the measures being taken by the Government to fulfil the electricity demand in Jharkhand;**
- (c) whether new power projects have been established/approved by the Government across the country;**
- (d) if so, the details thereof, State/UT-wise including Jharkhand; and**
- (e) if not, the reasons therefor?**

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) : The consumption of electricity has increased in the country during the last three years and the current year. The details of electricity supplied in the country including Jharkhand is given at Annexure-I.

(b) : The supply and distribution of electricity to the various categories of consumers in a State/UT is managed by the respective State Government/Power Utility. The Central Government assist the State Governments. Power plants have been established in Central Sector through Central Public Sector Undertakings (CPSUs) and allocating power from them to the various States / UTs. Government of India has allocated 1648 MW firm share and 167 MW from the unallocated pool of Eastern Region to the State of Jharkhand form Central Sector Power plants. To meet increasing power demand of Jharkhand, Government of India has initiated capacity addition by constructing Patratu Power Plant through a Joint Venture of NTPC and Jharkhand Bijli Vitran Nigam Limited and North Karanpura Power Plants of NTPC Ltd. 3400 MW from Patratu Power Plant and 333 MW from North Karampura Power Plant (Unit#2 and #3) have been allocated to the State of Jharkhand.

(c) to (e) : The details of the power projects established during the last year i.e. 2022-23 and the current year i.e. 2023-24 (period April 2023 - October 2023) and the under construction power projects in the country including Jharkhand is given at Annexure-II.

**ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 754
ANSWERED IN THE LOK SABHA ON 07.12.2023**

Details of State/UT-wise electricity supplied in the country including Jharkhand

	Energy Supplied (MU)			
	2020-21	2021-22	2022-23	2023 (April-October)
Chandigarh	1523	1606	1788	1187
Delhi	29555	31122	35133	24007
Haryana	53108	55209	60945	41687
Himachal Pradesh	10130	12088	12542	7436
Jammu & Kashmir	17222	18434	19322	11009
Punjab	58377	62411	69220	47498
Rajasthan	85205	89310	100057	60590
Uttar Pradesh	123383	128310	143050	97362
Uttarakhand	13818	15426	15386	9342
Northern Region	392323	413915	458640	300889
Chhattisgarh	30449	31872	38979	23409
Gujarat	111622	123666	137916	86923
Madhya Pradesh	83437	86455	91969	54553
Maharashtra	150663	172809	186461	120579
Daman & Diu	2223	2594	9960	5889
Dadra & Nagar Haveli	5497	6839		
Goa	4083	4448	4674	2977
Western Region	387975	428683	475157	299936
Andhra Pradesh	62076	68219	71893	48265
Telangana	66994	70523	77799	47869
Karnataka	68831	72417	75663	52189
Kerala	25102	26570	27726	17787
Tamil Nadu	101189	109798	114722	75661
Puducherry	2644	2893	3050	2115
Lakshadweep	56	56	64	37
Southern Region	326836	350421	370900	243915
Bihar	34018	35761	38762	27333
Damodar Valley Corporation	21368	23736	26330	15958
Jharkhand	9675	10590	12288	8519
Odisha	29848	38332	42584	25956
West Bengal	51543	53945	60274	44119
Sikkim	546	609	587	272
Andaman & Nicobar	323	327	348	215
Eastern Region	146999	162973	180888	122197
Arunachal Pradesh	714	874	892	571
Assam	9815	10825	11465	8137
Manipur	969	1018	1014	546
Meghalaya	2005	2243	2237	1113
Mizoram	723	644	645	369
Nagaland	822	851	873	569
Tripura	1481	1578	1547	1096
North-Eastern Region	16531	18033	18680	12407
All India	12,70,663	1374024	1504264	979345

Details of the under-construction power projects in the Country:

List of under construction Thermal Power projects in India (as on 01-11-2023)					
Sl. No.	Project Name	State	Implementing Agency	Unit No	Cap. (MW)
CENTRAL SECTOR					
1	Barh STPP St-I	Bihar	NTPC	U-3	660
2	Buxar TPP	Bihar	SJVN	U-1	660
				U-2	660
3	North Karanpura STPP	Jharkhand	NTPC	U-2	660
				U-3	660
4	Patratu STPP	Jharkhand	PVUNL	U-1	800
				U-2	800
				U-3	800
5	Talcher TPP St-III	Odisha	NTPC	U-1	660
				U-2	660
6	Lara STPP St-II	Chhattisgarh	NTPC	U-1	800
				U-2	800
7	Ghatampur TPP	Uttar Pradesh	NUPPL	U-1	660
				U-2	660
				U-3	660
8	Khurja SCTPP	Uttar Pradesh	THDC	U-1	660
				U-2	660
9	Telangana STPP St- I	Telangana	NTPC	U-2	800
Total Central Sector					12720
STATE SECTOR					
1	Dr.Narla Tata Rao TPS St-V	Andhra Pradesh	APGENCO	U-1	800
2	Jawaharpur STPP	Uttar Pradesh	UPRVUNL	U-1	660
				U-2	660
3	Obra-C STPP	Uttar Pradesh	UPRVUNL	U-1	660
				U-2	660
4	Panki TPS Extn.	Uttar Pradesh	UPRVUNL	U-1	660
5	Ennore SCTPP	Tamil Nadu	TANGEDCO	U-1	660
				U-2	660
6	North Chennai TPP St-III	Tamil Nadu	TANGEDCO	U-1	800
7	Udangudi STPP St-I	Tamil Nadu	TANGEDCO	U-1	660
				U-2	660
8	Bhusawal TPS	Maharashtra	MAHAGENCO	U-6	660
9	Sagardighi TPP St-III	West Bengal	WBPDCL	U-1	660
10	Yadadri TPS	Telangana	TSGENCO	U-1	800
				U-2	800
				U-3	800
				U-4	800
				U-5	800
Total State Sector					12860
Grand Total					25580

