GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
STARRED QUESTION NO.462
ANSWERED ON 03.04.2025

STREET LIGHTING NATIONAL PROGRAMME

†*462. DR. RAJKUMAR SANGWAN:

Will the Minister of POWER
be pleased to state:

(a) the present status of the Street Lighting National Programme (SLNP) in the country;

(b) whether Baghpat has been included among the districts of Uttar Pradesh under the said programme;

(c) if so, the number of LED street lights installed or replaced in Baghpat district since the inception of the said programme;

(d) the details of the funds allocated and utilized under the said programme in Baghpat district;

(e) whether any delays or problems have been reported in the implementation of the said programme; and

(f) if so, the specific steps taken/being taken to overcome such delays and issues?

A N S W E R

THE MINISTER OF POWER

(SHRI MANOHAR LAL)

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

****

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (f) IN RESPECT OF LOK SABHA STARRED QUESTION NO.462 FOR REPLY ON 03.04.2025 REGARDING STREET LIGHTING NATIONAL PROGRAMME ASKED BY DR. RAJKUMAR SANGWAN.

****

(a) : Street Lighting National Programme (SLNP), launched in 2015, aims to reduce energy consumption and costs in public lighting through the widespread adoption of LED street lighting across India. Energy Efficiency Services Limited (EESL), a joint venture of CPSEs under the Ministry of Power is the implementing agency for SLNP.

More than 13.1 million LED streetlights have been installed across different urban and rural areas under SLNP. This has resulted in an annual electricity energy saving, approximately 8.8. billion kWh, and annual monetary savings of around ₹6,178 crore for municipalities and gram panchayats. The State-wise LED streetlights installed is at Annexure.

(b) & (c) : SLNP has been implemented in 69 State bodies/ Authorities including 51 Nos of Urban Local Bodies (ULBs) in Uttar Pradesh. The Scheme has not yet been implemented in Baghpat district.

(d) : Government of India has not allocated any budget for SLNP, as the programme is implemented by EESL in self-financing mode.

(e) & (f) : There have been generally no delays at EESL end in implementation of the SLNP scheme once the agreements and consents from the respective authority is finalised.

However, the outstanding receivables against SLNP amounting to approximately ₹2700.54 crores {excluding Delayed Payment Surcharge (DPS)}, as on 31/03/25 from various States and ULBs, is one of the major challenges being faced by the company owing to implementation of the programme. EESL and Ministry of Power are rigorously following up with the States/UTs concerned for expediting the release of EESL's outstanding payment towards SLNP.

SLNP has largely achieved its objective of catalysing the adoption of energy efficient street lights in the country and now urban and rural local bodies are taking it forward through alternative options including CAPEX model.

****

ANNEXURE

ANNEXURE REFERRED TO IN PART (a) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 462 ANSWERED IN THE LOK SABHA ON 03.04.2025 REGARDING STREET LIGHTING NATIONAL PROGRAMME

****

State-wise Penetration of LED Street Lights

Since FY 2014-15, EESL has installed Street Lights in the below mentioned States/UTs and the State-wise installation details as on 31.03 2025 are as under:

Sr. No.	State Name	Total LED Street Lights Installed by EESL (Nos.)
1	ANDHRA PRADESH	29,47,706
2	TELANGANA	17,31,072
3	TAMILNADU	7,876
4	PORTBLAIR	14,995
5	MAHARASHTRA	11,14,328
6	KERALA	4,33,979
7	KARNATAKA	13,226
8	GOA	2,07,183
9	LAKSHADWEEP	1,000
10	WEST BENGAL	94,198
11	JHARKHAND	5,54,091
12	BIHAR	5,75,922
13	RAJASTHAN	10,73,238
14	GUJARAT	9,03,519
15	UTTAR PRADESH	12,90,949
16	UTTARAKHAND	1,33,511
17	CHHATTISGARH	3,81,199
18	ODISHA	3,53,808
19	MADHYA PRADESH	2,95,417
20	DELHI	3,99,715
21	JAMMU & KASHMIR	1,88,860
22	HIMACHAL PRADESH	63,332
23	PUNJAB	1,27,267
24	CHANDIGARH	46,496
25	HARYANA	85,139
26	SIKKIM	1,073
27	TRIPURA	76,426
28	ASSAM	28,875
29	PONDICHERRY	1,520
TOTAL		1,31,45,920

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
STARRED QUESTION NO.472
ANSWERED ON 03.04.2025

HYDROELECTRIC PROJECTS

†*472. SHRI SANJAY UTTAMRAO DESHMUKH:
SHRI ARVIND GANPAT SAWANT:

Will the Minister of POWER be pleased to state:

(a) the details of the hydroelectric projects constructed in the country along with their installed capacity during the last five years and the current year, State/UT-wise;

(b) the details of the hydroelectric projects currently under construction, State/UT-wise including Maharashtra;

(c) the details of the operational hydroelectric projects and the electricity generated by each project during the last five years and the current year;

(d) whether these projects are operating below their installed capacity and if so, the reasons therefor;

(e) the steps being taken by the Government to improve the efficiency of hydroelectric projects;

(f) whether the Government is taking any steps for the revival of stalled hydroelectric projects and if so, the details thereof; and

(g) the other efforts made/being made by the Government to ensure timely completion of hydroelectric projects in the country?

A N S W E R

THE MINISTER OF POWER

(SHRI MANOHAR LAL)

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

****

STATEMENT

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (g) IN RESPECT OF LOK SABHA STARRED QUESTION NO. 472 FOR REPLY ON 03.04.2025 REGARDING HYDROELECTRIC PROJECTS ASKED BY SHRI SANJAY UTTAMRAO DESHMUKH AND SHRI ARVIND GANPAT SAWANT.

****

(a) : Total 12 Nos. of Hydro Electric Projects (HEPs) (capacity above 25 MW) with aggregate installed capacity of 1,883 MW have been commissioned in the country during the last 5 years and the current year, (2020-21 to 2024-25) (upto 2nd April 2025). Details are at Annexure-I.

(b) : Total 26 Nos. of HEPs (capacity above 25 MW) with aggregate installed capacity of 13,238 MW are under construction in the country. There is no under-construction hydroelectric project in the State of Maharashtra. Details are at Annexure-II.

(c) : There are total 209 Nos. of HEPs (capacity above 25 MW) with aggregate installed capacity of 42,983 MW in the country. Details of installed capacity and electricity generated by each project during the last five years (2020-21 to February 2025) are at Annexure-III.

(d) : At present, Teesta-III (Sikkim) (1200 MW), Teesta-V (Sikkim) (510 MW), Khandong (Assam) (50 MW) and Malana-II (Himachal Pradesh) (100 MW) are having less / no generation. The main reasons for these HEPs operating below their capacity are outages of generating unit(s) due to flash flood / cloudburst.

(e) : The steps taken by the developers to improve efficiency of hydro plants are routine maintenance, Renovation and Modernization to extend lifespan of plant and addressing operational issues. Further, use of IT and automation such as SCADA, digital excitation system, digital governor system and real time monitoring are adopted to enhance the hydro plant performance.