List of Hydro Electric Projects (above 25 MW) under implementation - Sector-wise

	Name of the Project (Executing Agency)	State / UT	I.C. (No. X MW)	Cap. Under Execution(MW)
	Central Sector			
1	Subansiri Lower (NHPC)	Arunachal Pradesh/Assam	8x250	2000.00
2	Parbati St. II (NHPC)	Himachal Pradesh	4x200	800.00
3	Luhri-I (SJVN)	Himachal Pradesh	2x80+2x25	210.00
4	Dhaultasidh (SJVN)	Himachal Pradesh	2x33	66.00
5	Pakal Dul (CVPPL)	UT of Jammu & Kashmir	4x250	1000.00
6	Kiru (CVPPL)	UT of Jammu & Kashmir	4x156	624.00
7	Teesta St. VI NHPC	Sikkim	4x125	500.00
8	Vishnugad Pipalkoti (THDC)	Uttarakhand	4x111	444.00
9	Naitwar Mori (SJVNL)	Uttarakhand	2x30	30.00
10	Tapovan Vishnugad (NTPC)	Uttarakhand	4x130	520.00
11	Tehri PSS (THDC)	Uttarakhand	4x250	1000.00
12	Rammam-III (NTPC)	West Bengal	3x40	120.00
13	Rangit-IV (NHPC)	Sikkim	3x40	120.00
14	Ratle (RHEPPL / NHPC)	UT of Jammu & Kashmir	4x205 + 1x30	850.00
15	Kwar (CVPPPL)	UT of Jammu & Kashmir	4x135	540.00
16	Sunni Dam (SJVN)	Himachal Pradesh	4x73+1x73+1x17	382.00
17	Dibang Multipurpose Project (NHPC)	Arunachal Pradesh	12x240	2880.00
18	Lata Tapovan (NTPC)	Uttarakhand	3x57	171.00
	Sub-Total: Central Sector			12257.00
	State Sector			
19	Polavaram (APGENCO/ Irrigation Dept., A.P.)	Andhra Pradesh	12x80	960.00
20	Lower Kopli (APGCL)	Assam	2x55+2x2.5+1x5	120.00
21	Uhl-III (BVPCL)	Himachal Pradesh	3x33.33	100.00
22	Shongtong Karcham (HPPCL)	Himachal Pradesh	3x150	450.00
23	Parnai (JKSPDC)	UT of Jammu & Kashmir	3x12.5	37.50
24	Pallivasal (KSEB)	Kerala	2x30	60.00
25	Thottiyar (KSEB)	Kerala	1x30+1x10	40.00
26	Shahpurkandi (PSPCL/ Irrigation Deptt., Pb.)	Punjab	3x33+3x33+1x8	206.00
27	Kundah Pumped Storage Phase-I,II&III)	Tamil Nadu	4x125	500.00
28	Chanju-III (HPPCL)	Himachal Pradesh	3x16	48.00
29	Mankulam (KSEB)	Kerala	2x20	40.00
30	Lakhwar Multipurpose Project (UJVNL)	Uttarakhand	3x100	300.00
31	Lower Sileru Extension (APGENCO)	Andhra Pradesh	2x115	230.00
32	Lower Kalnai (JKSPDC)	UT of Jammu & Kashmir	2x24	48.00
33	Koyna Left Bank (WRD,MAH)	Maharashtra	2x40	80.00
	Sub-Total: State Sector			3219.50
	Grand Total:			15476.50

List of Nuclear Power projects Under Construction				
S.NO.	NAME OF GENERATOR	DEVELOPER	STATE	INSTALLED CAPACITY (MW)
1	KAKRAPARA A.P.S. UNIT 4	NPCIL	GUJARAT	700
2	RAJASTHAN A.P.S. UNIT 7	NPCIL	RAJASTHAN	700
3	RAJASTHAN A.P.S. UNIT 8	NPCIL	RAJASTHAN	700
4	KUDANKULAM UNIT 3	NPCIL	TAMILNADU	1000
5	PFBR NEW UNIT 1	BHAVINI	TAMILNADU	500
6	KUDANKULAM UNIT 4	NPCIL	TAMILNADU	1000
7	KUDANKULAM UNIT 5	NPCIL	TAMILNADU	1000
8	KUDANKULAM UNIT 6	NPCIL	TAMILNADU	1000
9	GORAKHPUR UNIT 1	NPCIL	HARYANA	700
10	GORAKHPUR UNIT 2	NPCIL	HARYANA	700
TOTAL				8000

**GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.764
ANSWERED ON 07.12.2023**

VILLAGES ELECTRIFIED UNDER DDUGJY

**764. SHRI GYANESHWAR PATIL:
SHRI NAYAB SINGH:**

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

- (a) the total number of villages electrified under the Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY), State/UT-wise including Madhya Pradesh and Haryana;**
- (b) the current status of the implementation of Ujwal Discom Assurance Yojana (UDAY);**
- (c) whether the Government has taken any affirmative actions for the smooth implementation of the said schemes; and**
- (d) if so, the details thereof?**

A N S W E R

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 strengthening the distribution system including separation of agriculture and non-agriculture feeders, strengthening and augmentation of sub-transmission & distribution infrastructure, metering of distribution transformers/feeders/consumers and electrification of villages across the country. As reported by the States, all the inhabited un-electrified villages as per Census 2011 were electrified by 28th April, 2018 under this scheme. A total of 18,374 villages were electrified under the scheme. For State of Madhya Pradesh, 422 numbers of villages were electrified under DDUGJY. As reported by the State of Haryana, all the inhabited un-electrified villages were electrified prior to the launch of DDUGJY. The State-wise details of village electrification are furnished at Annexure-I.

(b) to (d) : Ujwal DISCOM Assurance Yojana (UDAY) was launched by the Government on 20-11-2015 with an objective to improve operational and financial efficiency of the State DISCOMs.

As per OM dated 20th November, 2015 of UDAY Scheme (Clause 7) :

- i. State will issue non-SLR (Statutory Liquidity Ratio) including SDL (State Development Loans) bonds in the market or directly to the respective bank/ financial Institution holding the DISCOMs debts to the appropriate extent. Proceeds realized from issue of the bonds to the Banker/ FIs shall be entirely transferred by State to DISCOMs, which in turn shall discharge the corresponding amount of Bank/ FIs debts.**
- ii. Non SLR bonds issued by the State will have a maturity period of 10-15 years with a moratorium on repayment of principal up to 5 years, as required by the State.**

The summary of bonds issued under UDAY scheme is attached as Annexure-II. The maturity period of these bonds vary from State to State and is between 5 and 15 years.

A total of 27 States (except Odisha and West Bengal) and 5 UTs (except Delhi and Chandigarh) signed MoU under UDAY. 16 States (namely Jharkhand, Chhattisgarh, Rajasthan, Uttar Pradesh, Bihar, Punjab, Jammu & Kashmir, Haryana, Himachal Pradesh, Andhra Pradesh, Madhya Pradesh, Maharashtra, Assam, Meghalaya, Telangana and Tamil Nadu) signed Comprehensive MoU, which included financial restructuring of debt & taking over of future losses for four years. Other 16 States/UTs (namely Gujarat, Uttarakhand, Goa, Karnataka, Manipur, Sikkim, Arunachal Pradesh, Kerala, Tripura, Mizoram, Nagaland, Andaman & Nicobar Islands, Dadra & Nagar Haveli, Daman & Diu, Puducherry and Lakshadweep) had signed the MoU only for Operational improvements.

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 764 ANSWERED IN THE LOK SABHA ON 07.12.2023

Sl. No.	State	No. Of Villages Electrified under DDUGJY.		
		Grid	Off-Grid	Total
1	Arunachal Pradesh	928	555	1483
2	Assam	2338	394	2732
3	Bihar	2699	207	2906
4	Chhattisgarh	605	473	1078
5	Himachal Pradesh	28	-	28
6	J&K	75	54	129
7	Jharkhand	2335	248	2583
8	Karnataka	12	27	39
9	Madhya Pradesh	389	33	422
10	Maharashtra	37	43	80
11	Manipur	267	99	366
12	Meghalaya	969	82	1051
13	Mizoram	54	-	54
14	Nagaland	78	-	78
15	Odisha	2882	399	3281
16	Rajasthan	334	93	427
17	Tripura	26	-	26
18	Uttar Pradesh	1467	31	1498
19	Uttarakhand	67	24	91
20	West Bengal	22	-	22
	Total	15612	2762	18374

ANNEXURE REFERRED TO IN REPLY TO PARTS (b) TO (d) OF UNSTARRED QUESTION NO. 764 ANSWERED IN THE LOK SABHA ON 07.12.2023

SUMMARY OF BOND ISSUED UNDER UDAY SCHEME								
Sl. No.	State	Discom Liabilities (as per MoU) as on 30-09-2015	Discom Liabilities to be restructured as on 30-09-2015	Total Bonds issued by State till date	Total Bonds issued by Discom till date	Total bond issued under UDAY till date	Remaining Bonds to be issued by State	Remaining Bonds to be issued by Discoms
1	ANDHRA PRADESH	14721	14721	8256	0	8256	0	6465
2	ASSAM	1510	No bonds have been issued by the Govt. of Assam as the state took over loss in the form of grant and equity.					
3	BIHAR	3109	3109	2332	777	3109	0	0
4	CHHATISGARH	1740	870	870	0	870	0	0
5	HARYANA	34602	34518	25951	0	25951	0	8566
6	HIMACHAL PRADESH	3854	3854	2891	0	2891	0	963
7	JAMMU & KASHMIR	3538	3538	3538	0	3538	0	0
8	JHARKHAND	6718	6136	6136	0	6136	0	0
9	MADHYA PRADESH	34739	7360	7360	0	7360	0	0
10	MAHARASHTRA	22097	6613	4960	0	4960	0	1653
11	MEGHALAYA	167	167	125	0	125	0	42
12	PUNJAB	20838	20262	15629	0	15629	0	4633
13	RAJASTHAN	80530	76120	59722	12368	72090	0	4030
14	TAMIL NADU	30420	30420	22815	0	22815	0	7605
15	TELANGANA	11897	11244	8923	0	8923	0	2321
16	UTTAR PRADESH	53935	50125	39133	10377	49510	0	616
TOTAL:-		324415	269057	208641	23522	232163.29	0	36894.35
%age of Bonds issued to total debts to be restructured						86%		
Note- States- Goa, Uttarakhand, Gujarat, Karnataka, Manipur, Puducherry, Sikkim, Tripura, Kerala, Arunachal Pradesh, Mizoram have only opted for operational parameters under UDAY, hence, their debt was not taken over by State.								

**GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.781
ANSWERED ON 07.12.2023**

PRADHAN MANTRI SAHAJ HAR GHAR BIJLI YOJANA

781. SHRI JANARDAN SINGH SIGRIWAL:

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

- (a) the salient features of the Pradhan Mantri Sahaj Har Ghar Bijli Yojana–Saubhagya Scheme launched by the Government;**
- (b) whether electricity facility to all households in the country is being implemented as per the schedule and targets;**
- (c) if so, the details thereof;**
- (d) whether the Government has any data/information regarding the States where the said scheme has achieved considerable progress and achieved its targets in providing electricity to the households; and**
- (e) if so, the details thereof along with the extent of progress made by certain States in this regard?**

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a): The Government of India launched Pradhan Mantri Sahaj Bijli Har Ghar Yojana–SAUBHAGYA in October, 2017 with the objective of achieving universal household electrification, by providing electricity connections to all un-electrified households in rural areas and all poor households in urban areas in the country. Salient features of the scheme were:

- (i) Providing last mile connectivity and electricity connections to all un-electrified households in rural areas.**
- (ii) Providing Solar Photo Voltaic (SPV) based standalone systems for un-electrified households located in remote and inaccessible villages / habitations where grid extension is not feasible or cost effective.**

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- (iii) **Providing last mile connectivity and electricity connections to all remaining economically poor un-electrified households in urban areas. Non-poor urban households are excluded from this scheme.**

(b) to (e) : Under the aegis of SAUBHAGYA, as on 31.03.2019, all households were reported electrified by the States, except 18,734 households in Left Wing Extremists(LWE) affected areas of Chhattisgarh. Subsequently, seven States namely Assam, Chhattisgarh, Jharkhand, Karnataka, Manipur, Rajasthan and Uttar Pradesh had reported that around 19.09 lakh un-electrified households, identified before 31.03.2019, which were unwilling earlier but later expressed willingness to get electricity connection. This was also sanctioned. All these seven States had reported 100% household electrification as on 31.03.2021. A total of 2.817 crore households were electrified since the launch of SAUBHAGYA, up to 31.03.2021. 4.43 lakh additional households, which were identified as un-electrified before 31.03.2019, were given electricity connections under DDUGJY. As such, a total of 2.86 crore households were electrified till 31.03.2022. A certificate was taken from all States/ UTs that all eligible households have been electrified. The state-wise details of number of household covered are enclosed at Annexure.

ANNEXURE REFERRED TO IN REPLY TO PARTS (b) TO (e) OF UNSTARRED QUESTION NO. 781 ANSWERED IN THE LOK SABHA ON 07.12.2023

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

Sl. No.	Name of the States	No of Households electrified from 11.10.2017 to 31.03.2019 as per Saubhagya Portal	Additional Sanction allowed under Saubhagya		Further Additional Households sanctioned under DDUGJY		Grand Total(A+B)
			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)	
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

as per initial closure submitted by APDCL 381507 households have been electrified and as per the revised closure 368610 households have been electrified. However, the final closure of DDUGJY addl. HHS of Assam state is yet to be approved

* Not funded under Saubhagya

**GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.792
ANSWERED ON 07.12.2023**

ELECTRICITY CONNECTION TO POOR FAMILIES

†792. SHRI VIVEK NARAYAN SHEJWALKAR:

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

- (a) whether the Government has fixed any target to provide electricity connection to poor families in the country and if so, the details thereof; and**
- (b) the details of the financial assistance provided to the State Governments for the said purpose?**

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b) : 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 the Saubhagya scheme, as on 31.03.2021 all the States reported 100% electrification of all the willing un-electrified households. A total of 2.817 crore households were electrified up to 31.03.2021. Further, states reported 4.43 lakh additional households have been electrified under DDUGJY. Accordingly, as on 31.03.2022, a total of 2.86 crore households have been electrified since the launch of Saubhagya.

Under Saubhagya scheme and DDUGJY (Additional Households), a total grant of Rs. 6,819.4 Crores has been disbursed and the Schemes stand closed. As the arising of new households is a dynamic and continuous process, the states have been asked to take care of the future requirement.

.....2.

The Central Government in line with its commitment, is further supporting States for electrification of left-out households, identified before 31.03.2019 (period of execution of SAUBHAGYA), under the ongoing scheme of Revamped Distribution Sector Scheme (RDSS). 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

Further, all left out households of particularly vulnerable Tribal Groups will be electrified in mission mode under PM JANMAN. The funding for this mission will be provided from RDSS.

**GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.801
ANSWERED ON 07.12.2023
SUBSIDY ON ELECTRICITY**

801. SHRI RITESH PANDEY:

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

- (a) whether the Government is aware of the increasing losses of DISCOMs which surged to 66 per cent in financial year 2021 despite reform programmes and financial restructuring packages over the last two decades;**
- (b) if so, the details thereof and if not, the reasons therefor;**
- (c) the quantum of electricity subsidy provided to the consumers along with the number of beneficiaries and the quantum of losses incurred by the electricity distribution companies during the last five years;**
- (d) whether the Government proposes to phase out electricity subsidy by reducing the cost of power through power dispatch from less-polluting thermal power plants, if so, the details thereof and if not, the reasons therefor; and**
- (e) whether the Government also proposes to bring 'one nation-one power tariff' policy to ensure uniform electricity rates across the country, if so, the details thereof and if not, the reasons therefor?**

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) to (d): The losses of the DISCOMs have reduced substantially and the power sector has become viable because of a number of steps taken by the Government. These include:

- (i) Putting in place Rules to ensure payment for any subsidy declared by Government in time.**
- (ii) Ensure that the tariffs are up to date.**
- (iii) Reducing the Late Payment Surcharge.**
- (iv) Ensuring that the GENCOs are paid on time.**
- (v) Ensuring Energy Accounting and Energy Audit.**

- (vi) **Putting in place revised prudential norms providing that no DISCOM or GENCO of a State Government will be able to get loans from PFC/REC if the DISCOM is making a loss, unless the DISCOM, with the approval of the State Government, works out a plan for loss reduction and files it with the Central Government, and adheres to that loss reduction trajectories.**
- (vii) **Put in place an incentive of an additional borrowing space of 0.5% of GDP if the DISCOM puts in place loss reduction measures.**
- (viii) **Provided for covered wire in high loss areas under DDUGJY and IPDS.**
- (ix) **Provided that loss making DISCOMs will not be able to draw funds under any Power Sector Scheme of Government of India unless they put in place measures for loss reduction.**

As a result of the above, the AT&C losses – which were 21.61% in FY17-18 have come down to 16.42% in FY21-22.