(f) : Total 8 Nos. of Hydro Power projects totalling 1156 MW are stalled in the country. The list of projects, along with the reasons for being held-up, is attached as Annexure-IV. Further, the following hydro power projects, which were earlier stalled, have been revived by the Government:

i. **Subansiri Lower (2000 MW) of NHPC in Arunachal Pradesh was stalled since 2011. Works restarted after NGT case was dismissed on 31.07.2019.**

ii. **Teesta VI (500 MW) in Sikkim was allotted to LANCO but was stalled since 2012. It has been revived through NHPC's bid in NCLT in 2019.**

iii. **Rangit IV (120 MW) in Sikkim was originally allotted to Jal Power Corporation Ltd (Private Sector) and was stalled since October, 2013. The project has been revived through NHPC's bid in NCLT and NHPC has taken over Jal Power Corporation Ltd. on 31.03.2021.**

.....2.

iv. **Ratle HEP (850 MW) in J&K, was originally allotted to GVK and was stalled since 2014. It was revived after an MoU was signed amongst NHPC, JKSPDC and PDD, J&K.**

(g) : The Government has made the following efforts to ensure the timely completion of hydroelectric projects:

i. **Measures to reduce time and cost overrun has been issued by MoP vide OM dated 08.11.2019.**

ii. **Dispute Avoidance Mechanism for resolution of contractual disputes of contracts executed by hydro CPSUs at initial stage by engagement of Independent Engineer has been introduced by MoP vide OM dated 27.09.2021.**

iii. **Dispute Resolution Mechanism for resolution of disputes of contracts executed by CPSUs / other organizations under MoP through Conciliation Committees has been introduced by MoP vide OM dated 29.12.2021.**

iv. **Guidelines for early settlement of disputes and to minimize the arbitral claims/ disputes have been issued by MoP on 16.03.2022.**

v. **To prevent contractual disputes with respect to price variation calculation in case of change of Wholesale Price Index (WPI) series, Guidelines for 'Price Variation Calculation in case of Change/ Discontinuation of Wholesale Price Index Series during execution of the contract' were issued by MoP on 04.05.2022.**

vi. **IT based monitoring system has been introduced for close monitoring of the hydro projects.**

****

ANNEXURE-I

ANNEXURE REFERRED TO IN PART (a) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 472 ANSWERED IN THE LOK SABHA ON 03.04.2025 REGARDING HYDROELECTRIC PROJECTS

****

Hydro capacity addition during the last five year and the current year

Sl. No	Name of HEP	Executing Agency	Project Capacity (MW)	Sector	State	Unit No.	Capacity commissioned (MW)	Date of Commissioning
	2020-21							
1	Kameng	NEEPCO	600	Centre	Arunachal Pradesh	3	150	21.01.2021
						4	150	11.02.2021
2	Sawra Kuddu	HPPCL	111	State	Himachal Pradesh	1	37	12.11.2020
						2	37	05.12.2020
						3	37	16.12.2020
3	Singoli Bhatwari	L&T	99	Private	Uttarakhand	1	33	19.11.2020
						2	33	18.12.2020
						3	33	25.12.2020
	Sub-Total: (2020-21)						510	
	2021-22							
1	Rongnichu	MBPCL	2x56.5	Private	Sikkim	1	56.5	25.06.2021
						2	56.5	30.06.2021
2	Sorang	HSPCL	2x50	Private	Himachal Pradesh	1	50	23.09.2021
						2	50	21.09.2021
3	Bajoli Holi	GMR	3x60	Private	Himachal Pradesh	1	60	25.03.2022
						2	60	27.03.2022
						3	60	28.03.2022
	Sub-Total: (2021-22)						393	
	2022-23							
1	Vyasi	UJVNL	2x60	State	Uttarakhand	1	60	24.05.2022
						2	60	22.04.2022
	Sub-Total: (2022-23)						120	
	2023-24							
1	Naitwar Mori	SJVNL	2x30	Centre	Uttarakhand	1	30	24.11.2023
						2	30	04.12.2023
	Sub-Total: (2023-24)						60	
	2024-25							
1	Thottiyar	KSEB	1x10+1x30	State	Kerala	1	10	18.10.2024
						2	30	18.10.2024
2	Pallivasal	KSEB	2x30	State	Kerala	1	30	24.12.2024
						2	30	24.12.2024
3.	Uhl-III	BVPCL	3x33.33	State	Himachal Pradesh	1	33.33	28.02.2025
						2	33.33	05.03.2025
						3	33.33	03.03.2025
4.	Parbati St. II	NHPC	4x200	Centre	Himachal Pradesh	1	200	28.03.2025
						2	200	24.03.2025
						3	200	26.03.2025
	Sub-Total (2024 -25)						800	
	2025-26						0	
	Sub-Total (2025 -26)						0	
	Grand Total (2020-21 to 2025-26)						1883	

****

ANNEXURE-II

ANNEXURE REFERRED TO IN PART (b) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 472 ANSWERED IN THE LOK SABHA ON 03.04.2025 REGARDING HYDROELECTRIC PROJECTS

****

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

Sl. No.	Name of the Project (Executing Agency)	State / UT	District	Installed Capacity (No. X MW)	Capacity Under Execution (MW)
	Central Sector				
	NHPC				
1	Subansiri Lower (NHPC)	Arunachal Pradesh / Assam	Lower Subansiri, Ar. Pradesh / Dhemaji, Assam	8x250	2000
2	Parbati St. II (NHPC)	Himachal Pradesh	Kullu	1x200	200
3	Dibang Multipurpose Project (NHPC)	Arunachal Pradesh	Lower Dibang Valley	12x240	2880
4	Teesta St. VI NHPC	Sikkim	South Sikkim	4x125	500
5	Rangit-IV (NHPC)	Sikkim	West Sikkim	3x40	120
6	Ratle (RHEPPL / NHPC)	UT of Jammu & Kashmir	Kishtwar	4x205 + 1x30	850
	CVPPL				
7	Pakal Dul (CVPPL)	UT of Jammu & Kashmir	Kishtwar	4x250	1000
8	Kiru (CVPPL)	UT of Jammu & Kashmir	Kishtwar	4x156	624
9	Kwar (CVPPPL)	UT of Jammu & Kashmir	Kishtwar	4x135	540
	SJVN				
10	Luhri-I (SJVN)	Himachal Pradesh	Kullu/Shimla	2x80+2x25	210
11	Dhaulasidh (SJVN)	Himachal Pradesh	Hamirpur/ Kangra	2x33	66
12	Sunni Dam (SJVN)	Himachal Pradesh	Shimla/Mandi	4x73+1x73+1 x17	382
	THDC				
13	Vishnugad Pipalkoti (THDC)	Uttarakhand	Chamoli	4x111	444
	NTPC				
14	Tapovan Vishnugad (NTPC)	Uttarakhand	Chamoli	4x130	520
15	Rammam-III (NTPC)	West Bengal	Darjeeling	3x40	120
Sub-Total: Central Sector					10456
	State Sector				
	APGENCO				
16	Polavaram (APGENCO/ Irrigation Dept., A.P.)	Andhra Pradesh	East & West Godavari	12x80	960
17	Lower Sileru Extension (APGENCO)	Andhra Pradesh	Alluri Sitharamaraju	2x115	230
	HPPCL				
18	Shongtong Karcham (HPPCL)	Himachal Pradesh	Kinnaur	3x150	450