(e): As per the provisions of the Electricity Act, 2003, the State Electricity Regulatory Commission determines the electricity tariff for retail sale of electricity to end consumers. Section 61 of the Electricity Act, 2003 and the Tariff Policy provide the guiding principles for determination of tariff.

At present there is no proposal to implement uniform electricity pricing throughout the country. However, Government is promoting competition through Power Exchanges. Uniform tariff is discovered on the Power Exchange for a specific time block of the day. Accordingly, to this extent, for the power procured by the distribution utilities from Power Exchanges the price of electricity remains uniform, except in case of market splitting.

**GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.839
ANSWERED ON 07.12.2023**

INSTALLATION OF FLUE GAS DESULFURIZATION (FGD) UNITS

839. SHRI SUSHIL KUMAR SINGH:

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

- (a) the total number of thermal power plants in Bihar, district-wise;**
- (b) the number of thermal power plants in which Flue Gas Desulfurization (FGD) units are installed, district-wise;**
- (c) whether it is true that the State-owned and private sector thermal power plants in Maharashtra are yet to install the FGD units;**
- (d) if so, the details of measures taken by the Government in this regard;**
- (e) whether the Government has taken any steps to enforce compliance to install FGD units; and**
- (f) if so, the details thereof?**

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

- (a) : There are 6 Thermal Power Plants (total Installed Capacity – 9,070 MW) in Bihar. The District wise list is annexed at Annexure-I.**
- (b) : There are 10 numbers of Thermal Power Plants (total 24 units of 10,600 MW capacity) in which Flue Gas De-sulfurization (FGD) units have been installed. District wise list is annexed as Annexure-II.**
- (c) : Yes Sir, some of the State-owned and private sector thermal power plants in Maharashtra are in various stages of installation of FGD units.**

(d) to (f) : All Thermal Power Plants are required to comply with the emission norms as notified by the Ministry of Environment, Forest and Climate Change (MoEF&CC) and directions given by Central Pollution Control Board (CPCB) from time to time. For compliance with Sulphur dioxide (SO₂) emission norms, Thermal Power Plants are installing Flue Gas Desulphurization (FGD) equipment. MOEF&CC vide notification dated 05.09.2022 has specified following timelines for SO₂ compliance for non-retiring Thermal Power Plants for compliance to emission norms:

Sl. No.	Category	Location/Area	Timelines for compliance
1	Category A	Within 10 km radius of National Capital Region (NCR) or cities having million plus population (as per 2011 census of India)	Upto 31st December 2024
2	Category B	Within 10 km radius of Critically Polluted Areas or Non-attainment cities (as defined by CPCB)	Upto 31st December 2025
3	Category C	Other than those included in category A and B	Upto 31st December 2026

For non-compliance beyond the specified timelines, MoEF&CC has prescribed following environment compensation on the non-retiring thermal power plants:

Non-Compliant operation beyond the Timeline	Environmental Compensation (Rs. per unit electricity generated)
0-180 days	0.20
181-365 days	0.30
366 days and beyond	0.40

ANNEXURE-I**ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED
QUESTION NO. 839 ANSWERED IN THE LOK SABHA ON 07.12.2023**

List of Thermal Power Plants in Bihar

Sl. No	Name of District	Sector	Organisation	Name of Thermal Power Plant (TPP)	Total Installed Capacity (MW)
1	Aurangabad	Central	NTPC-JV	BRBCL, Nabinagar Thermal Power Station	1000
2		Central	NTPC	Nabinagar Super Thermal Power Station	1980
3	Begusarai	Central	NTPC	Barauni Thermal Power Station	720
4	Patna	Central	NTPC	Barh Super Thermal Power Plant	2640
5	Bhagalpur	Central	NTPC	Kahalgaon Super Thermal Power Station	2340
6	Muzaffarpur	Central	NTPC	Muzaffarpur Thermal Power Station (NTPC Kanti)	390
Total					9070

ANNEXURE-II**ANNEXURE REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 839 ANSWERED IN THE LOK SABHA ON 07.12.2023**

List of Thermal Power Plants in India where FGD has been installed

Sl. No.	Name of Project	State	Sector	Organisa-tion	District	Unit No.	Total Capacity (MW)
1	MAHATMA GANDHI TPS	Haryana	Private	Jhajjar Power	Jhajjar	1	660.00
						2	660.00
2	DADRI (NCTPP)	Uttar Pradesh	Central	NTPC	Gautam Budh Nagar	1	210.00
						2	210.00
						3	210.00
						4	210.00
						5	490.00
3	UNCHA HAR TPS	Uttar Pradesh	Central	NTPC	Raebareli	6	500.00
4	ITPCL TPP	Tamil Nadu	Private	ITPCL	Cuddalore	1	600.00
						2	600.00
5	MUNDRA TPS	Gujarat	Private	APL	Kutch	7	660.00
						8	660.00
						9	660.00
6	KHARGONE STPP	Madhya Pradesh	Central	NTPC	West Nimar	1	660.00
						2	660.00
7	VINDHYACHA L STPS	Madhya Pradesh	Central	NTPC	Singrauli	13	500.00
8	JSW RATNAGIRI TPP	Maharashtra	Private	JSW	Ratnagiri	1	300.00
						2	300.00
						3	300.00
						4	300.00
9	DAHANU TPS	Maharashtra	Private	APL	Palghar	1	250.00
						2	250.00
10	TROMBAY TPS	Maharashtra	Private	TATA PCL	Mumbai	5	500.00
						8	250.00
Total						24	10600

**GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.846
ANSWERED ON 07.12.2023**

ACCESS TO RELIABLE ELECTRICITY

846. SHRI THOMAS CHAZHIKADAN:

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

- (a) the percentage of rural households in Kerala not having access to reliable electricity;**
- (b) whether the Government has devised a concrete plan for increasing access to clean electricity in rural areas of Kerala; and**
- (c) if so, the details thereof?**

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) : The State Government of Kerala has reported that the State had achieved 100% village electrification by 1987. The Supply and distribution of electricity to all consumers is done by the State Power Utilities. Government of India has assisted the States through its various earlier schemes such as Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and is assisting the State through Revamped Distribution Sector Scheme (RDSS) to achieve the objective of providing uninterrupted power supply to all households. A total of 136193 numbers of BPL Households were connected under DDUGJY in Kerala from 2015 to 2019. The construction of new households is a dynamic and continuous process, the DISCOMs are duty bound to ensure that those seeking connections are connected.

In addition, all identified beneficiary Households under PM-JANMAN (Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan) for PVTG Development Mission for on-grid electricity connection shall be eligible for funding under RDSS as per the scheme guidelines.

(b) & (c) : As on 31st October, 2023, a cumulative capacity of 3058.35 MW Renewable Energy has been installed in the state of Kerala which includes 858.68 MW Solar Power, 1864.15 MW Large Hydro, 62.50 MW Wind Power, 270.52 MW Small Hydro Power and 2.50 MW Bio-Power.

**GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.847
ANSWERED ON 07.12.2023**

SCHEME FOR BESS

847. SHRI A. GANESHAMURTHI:

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

- (a) whether the Government has recently approved Viability Gap Funding scheme for developing Battery Energy Storage System (BESS);**
- (b) if so, the details thereof;**
- (c) whether it would reduce carbon emissions and dependence on fossil fuel and if so, the details thereof; and**
- (d) the details of the quantity of surplus energy from BESS expected to be given to DISCOMS during peak hour demand during the next five years, State-wise?**

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b): Yes, Sir. Cabinet in its meeting held on 06.09.2023 approved the scheme for Viability Gap Funding (VGF) for development of Battery Energy Storage Systems (BESS) with capacity of 4,000 MWh. Under the scheme, projects will be approved during a period of 3 years (2023-24 to 2025-26). The disbursement of funds will extend upto 2030-31 in 5 tranches. The cost of BESS system is anticipated to be in the range of ₹2.40 to ₹2.20 Crore/MWh during the period 2023-26 for development of BESS capacity of 4,000 MWh, which translates into Capital Cost of ₹9,400 Crores with a Budget support of ₹3,760 Crores.

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 for development of BESS through the bidding process to be conducted by the Implementing Agency(ies) as per the provisions of the Scheme and Bidding Guidelines.

(c) & (d): The implementation of a 4,000 MWh is expected to result in an annual reduction of approximately 1.3 million metric tons (MMT) of carbon emissions (CO₂) considering charging of BESS with Renewable Energy (RE). This will make up to 4,000 MWh of energy available during peak hours for Discoms and other beneficiaries to utilize, depending on their specific usage patterns.

**GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.848
ANSWERED ON 07.12.2023**

GENERATION OF HYDROPOWER

†848. SHRI MANSUKHBHAI DHANJIBHAI VASAVA:

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

- (a) whether the required amount of hydropower is not being generated despite immense potential of the same in the country;**
- (b) if so, the details of currently explored and exploited hydropower generation potential in the country, State/UT-wise; and**
- (c) the details of the steps being taken by the Government to increase the generation of hydropower?**

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) : The generation from hydro electric projects in the country against the target set by the Central Electricity Authority during the last 3 years and the current year is as under:

Year	Target Generation (in Billion Units)	Actual Generation (in Billion Units)	Achievement against Target
2020-21	140.4	150.3	+7.1%
2021-22	149.5	151.6	+1.4%
2022-23	150.7	162.1	+7.6%
2023-24 (till Oct 2023)	114.2	102.3	-10.4%

Thus, the hydropower generation has consistently exceeded the targets. During the current year, it is less mainly due to floods during July 2023 in Himachal Pradesh and Uttarakhand and devastating floods in Sikkim during October 2023, which affected generation as planned.

(b) : As per the reassessment study carried out by the Central Electricity Authority during the period 2017-2023, the exploitable hydro power potential in the country is about 1,33,410 MW, out of which 42,105 MW has been harnessed.

The State/ UT-wise hydro power potential and its status of development in the country is attached at Annexure.

(c): The Government of India has taken various policy measures to increase the generation from hydro power. These measures would not only help in development of the upcoming hydro power projects but also improve the generation. Some of the measures taken are as under:

- i. Declaration of large hydro power projects (of more than 25 MW capacity) as renewable energy source
- ii. Notification of Hydro Purchase Obligations (HPO)
- iii. Waiver of Inter State Transmission System (ISTS) charges for Hydro Power Projects and Pumped Storage projects (PSPs)
- iv. Tariff rationalization measures for bringing down the tariff during the initial years
- v. Budgetary support for flood moderation component of hydro power projects
- vi. Budgetary support for construction of enabling infrastructure, i.e. roads/bridges
- vii. Empanelment of Independent Engineer(s) and Conciliation Committee of Independent Experts for expeditions resolution of contractual disputes in hydro power projects
- viii. Issuance of guidelines on 10.04.2023 to promote Pumped Storage Projects

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 848 ANSWERED IN THE LOK SABHA ON 07.12.2023

STATUS OF LARGE HYDRO ELECTRIC POTENTIAL DEVELOPMENT

(In terms of Installed capacity - Above 25 MW)

Region/ State	Exploitable Identified Capacity as per Reassessment Study	Capacity In Operation	Capacity Under Active Construction	Capacity on which Construction is held up	H.E. Projects concurred by CEA and yet to be taken up for construction	H.E. Projects under Examination in CEA	H.E. Projects returned to project authorities	H.E. Projects under Survey & Investigation	H.E. Projects allotted for dev on which S&I is held up/ yet to be taken up
	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)
NORTHERN									
Jammu & Kashmir	12265	3360	3052	48	3119	0	390	1060	370
Ladakh	707	89	0	0	0	0	0	95	0
Himachal Pradesh	18305	10263	2446	44	937	0	400	1144	2700
Punjab	1301	1096	206	0	0	0	0	0	0
Haryana	0	0	0	0	0	0	0	0	0
Rajasthan	411	411	0	0	0	0	0	0	0
Uttarakhand	13481	3975	1324	247	815	0	939	732	628
Uttar Pradesh	502	502	0	0	0	0	0	0	0
Sub Total (NR)	46971	19696	7028	339	4871	0	1729	3031	3698
WESTERN									
Madhya Pradesh	2819	2235	0	400	0	0	0	0	0
Chhattisgarh	1311	120	0	0	0	0	0	0	0
Gujarat	550	550	0	0	0	0	0	0	0
Maharashtra	3144	2647	0	0	0	0	0	0	0
Goa	0	0	0	0	0	0	0	0	0
Sub total (WR)	7824	5552	0	400	0	0	0	0	0
SOUTHERN									
Andhra Pradesh	2596	1610	1190	0	0	0	0	0	0
Telangana	1302	800	0	0	0	0	320	0	0
Karnataka	4414	3689	0	0	0	0	665	0	0
Kerala	2473	1864	140	0	0	0	0	800	0
Tamil Nadu	1785	1778	0	0	0	0	0	0	0
Sub Total (SR)	12570	9742	1330	0	0	0	985	800	0
EASTERN									
Jharkhand	300	210	0	0	0	0	0	0	0
Bihar	130	0	0	0	0	0	130	0	0
Odisha	2825	2155	0	0	0	0	0	0	0
West Bengal	809	441	120	0	0	0	0	90	0
Sikkim	6051	2282	620	417	520	0	0	0	0
Sub Total (ER)	10115	5088	740	417	520	0	130	90	0
NORTH EASTERN									
Meghalaya	2026	322	0	0	85	0	0	270	170
Tripura	0	0	0	0	0	0	0	0	0
Manipur	615	105	0	0	0	0	0	0	0
Assam	643	350	120	0	0	0	60	0	0
Nagaland	325	75	0	0	186	0	0	0	0
Arunachal Pradesh	50394	1115	4880	0	13798	0	5323	14599	1520
Mizoram	1927	60	0	0	0	0	0	0	0
Sub Total (NER)	55930	2027	5000	0	14069	0	5383	14869	1690
ALL INDIA	133410	42105	14098	1156	19460	0	8227	18790	5388

**GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.849
ANSWERED ON 07.12.2023**

DISTRIBUTION OF FANS AND ELECTRIC STOVES

**†849. SHRI RAM KRIPAL YADAV:
DR. RAM SHANKAR KATHERIA:
SHRI JANARDAN MISHRA:
SHRI HARISH DWIVEDI:**

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

- (a) whether the Government proposes to launch any scheme related to distribution of low power consuming fans and electric stoves in the country;**
- (b) if so, the name of the companies which have been identified by the Government for distribution of fans and electric stoves under the said scheme, State-wise; and**
- (c) the extent to which the cost of cooking food for the poor families of the country would get reduced through e-cooking?**

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b) : Energy Efficiency Services Limited (EESL), a joint venture of Public Sector Undertakings (PSUs) under Ministry of Power has launched National Efficient Cooking Programme (NECP) and Energy Efficient Fans Programme (EEFP) in November, 2023. These initiatives are aimed at revolutionizing cooking practices in India and emphasizing the importance of energy efficient fans. EESL plans to execute phase wise sale of BLDC fans through various channels such as EESL portal, Government e-Marketplace (GEM), India Post, and Common Service Centres (CSC).