19	Chanju-III (HPPCL)	Himachal Pradesh	Chamba	3x16	48
	KSEB				
20	Mankulam (KSEB)	Kerala	Idukki	2x20	40
	APGCL				
21	Lower Kopli (APGCL)	Assam	Dima Hasao & Karbi Anglong	2x55+2x2.5+1x5	120
	JKSPDC				
22	Parnai (JKSPDC)	UT of Jammu & Kashmir	Poonch	3x12.5	38
	PSPCL				
23	Shahpurkandi (PSPCL/ Irrigation Deptt., Pb.)	Punjab	Pathankot	3x33+3x33+1x8	206
	UJVNL				
24	Lakhwar Multipurpose Project (UJVNL)	Uttarakhand	Dehradun & Tehri Garhwal	3x100	300
Sub-Total: State Sector					2392
	Private Sector				
	Statkraft				
25	Tidong-I (Statkraft IPL)	Himachal Pradesh	Kinnaur	3x50	150
	JSW				
26	Kutehr (JSW Energy Ltd)	Himachal Pradesh	Chamba	3x80	240
Sub-Total: Private Sector					390
Total					13238

****

ANNEXURE-III

ANNEXURE REFERRED TO IN PART (c) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 472 ANSWERED IN THE LOK SABHA ON 03.04.2025 REGARDING HYDROELECTRIC PROJECTS

****

Installed Capacity and Generation from Hydro Power Projects
(capacity above 25 MW)

State	Name of Station	Installed Capacity	2020-21	2021-22	2022-23	2023-24	2024-25 (Upto Feb, 2025)
		(in MW)	Figures in Million Units(in MUs)				
Andhra Pradesh	LOWER SILERU HPS	460	1292.6	896.2	1078.6	1004.7	1111.8
	NAGARJUN SGR TPD	50	54.7	137.6	98.0	0.7	92.4
	NAGARJUN SGR RBC HPS	90	155.6	279.1	297.8	0.1	211.8
	SRISAILAM HPS	770	1157.3	1438.9	1883.3	6.1	1166.5
	UPPER SILERU HPS	240	620.1	362.0	389.9	361.7	485.0
Arunachal Pradesh	KAMENG HPS	600	1529.8	2576.4	2912.8	2652.1	2627.1
	PARE HPS	110	522.3	430.6	531.9	448.7	368.3
	RANGANADI HPS	405	1399.3	1154.3	1376.3	1177.4	1025.7
Assam	KARBI LANGPI HPS	100	203.0	401.1	481.6	328.9	401.5
	KHONDONG HPS	50	67.8	275.1	0.0	0.0	0.0
	KOPILI HPS	200	0.0	0.0	0.0	285.8	543.1
Chhattisgarh	HASDEOBANGO HPS	120	419.2	404.1	237.4	321.8	372.3
Gujarat	S SAROVAR CHPH HPS	250	1087.0	824.3	1241.1	1189.5	1132.3
	UKAI HPS	300	651.1	655.2	977.2	580.3	713.4
Himachal Pradesh	ALLAIN DUHANGAN HPS	192	640.5	637.4	640.1	587.7	642.5
	BAIRA SIUL HPS	180	457.6	587.2	627.9	542.1	506.1
	BAJOLI HOLI HPS	180	-	-	421.5	708.2	710.7
	BASPA HPS	300	1311.2	1320.4	1351.9	1162.8	1338.0
	BASSI HPS	66	309.0	317.4	307.1	295.7	302.1
	BHAKRA LEFT HPS	630	2389.4	2189.1	2290.3	2678.5	2241.0
	BHAKRA RIGHT HPS	785	3046.6	2168.5	2734.4	3070.8	2516.4
	BUDHIL HPS	70	276.0	251.4	274.2	256.3	275.9
	CHAMERA-I HPS	540	2264.9	1899.3	1889.1	2169.7	1974.9
	CHAMERA-II HPS	300	684.6	1358.7	1326.8	1208.7	1290.4
	CHAMERA-III HPS	231	995.9	1004.3	1001.9	845.1	978.8
	CHANJU-I HPS	36	159.4	146.5	140.0	155.0	150.0
	DEHAR HPS	990	2993.3	3109.7	3034.9	2815.0	2801.0
	GIRI BATA HPS	60	164.8	227.6	231.8	232.8	144.0
	KARCHAM WANGTOO HPS	1045	4361.4	4243.5	4284.9	3786.4	4425.7
	KASHANG INTEGRATED HEP	195	13.0	209.4	157.0	176.6	227.2
	KOLDAM	800	3221.4	3120.1	3132.8	2952.1	3254.3
	LARJI HPS	126	616.3	580.9	611.2	213.5	273.3
	MALANA HPS	86	334.9	315.0	320.9	249.1	234.0
	MALANA-II HPS	100	370.5	345.7	343.5	140.7	184.0
	NATHPA JHAKRI HPS	1500	7099.0	7067.4	7133.0	6310.1	7202.6
	PARBATI-III HPS	520	616.9	613.3	651.9	293.4	553.8
	PONG HPS	396	1775.6	1103.7	1564.4	1807.1	1460.7
	RAMPUR HPS	412	1995.4	1981.2	1997.5	1778.1	2011.7
	SAINJ HPS	100	424.8	418.8	423.1	362.2	406.7
	SANJAY HPS	120	474.3	642.8	629.3	537.0	574.7
	SAWRA KUDDU HPS	111	-	21.3	324.0	307.5	256.1
	SHANAN HPS	110	477.1	521.9	503.1	492.3	480.2
	SORANG HPS	100	-	57.2	318.3	231.6	381.0