(c) : Owing to higher efficiency of induction cook stoves annual monetary savings of approximately ₹3000-4000/- may accrue to a household in comparison to LPG based cooking.

**GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.881
ANSWERED ON 07.12.2023**

ELECTRICITY CONNECTIONS UNDER SAUBHAGYA SCHEME

881. SHRI SHYAM SINGH YADAV:

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

(a) the number of electricity connections provided to all unelectrified rural households and poor urban households in the district of Jaunpur since October 2017 under Saubhagya Scheme; and

(b) the number of unelectrified rural and urban households in Jaunpur district unwilling to take electricity connections under Saubhagya Scheme?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a): As per SAUBHAGYA portal, a total of 2,04,482 nos. of households in Jaunpur district have been electrified covering rural and urban households.

(b): The State has reported that the data of the Households unwilling for the electricity connections was not maintained under SAUBHAGYA Scheme. Further, for electrification of un-electrified households only cases of un-electrified households (prior to SAUBHAGYA) identified before 31.03.2019 are considered under Revamped Distribution Sector Scheme-RDSS. A total of 30,055 households have been sanctioned for electrification in Jaunpur district under RDSS.

**GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.884
ANSWERED ON 07.12.2023**

DEVELOPMENT OF HYDRO POWER PROJECTS

884. SHRI SUNIL KUMAR MONDAL:

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

- (a) whether the Government has established any new hydro power project or has developed the existing hydro power projects across the country especially in West Bengal during the last two years and the current year;**
- (b) if so, the details thereof along with action taken or being taken and futuristic plans made in this regard, State/UT-wise including West Bengal especially in Bardhaman Purba constituency; and**
- (c) if not, the reasons therefor?**

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) to (c) : Four hydro electric projects and one Unit of Naitwar Mori totaling to 543 MW have been commissioned in the country during the last two years. State/UT-wise details are enclosed at Annexure-I. Further, 42 projects of about 18,000 MW are currently under construction. State/UT wise details are enclosed at Annexure-II.

No hydro electric project above 25 MW has been commissioned during the last 2 years in the state of West Bengal. However, Rammam-III project of 120 MW is currently under construction, Turga Pumped Storage Project of 1000 MW has been concurred by the Central Electricity Authority and is to be taken up for construction. Teesta Intermediate hydro project of 90 MW is under survey and investigation in the state of West Bengal.

The Government of India has taken various policy measures to address the issues faced by hydro projects, which would help in development of hydro power projects in the country, including in the state of West Bengal. Some of the measures taken are as under:

- i. Declaration of large hydro power projects (greater than 25 MW) as renewable energy source**
- ii. Notification of hydro purchase obligation**
- iii. Waiver of Inter State Transmission System charges for Hydro Power Projects and Pumped Storage projects**
- iv. Tariff rationalization measures for bringing down the tariff during the initial years**
- v. Budgetary support for flood moderation component of hydro power projects**
- vi. Budgetary support for construction of enabling infrastructure, i.e. roads/bridges**
- vii. Empanelment of Independent Engineer and Conciliation Committee of Independent Experts for resolution of contractual disputes in hydro power projects**
- viii. Issuance of guidelines on 10.04.2023 for promotion of Pumped Storage Projects**

ANNEXURE-I**ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 884 ANSWERED IN THE LOK SABHA ON 07.12.2023**

HYDRO CAPACITY ADDITION DURING THE YEAR 2021-22

Sl. No	Name of Project (Developer)	Sector	State	Unit No.	Capacity (MW)	Date of Commissioning
1	Rongnichu HEP (Madhya Bharat Corp. Ltd)	Private	Sikkim	1	56.5	25.06.2021
				2	56.5	30.06.2021
2	Sorang HEP (Himachal Sorang Power Corp. Ltd.)	Private	Himachal Pradesh	1	50	23.09.2021
				2	50	21.09.2021
3	Bajoli Holi HEP (GMR Bajoli Holi Hydro Power Pvt. Ltd)	Private	Himachal Pradesh	1	60	25.03.2022
				2	60	27.03.2022
				3	60	28.03.2022
Total: (2021-22)					393	

HYDRO CAPACITY ADDITION DURING THE YEAR 2022 - 23

Sl. No.	Name of Project (Developer)	Sector	State	Unit No.	Capacity (MW)	Date of Commissioning
4	Vyasi HEP (Uttarakhand Jal Vidyut Nigam Ltd)	State	Uttarakhand	1	60	24.05.2022
				2	60	22.04.2022
Total: (2022-23)					120	

HYDRO CAPACITY ADDITION DURING THE YEAR 2023 - 24

Sl. No.	Name of Project (Developer)	Sector	State	Unit No.	Capacity (MW)	Date of Commissioning
5	Naitwar Mori HEP (SJVN Ltd) (2X30 MW)	Central	Uttarakhand	1	30	24.11.2023
Total: (2023-24)					30	
Grand Total (2021-22 to 2023 -24-till Dec 23)					543	

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 884 ANSWERED IN THE LOK SABHA ON 07.12.2023

List of Hydro Electric Projects (above 25 MW) under construction			
Sl. No.	Name of Project (Executing Agency)	Sector	Capacity (MW)
Andhra Pradesh			
1	Polavaram (APGENCO/ Irrigation Dept., A.P.)	State	960
2	Lower Sileru Extension (APGENCO)	State	230
3	Pinnapuram (Greenko AP01 IREP Private Limited)	Private	1200
	Sub-total: Andhra Pradesh		2390
Arunachal Pradesh			
4	Subansiri Lower (NHPC)	Central	2000
5	Dibang Multipurpose Project (NHPC)	Central	2880
	Sub-total: Arunachal Pradesh		4880
Assam			
6	Lower Kopli (APGCL)	State	120
	Sub-total: Assam		120
Himachal Pradesh			
7	Parbati St. II (NHPC)	Central	800
8	Luhri-I (SJVN)	Central	210
9	Dhaulasidh (SJVN)	Central	66
10	Sunni Dam (SJVN)	Central	382
11	Uhi-III (BVPCL)	State	100
12	Shongtong Karcham (HPPCL)	State	450
13	Chanju-III (HPPCL)	State	48
14	Tidong-I (Statkraft IPL)	Private	150
15	Kutehr (JSW Energy Ltd)	Private	240
16	Tangnu Romai (TRPG)	Private	44
	Sub-total: Himachal Pradesh		2490
Jammu & Kashmir			
17	Pakal Dul (CVPPL)	Central	1000
18	Kiru (CVPPL)	Central	624
19	Ratle (RHEPPL / NHPC)	Central	850
20	Kwar (CVPPL)	Central	540
21	Parnai (JKSPDC)	State	38
22	Lower Kalnai (JKSPDC)	State	48
	Sub-total: Jammu & Kashmir		3100
Kerala			
23	Pallivasal (KSEB)	State	60
24	Thottiyar (KSEB)	State	40
25	Mankulam (KSEB)	State	40
	Sub-total: Kerala		140