Jammu and Kashmir	BAGLIHAR HPS	450	2657.9	2676.9	2712.1	2574.3	2575.3
	BAGLIHAR II HPS	450	1447.0	1561.0	1467.1	1554.5	1527.3
	DULHASTI HPS	390	2329.6	2216.1	2082.9	2087.3	2141.4
	KISHANGANGA HPS	330	1111.5	1506.4	1454.1	1270.4	1233.4
	LOWER JHELUM HPS	105	561.2	623.0	612.5	511.2	438.0
	SALAL HPS	690	3632.2	3485.5	3240.1	3366.7	3081.3
	SEWA-II HPS	120	376.1	62.9	508.1	551.9	310.6
	UPPER SINDH-II HPS	105	274.8	255.2	265.4	141.8	99.9
	URI-I HPS	480	2986.4	3037.5	2861.5	2426.9	1696.0
	URI-II HPS	240	1626.1	1649.5	1573.8	1389.3	1128.5
Jharkhand	PANCHET HPS	80	173.1	245.5	136.5	100.0	110.4
	SUBERNREKHA-I HPS	65	0.0	152.4	92.6	49.4	97.8
	SUBERNREKHA-II HPS	65	50.0	150.1	76.4	47.4	53.5
Karnataka	ALMATTI DPH HPS	290	643.7	499.6	626.6	242.1	612.8
	BHADRA HPS	26	56.7	72.3	104.7	26.7	55.4
	GERUSUPPA HPS	240	480.6	543.3	566.1	347.9	515.6
	GHAT PRABHA HPS	32	110.1	95.0	87.2	42.7	94.5
	HAMPI HPS	36	72.3	103.0	104.8	65.3	86.2
	JOG HPS	139.2	373.8	554.3	551.0	342.7	389.4
	KADRA HPS	150	410.3	402.1	355.7	278.8	458.6
	KALINADI HPS	900	3147.2	3687.0	2843.5	2536.3	3440.2
	KALINADI SUPA HPS	100	443.5	609.8	377.0	425.7	548.7
	KODASALI HPS	120	383.0	425.6	345.3	283.1	454.7
	LIGANAMAKKI HPS	55	255.5	277.9	254.2	150.1	161.1
	MUNIRABAD HPS	28	102.1	132.1	114.9	31.7	118.2
	SHARAVATHI HPS	1035	4582.7	4994.3	5220.8	3358.3	4455.5
	SIVASAMUNDRUM HPS	42	321.1	301.0	285.9	160.5	132.4
	T B DAM HPS	36	111.5	102.0	88.5	33.5	94.4
	VARAHI HPS	460	1093.1	1137.3	1231.1	647.9	1021.2
Kerala	IDAMALAYAR HPS	75	290.0	377.0	409.4	198.2	303.4
	IDUKKI HPS	780	2530.2	3709.9	3261.8	1644.5	2168.5
	KAKKAD HPS	50	184.9	272.6	243.3	188.9	197.4
	KUTTIYADI ADDL EXTN	100	358.3	400.4	416.3	271.9	400.6
	KUTTIYADI EXTN HPS	50	176.9	151.8	172.6	152.3	176.6
	KUTTIYADI HPS	75	212.9	194.5	198.2	98.3	149.4
	LOWER PERIYAR HPS	180	538.0	811.9	688.7	489.1	572.2
	NARIAMANGLAM HPS	52.65	284.7	312.4	237.8	182.6	228.6
	PALLIVASAL HPS	37.5	134.3	162.3	147.6	157.3	136.9
	PANNIAR HPS	30	181.3	210.7	199.0	164.8	165.3
	PORINGALKUTTU HPS	32	153.5	220.4	157.3	96.2	145.7
	SABARIGIRI HPS	300	1227.6	2047.5	1532.3	1129.5	1256.6
	SENGULAM HPS	48	117.5	183.6	126.6	132.2	117.0
	SHOLAYAR HPS	54	238.4	262.5	198.3	249.8	225.0
	THOTTIYAR HPS	40	-	-	-	-	14.8
Ladakh	CHUTAK HPS	44	158.6	170.5	166.8	158.6	166.4
	NIMMO BAZGO HPS	45	217.6	235.4	236.0	229.9	231.7
Madhya Pradesh	BANSAGAR TONS-I HPS	315	1184.2	1121.5	638.5	798.8	885.0
	BANSAGAR-II HPS	60	111.7	85.4	75.4	105.6	98.5
	BANSAGAR-III HPS	30	135.6	49.9	137.6	165.4	112.0
	BARGI HPS	90	434.1	382.4	429.8	455.1	469.7
	GANDHI SAGAR HPS	115	148.4	211.7	288.9	295.5	228.6
	INDIRA SAGAR HPS	1000	2793.6	1717.2	3661.1	2999.7	3469.8
	MADHIKHERA HPS	60	118.2	116.5	169.8	49.5	101.9
	OMKARESHWAR HPS	520	1442.6	928.2	1782.4	1470.8	1755.5
	RAJGHAT HPS	45	109.0	74.0	125.6	104.6	99.7
Maharashtra	BHANDARDHARA HPS ST-II	34	34.3	33.9	19.3	23.5	26.2
	BHIRA HPS	150	358.9	397.2	401.6	432.3	424.4
	BHIRA TAIL RACE HPS	80	97.3	101.0	81.4	75.3	64.3
	BHIVPURI HPS	75	299.7	272.3	329.7	316.1	319.8
	KHOPOLI HPS	72	280.2	293.1	299.5	283.1	273.8
	KOYNA DPH HPS	36	165.4	132.5	166.5	175.3	150.0

	KOYNA-I&II HPS	600	1226.2	1259.4	1224.1	985.7	861.2
	KOYNA-III HPS	320	585.2	673.9	839.8	528.6	477.2
	KOYNA-IV HPS	1000	1195.8	1573.4	1241.3	1264.1	1134.2
	PENCH HPS	160	414.9	304.5	365.2	367.2	419.9
	TILLARI HPS	60	106.5	116.7	126.7	47.2	99.4
	VAITARNA HPS	60	42.8	128.6	171.2	139.5	82.2
Manipur	LOKTAK HPS	105	621.6	455.5	478.0	298.2	687.4
Meghalaya	KYRDEMKULAI HPS	60	163.7	110.2	130.6	111.3	88.1
	MYNTDU(LESHKA) St-1 HPS	126	420.6	380.4	359.7	304.1	359.9
	NEW UMTRU HPS	40	229.8	160.8	196.2	163.6	179.9
	UMIAM HPS ST-I	36	149.5	64.9	117.7	85.5	106.9
	UMIAM HPS ST-IV	60	188.3	125.5	176.0	144.2	139.9
Mizoram	TUIRIAL HPS	60	158.9	137.4	204.1	118.6	235.9
Nagaland	DOYANG HPS	75	203.9	100.6	177.4	165.5	212.5
Odisha	BALIMELA HPS	510	1656.1	1062.0	1004.9	1035.3	1585.3
	CHIPLIMA HPS	72	324.8	268.1	326.1	310.4	206.0
	HIRAKUD HPS	287.8	628.2	707.7	904.8	866.7	755.7
	MACHKUND HPS	114.75	666.1	718.5	543.7	863.0	421.9
	RENGALI HPS	250	1014.8	866.4	758.6	779.5	873.9
	UPPER INDRAVATI HPS	600	1757.3	1156.7	1380.4	1726.1	1281.3
	UPPER KOLAB HPS	320	812.8	451.2	544.4	581.3	733.5
Punjab	ANANDPUR SAHIB-I HPS	67	276.1	197.1	238.7	237.2	236.3
	ANANDPUR SAHIB-II HPS	67	297.8	199.2	245.7	237.3	220.6
	GANGUWAL HPS	77.65	635.6	609.9	599.0	610.8	540.7
	KOTLA HPS	77.65	637.5	613.9	601.6	601.1	535.7
	MUKERIAN-I HPS	45	1096.6	572.6	670.8	261.3	242.6
	MUKERIAN-II HPS	45	86.4	99.7	150.8	268.1	258.6
	MUKERIAN-III HPS	58.5	108.7	127.9	192.1	328.5	336.8
	MUKERIAN-IV HPS	58.5	109.5	126.4	193.3	289.2	299.7
	RANJIT SAGAR HPS	600	1498.9	1163.0	1507.7	1843.0	1211.1
Rajasthan	JAWAHAR SAGAR HPS	99	257.2	210.7	315.8	310.5	257.9
	MAHI BAJAJ-I HPS	50	155.6	135.1	168.0	143.1	139.5
	MAHI BAJAJ-II HPS	90	46.8	52.7	74.2	69.6	51.0
	R P SAGAR HPS	172	10.1	83.3	409.5	490.8	350.8
Sikkim	CHUZACHEN HPS	110	488.4	514.2	503.9	473.1	392.3
	DIKCHU HPS	96	459.0	481.5	535.9	394.1	24.7
	JORETHANG LOOP	96	399.9	424.7	433.5	356.9	403.5
	RANGIT HPS	60	288.7	337.7	332.4	297.0	306.1
	RONGNICHU HPS	113	-	295.4	434.8	396.8	392.6
	TASHIDING HPS	97	369.8	453.1	445.9	433.2	445.6
	TEESTA V HPS	510	2829.8	2671.8	2857.8	1966.0	0.0
	TEESTA-III HPS	1200	6044.0	6315.5	6152.6	4292.8	0.0
Tamil Nadu	ALIYAR HPS	60	119.2	22.6	168.6	98.4	142.1
	BHAWANI BARRAGE-II HPS	30	81.2	78.7	103.2	54.7	35.3
	BHAWANI BARRAGE-III HPS	30	61.0	63.5	65.1	33.5	52.1
	BHAWANI KATTAL	30	101.7	76.1	128.2	78.1	89.5
	KODAYAR-I HPS	60	202.6	207.4	221.7	129.4	54.0
	KODAYAR-II HPS	40	90.7	39.0	70.8	6.9	62.7
	KUNDAH-I HPS	60	302.1	262.1	271.1	222.1	115.6
	KUNDAH-II HPS	175	769.0	718.6	742.9	584.5	594.1
	KUNDAH-III HPS	180	460.5	449.2	464.0	366.8	375.8
	KUNDAH-IV HPS	100	137.4	183.0	158.6	88.4	152.4
	KUNDAH-V HPS	40	52.5	40.0	54.3	67.4	27.8
	LOWER METTUR-I HPS	30	75.3	78.7	99.7	52.1	64.3
	LOWER METTUR-II HPS	30	75.5	77.2	94.8	50.0	62.8
	LOWER METTUR-III HPS	30	75.9	73.7	88.7	49.9	60.7
	LOWER METTUR-IV HPS	30	63.8	61.5	67.6	40.7	49.3
	METTUR DAM HPS	50	133.8	135.3	226.9	83.4	118.1
	METTUR TUNNEL HPS	200	337.2	392.5	797.1	144.7	354.2

	MOYAR HPS	36	112.2	104.5	129.0	92.2	40.0
	PAPANASAM HPS	32	131.8	163.4	129.4	105.5	121.6
	PARSON`S VALLEY HPS	30	50.9	41.1	44.7	24.1	39.5
	PERIYAR HPS	161	548.0	779.2	661.9	440.1	541.6
	PYKARA HPS	59.2	0.0	0.1	35.3	3.1	20.6
	PYKARA ULTMATE HPS	150	337.9	322.4	463.5	308.3	328.6
	SARKARPATHY HPS	30	137.3	143.4	117.1	77.6	89.9
	SHOLAYAR HPS (TN)	70	290.4	400.2	298.2	202.9	273.5
	SURULIYAR HPS	35	111.1	33.2	0.0	26.5	115.8
Telangana	LOWER JURALA HPS	240	403.3	369.9	432.3	111.6	333.4
	NAGARJUN SGR HPS*	110	1248.7	2262.5	2354.9	540.7	1870.4
	NAGARJUN SGR LBC HPS	60	101.2	148.3	140.0	0.0	122.6
	POCHAMPAD HPS	36	91.0	110.8	138.9	76.0	58.9
	PRIYADARSHNI JURALA HPS	234	368.3	344.0	452.9	101.2	344.5
	PULICHINTALA HPS	120	201.4	315.2	330.5	102.0	265.2
Uttar Pradesh	KHARA HPS	72	325.5	357.6	328.6	273.6	255.4
	MATATILA HPS	30.6	116.8	87.0	126.4	99.3	107.6
	OBRA HPS	99	338.9	311.6	160.1	145.4	228.2
	RIHAND HPS	300	791.2	646.5	359.0	332.3	591.6
Uttarakhand	CHIBRO (YAMUNA) HPS	240	821.6	903.9	835.0	757.0	721.4
	CHILLA HPS	144	733.1	799.4	809.6	706.5	643.1
	DHAKRANI HPS	33.75	152.7	155.6	135.4	115.4	100.0
	DHALIPUR HPS	51	174.1	246.8	199.8	152.8	209.4
	DHAULI GANGA HPS	280	1153.2	1212.4	1292.8	974.1	1093.0
	KHATIMA HPS	41.4	218.8	229.8	228.7	204.7	171.0
	KHODRI HPS	120	375.5	430.8	402.8	366.2	347.6
	KOTESHWAR HPS	400	1221.5	1190.6	1255.2	1193.1	1143.3
	KULHAL HPS	30	133.4	160.1	151.7	127.6	132.5
	MANERI BHALI-I HPS	90	329.2	399.0	405.2	464.1	476.6
	MANERI BHALI-II HPS	304	1288.9	1412.5	1290.2	1200.8	1245.9
	NAITWAR MORI HPS	60	-	-	-	-	214.8
	RAMGANGA HPS	198	260.8	249.4	386.9	317.8	335.2
	SHRINAGAR HPS	330	1438.0	1421.9	1514.1	1306.4	1405.8
	SINGOLI BHATWARI HPS	99	-	80.4	466.0	393.7	423.6
	TANAKPUR HPS	94.2	473.2	540.2	535.0	453.4	432.6
	TEHRI ST-1 HPS	1000	3040.3	3098.1	3284.8	3248.6	3142.3
	VISHNU PRAYAG HPS	400	1778.4	1801.2	1910.8	1627.5	1784.9
	VYASI HPS	120	-	-	331.9	309.4	294.6
West Bengal	JALDHAKA HPS ST-I	36	201.5	178.1	165.9	153.2	169.6
	MAITHON HPS	63.2	192.4	221.4	100.1	76.3	152.9
	RAMMAM HPS	50	254.7	268.3	245.6	162.9	200.3
	TEESTA LOW DAM-III HPS	132	541.3	601.5	599.4	418.9	141.1
	TEESTA LOW DAM-IV HPS	160	719.0	736.8	734.6	638.2	585.9
Grand Total		42,223*	1,44,174	1,46,239	1,53,554	1,28,830	1,31,631

(*):- NAGARJUN SAGAR HPS comprises a combination of Conventional and Pumped Storage Scheme. However, the generation figures are for the consolidated capacity.

Note (*): The total installed capacity is about 42,983 MW including recent commissioned Pallivasal extension HEP (60 MW), Uhl-III HEP (100 MW) and Parbati-II HEP (600 MW).

****

ANNEXURE-IV

ANNEXURE REFERRED TO IN PART (f) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 472 ANSWERED IN THE LOK SABHA ON 03.04.2025 REGARDING HYDROELECTRIC PROJECTS

****

List of Hydro Electric Projects (above 25 MW) held-up

Sl. No.	Name of Scheme Executing Agency)	Sector	State/ District	Installed Capacity	Capacity Under Execution (MW)	Physical progress (in %)	Present Status
A	**Projects held up due to sub-judice matters**						
1	Lata Tapovan (NTPC)	Central	Uttarakhand /Chamoli	3x57	171	3.8%	Matter is sub-judice. Infrastructure works almost completed. Hon'ble SC stayed construction of 24 HE projects in Uttarakhand including Lata Tapovan. Work stalled since May, 2014.
2	Maheshwar (SMHPCL)	Private	Madhya Pradesh /Khargone & Khandwa	10x40	400	85%	Matter is sub-judice. Works suspended since Nov-11 due to cash flow problem with developer. M.P. Power Management Company Ltd. has terminated the Power Purchase Agreement with SMHPCL on 18.04.2020. The application of PFC has been admitted in NCLT on 27.09.2022 under IBC. CIRP has been put on hold by NCLT vide order dated 17.03.2023 in an application filed by Entegra Ltd. PFC has filed an Appeal before the NCLAT against the NCLT Order dated 17.03.2023 for recommencement of CIRP.