Madhya Pradesh			
26	Maheshwar (SMHPCL)	Private	400
Sub-total: Madhya Pradesh			400
Maharashtra			
27	Koyna Left Bank (WRD,MAH)	State	80
Sub-total: Maharashtra			80
Punjab			
28	Shahpurkandi (PSPCL/ Irrigation Deptt., Pb.)	State	206
Sub-total: Punjab			206
Sikkim			
29	Teesta St. VI NHPC	Central	500
30	Rangit-IV (NHPC)	Central	120
31	Bhasmey (Gati Infrastructure)	Private	51
32	Rangit-II (Sikkim Hydro)	Private	66
33	Panan (Himagiri)	Private	300
Sub-total: Sikkim			1037
Tamil Nadu			
34	Kundah Pumped Storage Phase-I,II&III)	State	500
Sub-total: Tamil Nadu			500
Uttarakhand			
35	Vishnugad Pipalkoti (THDC)	Central	444
36*	Naitwar Mori (SJVNL)	Central	30
37	Tapovan Vishnugad (NTPC)	Central	520
38	Tehri PSS (THDC)	Central	1000
39	Lakhwar Multipurpose Project (UJVNL)	State	300
40	Lata Tapovan (NTPC)	Central	171
41	Phata Byung (LANCO)	Private	76
Sub-total: Uttarakhand			2541
West Bengal			
42	Rammam-III (NTPC)	Central	120
Sub-total: West Bengal			120
Total:			18004
* 1 unit (30 MW) of Naitwar Mori HEP has achieved its CoD on 24.11.23			

**GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.895
ANSWERED ON 07.12.2023**

MODERNIZATION AND RESTRUCTURING OF ELECTRICITY MARKET

**895. DR. MANOJ RAJORIA:
SHRI SUNIL BABURAO MENDHE:
DR. DHAL SINGH BISEN:
SHRI SUMEDHANAND SARASWATI:
SHRIMATI HIMADRI SINGH:
SHRI RAJESH VERMA:
SHRI SUDHAKAR TUKARAM SHRANGARE:
SHRI RAJENDRA AGRAWAL:
SHRI MOHANBHAI KALYANJI KUNDARIYA:
SHRI DILIP SAIKIA:
SHRI PARVESH SAHIB SINGH VERMA:
SHRIMATI RANJEETA KOLI:
SHRI KRIPANATH MALLAH:**

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

- (a) the quantum of power that has been produced in the country annually during the last five years, State/UT-wise including Delhi;**
- (b) the details of insights into the technological advancements and innovations implemented in the electricity market restructuring to accommodate the integration of renewable energy sources more efficiently;**
- (c) the details of the initiatives Government has implemented to modernise and restructure the nation's electricity market particularly to facilitate the seamless integration of renewable energy sources into the power grid and ensuring optimal utilisation of electricity generation resources;**
- (d) the manner in which the Government encourage private sector participation and investment in the modernization and restructuring of the electricity market; and**
- (e) the details of the corrective measures taken by the Government to ensure the financial stability of the power sector, including DISCOMs, electricity consumers and power generation companies?**

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) to (e): The State/UT-wise details of quantum of power generated in the country (including Delhi) during the last five years and current year 2023-24 (till October'23) is given at Annexure. It will be seen that the demand has gone up by 50.8 percent in energy terms from 2013-14 to 2022-23. The peak demand has gone up from 136 GW in 2013-14 to 243 GW in September, 2023. We have been able to meet the increase in demand because we added 194 GW of capacity between 2014 to 2023.

We also added 192000 cKt kms of transmission line during the same period connecting the whole country into one grid and one national market.

We have introduced new products in the Exchange for Renewable Energy such as the Green Day Ahead Market and the Green Term Ahead Market.

We have one of the fastest Renewable Energy Capacities in the world and have emerged as the most favoured destination for investment in Renewables in the world. We have constructed Green Energy Corridors and put in place 13 Renewable Energy Management Centres. Today our Renewable Energy Capacity is 178000 MW and 99000 MW is under installation.

We have made the power sector viable. The AT&C losses have come down from 22.62% in 2013-14 to 16.42% in 2021-22. All current payment of Gencos are up-to-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.

In order to reduce the AT&C losses the Government of India implemented the following steps:

- (i) Provided funds under DDUGJY and IPDS to install meter on unmetered connections; and installed covered wire in loss prone areas to make theft difficult;**
- (ii) Put in place energy accounting and energy audit system;**
- (iii) Revised prudential norms to ensure that no loans are given by REC/PFC to DISCOMs which are making losses, unless they draw up a plan to reduce the losses, get their State Government approval on it and file it with the Government of India; and follow up on these steps;**
- (iv) Put in place a merit order despatched system to ensure that cheaper power is despatched first;**
- (v) Reduced the late payment surcharge to reduce the burden on the DISCOMs;**
- (vi) Put in place rules to ensure that if the Genco is not paid for the power supplied, the areas of the defaulting DISCOMs is automatically cut off;**
- (vii) Put in place an incentive of an additional borrowing space of 0.5% of GDP if the DISCOMs puts in place loss reduction measures;**
- (viii) Provided that no funds will be given under RDSS to loss making DISCOMs unless they put in place measures to reduce their losses; and**
- (ix) Put in place Rules to ensure that the tariff is up-to-date.**

As a result of the above measures, the power sector has become viable and profitable.

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (e) OF UNSTARRED QUESTION NO. 895 ANSWERED IN THE LOK SABHA ON 07.12.2023

State/UT-wise including Delhi details of power generated in the country annually during the last five years and current year 2023-24(till October'23)

NAME OF STATE /UT	GENERATION in MUs					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24 (till October'23)
Chandigarh	13.51	13.33	10.16	14.19	12.61	8.73
Delhi	7423.68	6438.78	5730.71	5407.30	4314.50	2804.93
Haryana	26097.79	18050.51	15657.13	24103.15	33559.00	18342.80
Himachal Pradesh	38196.48	43002.12	39633.77	38503.40	41579.93	31308.07
Jammu and Kashmir	16699.27	18537.25	17441.97	17489.83	17170.62	13209.89
Ladakh	154.51	270.28	376.21	405.98	402.78	307.32
Punjab	33144.86	28747.68	25606.29	31127.70	40075.40	26014.77
Rajasthan	68841.66	70291.34	70607.33	83997.41	105963.47	68911.79
Uttar Pradesh	128467.21	129323.42	132668.65	143159.29	163447.06	99968.15
Uttarakhand	16100.33	17735.27	15551.31	16216.77	16369.49	11157.01
Chhattisgarh	116659.43	119336.93	136667.58	143213.21	144839.62	95742.91
Gujarat	110557.53	124666.25	121859.71	87886.78	95017.30	80347.46
Madhya Pradesh	129934.92	129397.90	138084.97	143037.90	152020.26	94862.33
Maharashtra	151998.66	145404.00	131805.01	153065.31	158993.39	98334.71
Dadra and Nagar Haveli	5.76	6.19	11.96	49.16	30.62	16.15
Daman & Diu	18.94	21.83	40.04	47.67		
Goa	0.00	0.82	1.46	16.82	19.96	40.77
Andhra Pradesh	77694.33	76936.32	66882.90	74197.52	81701.42	54718.62
Telangana	56802.95	51923.14	46475.88	59279.66	63044.77	39944.96
Karnataka	28982.63	31114.50	34587.96	37951.72	37564.56	21690.70
Kerala	770.32	804.74	1092.12	1614.62	1961.28	1406.02
Tamil Nadu	17128.37	20019.68	21891.20	24312.41	27859.52	21597.02
Lakshadweep	83779.62	83498.68	70077.93	82020.39	89061.67	53845.69
Puducherry	49965.61	51858.96	48412.53	57188.93	56760.51	32898.77
Andaman Nicobar	151.16	113.49	157.99	152.01	252.45	215.43
Bihar	32658.66	35719.44	34092.75	44180.23	55489.06	34643.91
Jharkhand	27003.35	26247.21	27469.53	28915.39	30797.95	20728.50
Orissa	47477.80	49037.17	62944.21	66473.02	71529.15	41951.26
Sikkim	9050.18	11087.98	10935.46	11506.25	11709.14	8318.54
West Bengal	78438.25	75786.81	77478.05	88251.70	92995.30	55283.17
Arunachal Pradesh	1400.77	1788.70	3453.44	4163.41	4845.79	3329.00
Assam	7245.71	8089.14	6020.52	8398.89	9153.69	5760.77
Manipur	604.49	370.79	629.33	462.20	486.77	189.34
Meghalaya	980.04	1081.02	1208.78	886.50	1052.41	669.25
Mizoram	208.52	227.02	192.37	165.53	266.40	123.35
Nagaland	318.93	256.72	273.63	164.02	289.32	205.18
Tripura	6712.93	6121.04	7058.83	6339.87	7086.06	3897.81
Bhutan (IMP)	4406.62	5794.48	8765.50	7493.20	6742.40	4644.00
All India Grand Total	1376095.79	1389120.93	1381855.15	1491859.37	1624465.61	1047439.04

**GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.896
ANSWERED ON 07.12.2023**

POWER GENERATION CAPABILITIES IN NORTH-EASTERN REGION

**896. SHRI TIRATH SINGH RAWAT:
SHRI SUNIL BABURAO MENDHE:
SHRI BIDYUT BARAN MAHATO:
SHRI RAJESH VERMA:**

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

- (a) whether the Government has taken any initiative to increase or expand power generation capacities/capabilities in the North-Eastern Region of the country;**
- (b) if so, the details thereof and if not, the reasons therefor;**
- (c) the details of the projects implemented to increase power supply capacity in the North-Eastern Region, including the specific States that are likely to be benefited from the said initiative; and**
- (d) the names of the projects, locations, capacity additions and their estimated completion dates?**

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b): Government has taken number of policy measures to increase or expand power generation capacities/capabilities in the country including North-East Region, details of which are enlisted below:

✓ **During March, 2019, the Government approved 'measures to promote hydro power which are detailed below:**

- **Declaring Large Hydro Power (LHPs) (> 25 MW projects) as Renewable Energy source.**
- **Hydro Purchase Obligation (HPO)**
- **Tariff rationalization measures for bringing down hydro power tariff.**

- **Budgetary Support for Flood Moderation/Storage Hydro Electric Projects (HEPs).**
 - **Budgetary Support towards Cost of Enabling Infrastructure, i.e. roads/bridges. The guidelines for Budgetary Support towards Flood Moderation component as well as towards Cost of Enabling Infrastructure have also been notified by Govt. on 28.09.2021.**
- ✓ **Waiver of Inter State Transmission System (ISTS) Charges on the transmission of power from new Hydro Power Projects would be applicable, for which construction work is awarded and Power Purchase Agreement (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, has been extended for HEPs for which construction work is awarded and PPA is signed up to 30.06.2028.**

(c) : Since year 2014-15, nine (9) number of Hydroelectric Projects with aggregate installed capacity of 2,412 MW have been commissioned in the North Eastern Region including Sikkim. The details are as under:

SI. No.	NAME OF PROJECT	STATE	CAPACITY (MW)	YEAR OF COMMISSIONING
1	JORETHANG LOOP	SIKKIM	96	2015
2	TEESTA-III	SIKKIM	1200	2017
3	TURIAL	MIZORAM	60	2017
4	NEW UMTRU	MEGHALAYA	40	2017
5	DIKCHU	SIKKIM	96	2017
6	TASHIDING	SIKKIM	97	2017
7	PARE	ARUNACHAL PRADESH	110	2018
8	KAMENG	ARUNACHAL PRADESH	600	2021
9	RONGNICHU	SIKKIM	113	2021

(d) : Currently, eight (8) no. of hydroelectric projects with aggregate installed capacity of 6,037 MW are under construction in the North Eastern Region of the country. The details are enclosed at Annexure.

Further, 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 Authority for its concurrence, a scheme estimated to involve a capital expenditure exceeding such sum, as may be fixed by the Central Government, from time to time, by notification (presently, ₹1,000 crores).

Accordingly, Central Electricity Authority (CEA) accorded concurrence to 17 number Hydro Electric Schemes (14,589 MW) in North Eastern Region including Sikkim. The details are given below:

Sl. No.	Name of Scheme	State	Installed Capacity (MW)	Estimated Year of Completion
1.	TEESTA ST-IV	Sikkim	520	2031-32
2.	TAWANG ST-I	Arunachal Pradesh	600	Beyond 2031-32
3.	WAH-UMIAM STAGE-III	Meghalaya	85	2029-30
4.	TAWANG ST-II	Arunachal Pradesh	800	Beyond 2031-32
5.	HEO	Arunachal Pradesh	240	2028-29
6.	TATO-I	Arunachal Pradesh	186	2028-29
7.	TATO-II	Arunachal Pradesh	700	Beyond 2031-32
8.	DEMWE LOWER	Arunachal Pradesh	1750	2031-32
9.	KALAI-II	Arunachal Pradesh	1200	Beyond 2031-32
10.	TALONG LONDA	Arunachal Pradesh	225	2031-32
11.	ETALIN	Arunachal Pradesh	3,097	2030-31
12.	NAFRA	Arunachal Pradesh	120	2027-28
13.	HIRONG	Arunachal Pradesh	500	Beyond 2031-32
14.	NAYING	Arunachal Pradesh	1,000	Beyond 2031-32
15.	ATTUNLI	Arunachal Pradesh	680	2030-31
16.	LOWER SIANG	Arunachal Pradesh	2,700	Beyond 2031-32
17.	DIKHU	Nagaland	186	2030-31

ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (d) OF UNSTARRED QUESTION NO. 896 ANSWERED IN THE LOK SABHA ON 07.12.2023

List of Hydro Electric Projects (above 25 MW) under implementation

Sl. No.	Name of Project	Sector	Cap. Under Execution (MW)	Estimated Year of Completion
Arunachal Pradesh				
1	Subansiri Lower	Central	2,000	2023-26 (May'25)##
2	Dibang Multipurpose Project	Central	2,880	2031-32 (Feb'32)
Assam				
3	Lower Kopli	State	120	2024-25 (Mar'25)
Sikkim				
4	Teesta St. VI	Central	500	2026-27 (Aug'26)
5	Rangit-IV	Central	120	2024-25 (Aug'24)
6*	Bhasmey	Private	51	*
7*	Rangit-II	Private	66	*
8*	Panan	Private	300	*

##: 2 units (500 MW) likely during 2023-24 ,4 units (1,000 MW) during 2024-25 and remaining 2 units (500 MW) during 2025-26.

*** The project is presently stalled.**