3	Bhasmey (Gati Infrastructure) Pvt. Ltd.	Private	Sikkim/ East Sikkim	2x25.5	51	30%	Matter is sub-judice. The Court appointed Resolution Professional for Bhasmey HEP stated that works stalled since Sept., 2016. CIRP has been initiated against Gati infra and NCLT has appointed Resolution Professional. The Resolution Professional has received 4 Resolution Plan in the matter of Gati Infrastructure Bhasmey Power Private Limited and are pending for approval from the Committee of Creditors.
			Subtotal		622		
B	Projects held up due to funds constraints						
1	Tangnu Romai Power Generation Power Ltd.	Private	Himachal Pradesh/ Shimla	2x22	44	20%	Works on hold since Aug'2016. Corporate Insolvency Resolution Process (CIRP) has been initiated in respect of the Corporate Debtor (TRPGPL) under the Insolvency and Bankruptcy Code 2016 (IBC) vide an order of the Hon'ble National Company Law Tribunal, Chandigarh Bench dated 06th May, 2024.
2	Rangit-II (Sikkim Hydro) Power Ventures Ltd.	Private	Sikkim/ West Sikkim	2x33	66	20%	Works stalled since Dec., 2017. Funds constraints with the developer. There was delay in providing land by State Government to the Company for Construction, the Environment Clearance got Expired.
			Sub total		110		

C	Project held up due to accessibility to project site						
1	Panan (Himagiri) Hydro Energy Private Ltd.	Private	Sikkim/ North Sikkim	4x75	300	Nil	Initially, the project secured all necessary approvals and began construction in 2011, but an earthquake in 2011 delayed progress until 2012. Floods in 2016 washed away infrastructure, further hindering construction. Additionally, the formation of Mantam Lake posed further concerns. The project faced delays in obtaining NBWL clearance, which was finally achieved in 2019. The COVID -19 pandemic caused a lockdown from 2020 to 2021, delaying progress again. In October 2023, flash floods disrupted infrastructure, and the Teesta bridge collapse in February 2025 halted the project entirely. Despite overcoming several challenges, the project remains stalled due to ongoing infrastructure issues.
			Subtotal		300		
D	Projects held up due to other issue						
1	Lower Kalnai (JKSPDC)	State	U.T of Jammu& Kashmir / Kishtwar	2x24	48	10%	The Lower Kalnai Hydel Project (48 MW) in Jammu and Kashmir faced delays due to contractor insolvency. The Notification of Award was issued on September 12, 2013, with a completion deadline of September 2017. On account of poor progress & insolvency of the contractor, JKSPDC decided to encash bank guarantees to talling Rs.79.532 crore and terminate the contract. The EPC Contract with M/s. Coastal Projects Private Limited was terminated in August 2019. The revised project cost was tendered in March 2022, with M/s. MEIL emerging as the lowest bidder. However, the project's financial viability remains uncertain due to the need for exemptions, including SGST reimbursement and waivers on free power and water usage charges.

2	**Phata Byung (LANCO)**	**Private**	**Uttrakhand/ Rudrapraya**	**2x38**	**76**	**74.0%**	**Works stalled since July, 2017 due to Financial crunch. The project stands allotted to M/s. Statkraft IH through NCLT on 23.03.2023.**
			Subtotal		**124**		
				Total	**1156**		

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5300
ANSWERED ON 03.04.2025

TARGET OF DOUBLING ENERGY EFFICIENCY

5300. SMT. ANITA SUBHADARSHINI:

Will the Minister of POWER be pleased to state:

(a) whether the Government has any plan to achieve the target of doubling energy efficiency by 2030 and if so, the details thereof;

(b) the Government's plan to address the challenge of rising cooling demand by ensuring access to sustainable and energy-efficient cooling solutions;

(c) the initiatives taken by the Bureau of Energy Efficiency to promote energy efficiency across industries, transport, households and other sectors; and

(d) if so, the details thereof?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : The Government has prepared plans across key sectors namely Industry, Buildings (including appliances), Transport and Others/Miscellaneous. By implementing these plans, it is aimed to reduce the energy consumption by 89 Million tonnes of oil equivalent (Mtoe) in 2030 as compared to the scenario in which these interventions are not carried out.

(b) : Sustainable cooling acts as a tool to address the growing cooling demand. To balance the growing cooling demand while ensuring the sustainable and energy efficient cooling solutions, two new building codes: the Energy Conservation and Sustainable Building Code (ECSBC) for commercial buildings and the Eco Niwas Samhita (ENS) for residential buildings have been published by the Bureau of Energy Efficiency (BEE) for adoption by States. The Air-conditioners, Ceiling Fans and Refrigerators have been brought under mandatory compliance of Standard and Labelling programme to ensure that energy efficient devices are deployed for cooling purposes.

Additionally, with the overarching goal to address the rising cooling demand, Ministry of Environment, Forest and Climate Change (MoEFCC) launched India Cooling Action Plan (ICAP).

.....2.

(c) & (d) : Bureau of Energy Efficiency, under the aegis of Ministry of Power has taken several initiatives to promote the energy efficiency in industry, transport and domestic sectors which includes;

i. **Perform, Achieve and Trade scheme to improve energy efficiency in energy-intensive industries. It sets sector-specific energy reduction targets, allowing industries to earn Energy Saving Certificates for exceeding targets, which can be traded on power exchanges. This incentivizes cost-effective energy savings while providing flexibility in compliance.**

ii. **Under the Standards and Labelling programme, 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 encouraged for making informed choice regarding purchase of energy efficient appliances thereby saving electricity consumption.**

iii. **The Energy Conservation and Sustainable Building Code (ECSBC) for commercial buildings and the Eco Niwas Samhita (ENS) for residential buildings have been published for energy savings in building sector. These codes are to be adopted and implemented by the States / local bodies.**

iv. **Corporate Average Fuel Efficiency norms for passenger cars for energy savings in transport sector.**

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5309
ANSWERED ON 03.04.2025

PROMOTION AND ADOPTION OF EV CHARGING INFRASTRUCTURE

†5309. SMT. HIMADRI SINGH:
SHRI BHOJRAJ NAG:
SHRI CAPTAIN BRIJESH CHOWTA:
SHRI ALOK SHARMA:
SHRI P C MOHAN:
DR. BHOLA SINGH:
SHRI DAMODAR AGRAWAL:
DR. NISHIKANT DUBEY:
MS KANGNA RANAUT:
SHRI PRATAP CHANDRA SARANGI:
DR. VINOD KUMAR BIND:
SMT. SHOBHANABEN MAHENDRASINH BARAIYA:
SHRI DINESHBHAI MAKWANA:

Will the Minister of POWER be pleased to state:

(a) whether the Government is taking steps to promote the adoption of Electric Vehicle (EV) charging infrastructure in rural and semi-urban areas across the States particularly in Chhattisgarh, Karnataka, Bengaluru and Uttar Pradesh and make a common evident policy on EVs, if so, the details thereof along with the number of charging stations installed;

(b) whether the Government is providing incentives for private sector investment in EV charging stations, if so, the details thereof and if not, the reasons therefor;

(c) the manner in which the availability of charging infrastructure is being expanded in rural and semi-urban areas including Tier-II and Tier-III cities in the country, State-wise including Odisha and Uttar Pradesh;

(d) whether there is any policy intervention planned to regulate EV charging tariffs and ensure affordability and if so, the details thereof;

(e) whether the Government has identified any challenges in expanding EV infrastructure in Semi-urban areas and if so, the steps taken to address them;

(f) the progress made in Bhopal district under the said scheme along with the details thereof; and

(g) the steps being taken to promote awareness about the benefits of EVs among rural and semi-urban population?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) & (d) : Ministry of Power, in April 2018, has clarified that charging stations do not require any license under the Electricity Act 2003.Further, the Ministry has issued "Guidelines for Installation and Operation of Electric Vehicle Charging Infrastructure-2024" in September, 2024. These guidelines, applicable to urban and rural areas,

.....2.

outline standards to establish an interoperable EV charging network. The salient features of the guidelines, *inter-alia*, are as follows:

(i) Public land can be offered to Government/public entities on a revenue-sharing model at Rs. 1.0 / kWh for 10 years; and to private entities via bidding with the same floor price (i.e. Rs. 1.0 / kWh) to establish charging stations.

(ii) DISCOMs to ensure electricity connections with expedited timelines for charging stations up to 150 kW.

(iii) State Governments to grant necessary permissions to enable round the clock operations of charging stations.

To regulate EV charging tariffs and ensure charging at affordable rates, the guidelines provide for:

(i) Capped Electricity Tariff:– A single-part tariff capped at the Average Cost of Supply (ACoS) until 31st March, 2028.

(ii) A 30% discount on ACoS to be offered during solar hours and a 30% surcharge during non-solar hours.

(iii) Time-Based Charging Fees for public and community stations:–

- **AC Charging: ₹3.0 per unit during solar hours (9 AM – 4 PM), ₹4.0 per unit during non-solar hours.**
- **DC Charging: ₹11.0 per unit during solar hours, ₹13.0 per unit during non-solar hours.**

(iv) Pass-Through Costs:– Land costs and electricity tariffs will be treated as pass-through costs, ensuring minimal financial burden on charging service providers.

As per data available with Bureau of Energy Efficiency (BEE), details of State-wise public charging stations installed across the country as on 28.03.2025 are at ANNEXURE.

(b) : Ministry of Power is not providing any incentives for private sector investments in EV charging stations. Ministry of Heavy Industries launched the PM E-DRIVE Scheme in October 2024 to boost EV adoption, establish charging infrastructure, and develop a robust EV manufacturing ecosystem in India. The scheme offers grants for development of charging infrastructure and aims to install ample public charging infrastructure, including over 22,000 chargers for e-4Ws, 1,800 for e-buses, and provision for e-2Ws and e-3Ws, to boost EV user confidence.

(c) : To expand the public charging infrastructure in rural and semi-urban areas, including tier-II and tier-III cities, the aforementioned guidelines, *inter-alia*, provide for:

(i) Urban areas – One charging station per 1 sq. km.

(ii) Highways – One charging station every 20 km.

.....3.

(iii) Long-range EVs & Heavy-Duty Vehicles (buses/trucks) – One charging station every 100 km on each side of highway.

(iv) Priority to fuel retail outlets – Existing fuel stations operated by Oil Marketing Companies (OMCs) will be prioritised for setting up charging stations.

(v) Charging stations at key locations, including:

- Group Housing Societies including Residential Societies
- Shopping malls, office buildings, restaurants & hotels
- Educational institutes & hospitals

These guidelines help State and UT governments, including Odisha and Uttar Pradesh, to facilitate allotment of sites and provide electric connectivity infrastructure to support EV charging network expansion.

As per the data available with Bureau of Energy Efficiency (BEE), as on 28.03.2025, 550 and 2113 public charging stations have been installed in Odisha and Uttar Pradesh respectively.

(e) : Ministry of Power identified, *inter-alia*, the following key challenges in establishing EV charging infrastructure, including in semi-urban areas, which the aforementioned guidelines aim to address.

(i) Availability of sites for setting up of charging stations,

(ii) High connectivity charges,

(iii) Delays in release of electricity connections.

(iv) Permission to open charging stations at night in some places.

(f) : As per data available with Bureau of Energy Efficiency, 58 Public Charging stations have been installed in Bhopal district as on 25th March, 2025.

(g) : To create awareness about the benefits of EVs including among rural and semi-urban population, "GO ELECTRIC" campaign was launched by Bureau of Energy Efficiency on 19th February 2021.Under the campaign, States have conducted 205 webinars/ workshops, 119 roadshows/rallies and 179 other activities such as radio jingles, poster/leaflet distribution, social media awareness, and street plays.

****

ANNEXURE

ANNEXURE REFERRED IN REPLY TO PARTS (a) & (d) OF UNSTARRED QUESTION NO. 5309 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

State-wise installed public charging stations across the country as on 28.03.2025

State	No. of Public Charging Station
Andaman & Nicobar	4
Andhra Pradesh	614
Arunachal Pradesh	44
Assam	311
Bihar	393
Chandigarh	14
Chhattisgarh	290
Delhi	1951
Goa	155
Gujarat	1008
Haryana	808
Himachal Pradesh	114
Jammu & Kashmir	157
Jharkhand	277
Karnataka	5879
Kerala	1288
Ladakh	1
Lakshwadeep	1
Madhya Pradesh	942
Maharashtra	3842
Manipur	50
Meghalaya	43
Mizoram	13
Nagaland	36
Odisha	550
Puducherry	42
Punjab	607
Rajasthan	1285
Sikkim	11
Tamil Nadu	1495
Telangana	976
Tripura	54
UT OF D&NH AND D&D	6
Uttar Pradesh	2113
Uttarakhand	202
West Bengal	791
Grand Total	26,367

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5329
ANSWERED ON 03.04.2025

VIABILITY GAP FUNDING FOR BATTERY ENERGY STORAGE SYSTEMS

5329. SHRI AZAD KIRTI JHA:

Will the Minister of POWER
be pleased to state:

(a) the details of the Viability Gap Funding (VGF) Scheme for Battery Energy Storage Systems (BESS) including the approved financial outlay and expected capacity addition;

(b) the reasons for reduction in the funds allocation from 96 crore rupees in 2024-25 to 46 crore rupees in the Revised Estimates along with the reasons for zero expenditure so far;

(c) the measures taken by the Government to ensure timely implementation and achievement of the 13,200 MWh target by 2027-28;

(d) whether the Government has assessed the scheme's impact on renewable energy integration and infrastructure cost reduction and if so, the details thereof; and

(e) the steps taken by the Government to ensure optimal fund utilization and prevent delays?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : The Union Cabinet approved the Viability Gap Funding (VGF) Scheme for Battery Energy Storage Systems (BESS) on 6th September 2023, to support the development of BESS. As per the Scheme, VGF support will be provided for BESS approved during 2023-26. The fund disbursement will occur in 5 tranches: 10% upon financial closure of the project, 45% upon achieving the Commercial Operation Date (COD), and 15% per year over the next 3 years from COD.With the decline in battery prices, the scheme capacity has been increased from 4000 MWh to 13,200 MWh while staying within the approved budgetary allocationof Rs 3,760 Cr.

(b) : A budgetary provision of ₹96 Crore was made for 1000 MWh BESS in 2024-25, assuming 10% disbursement upon financial closure. However, with falling BESS costs, the VGF amount reduced from ₹96 lakh per MWh (estimated in 2023-24) to ₹46 lakh per MWh or 30% of capital cost, whichever is lower. As a result, the budgetary allocation was revised from ₹96 Crore to ₹46 Crore. As per scheme guidelines, 10% of VGF is to be disbursed after financial closure. Since, none of the projects could achieve financial closure, no expenditure was incurred under the scheme during 2024-25.

(c) & (e) : Central Electricity Authority (CEA) is responsible for monitoring the scheme, while the Ministry of Power oversees the scheme, to ensure timely completion and efficient fund utilisation.

(d) : The National Electricity Plan 2023 estimates that 236 GWh BESS would be required by 2031-32. This scheme will support integration of renewable energy and help minimize costs during peak demand periods in non-solar hours.

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5347
ANSWERED ON 03.04.2025

EVOLVING CARBON MARKET FRAMEWORK

5347. SHRI JASHUBHAI BHILUBHAI RATHVA:
SHRI DAMODAR AGRAWAL:

Will the Minister of POWER
be pleased to state:

(a) the special measures being taken by the Government to prevent fraudulent carbon credit transactions in the emerging carbon market framework in the country;

(b) whether the Government is formulating any plan to balance economic growth with the prescribed carbon reduction targets between 2027 and 2030;

(c) if so, the details thereof and if not, the reasons therefor;

(d) the mechanisms being established by the Government to ensure compliance with carbon reduction targets in the private sector; and

(e) the Government's plan to integrate the lessons learned from international best practices discussed in 'Prakriti 2025' into India's climate policy framework?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : As per Carbon Credit Trading Scheme (CCTS), notified in June, 2023 (as amended), the Grid Controller of India is the registry for the Indian carbon market. In order to prevent fraudulent carbon credit transactions in Indian carbon market, the functions assigned to the registry for the Indian carbon market include maintaining secure data base and records of all transactions. This registry is also the meta-registry for India.

(b) & (c) : Currently, the mandatory compliance of greenhouse gas emission intensity (GEI) targets under CCTS covers only few emission intensive industries, designated as "Obligated Entities". The greenhouse gas emission intensity (GEI) targets are given to only those obligated entities whose annual energy consumption are above certain thresholds. Further, while finalizing the GEI targets for different obligated entities, the marginal abatement cost of possible technological measures in the units of obligated entities are taken into consideration to ensure that such entities are given pragmatic and achievable targets.

.....2.

(d) : Bureau of Energy Efficiency (BEE) has published Detailed Procedure for Compliance Mechanism under CCTS in July 2024 which covers comprehensive Measurement, Reporting, and Verification (MRV) framework to ensure accurate, transparent, and credible compliance. An essential aspect of the MRV framework is the verification process, which requires annual verification of GHG emissions data. Further, the environmental compensation may be levied and penalty may be imposed under Environment Protection Act in case of non-compliance of GEI targets by obligated entitles.

(e) : An international conference on carbon markets titled "PRAKRITI" was held in February, 2025 at New Delhi wherein industries, financial institutions and other stakeholders participated to deliberate various aspects of carbon market, greenhouse gas (GHG) emission reduction measures, investments in clean technologies for possible adoption of suitable measure by them. Learnings from this conference would enable the obligated entities to opt for the optimum measures to achieve GHG emission reduction targets. Further, learnings from this conference would also enable the government optimize the policy framework of CCTS.

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5351
ANSWERED ON 03.04.2025

CENTRAL POWER RESEARCH INSTITUTE

5351. SHRI DHAIRYASHEEL SAMBHAJIRAO MANE:
SHRI CHAVAN RAVINDRA VASANTRAO:
SHRI SUDHEER GUPTA:

Will the Minister of POWER
be pleased to state:

(a) whether some foreign countries (overseas utilities) refused to accept the certification of electrical equipment made by the Central Power Research Institute (CPRI) in India;

(b) if so, the details thereof and the reaction of the Government thereto;

(c) whether the Government has held any meeting with the concerned countries to resolve the issues;

(d) if so, the details and the outcomes thereof; and

(e) the details of the steps taken by the Government to capture the $1503.21 billion global electrical equipment market of which China already accounts for $ 500 billion?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) to (d): Central Power Research Institute (CPRI) is a globally recognized Testing and Certification Agency for the purpose of certification of rating and performance of the electrical equipment. With the state-of-art facility, the Institute offers testing services to Indian electrical equipment manufacturers as well as to Overseas manufacturers.

In the year 2023, the Indian Electrical and Electronics Manufacturing Association (IEEMA) had expressed concerns over non-acceptance of test certificates issued by CPRI by few overseas utilities. In this context, the Ministry of Power has taken up the matter with the Ministry of External Affairs and Department of Commerce to promote the acceptance of Central Power Research Institute (CPRI) Test Reports and Certificates internationally.

.....2.

Meetings were held with Indian Missions in Thailand, Bangladesh, Abu Dhabi, Kuwait, Accra, Muscat, Sharjah, Bahrain, Ghana etc. Subsequent to the above developments, currently, no challenges have been reported regarding non-acceptance of CPRI Test Reports from these countries. Further, overseas customers from various countries are availing services of CPRI on regular basis.

(e) : Some of the measures that have been taken by the Government under the 'Atmanirbhar Bharat' initiative to boost exports of the products in various sectors, including the electric equipment sector, are listed below:

i. **Public Procurement (Preference to Make in India) Order on Industrial Steam Generators / Boilers has been issued to provide purchase preference of domestic manufactured goods.**

ii. **The government has introduced PLI schemes such as PLI for Large Scale Electronics Manufacturing, PLI Scheme 2.0 for IT Hardware and recently launched Electronics Component Manufacturing Scheme to incentivize companies to manufacture electronics and electrical equipment within India, aiming to reduce reliance on imports, especially from China.**

iii. **The Production Linked Incentive (PLI) Scheme by the Ministry of Steel in India aims to boost domestic production of specialty steel, a high-value material used in sectors like defense, automotive, and electrical industries. Launched initially in July 2021 and updated as PLI Scheme 1.1 in January 2025, it offers financial incentives to manufacturers, encouraging investment, job creation, and technological advancement. The scheme targets self-reliance by reducing imports, enhancing export potential, and strengthening India's steel ecosystem, aligning with the vision of Atmanirbhar Bharat. One of the five types of the specialty steel covered under the scheme is CRGO steel which is exclusively used in power sector.**

iv. **PLI scheme for Advanced Chemistry Cell (PLI-ACC) with a budgetary outlay of Rs.18,100 Crore was launched by Ministry of Heavy Industries (MHI) to incentivize manufacturers of advanced chemistry cells. This scheme aims to build local manufacturing capacity of 50 GWh out of which 30 GWh has already been subscribed.**

v. **PLI Scheme for High Efficiency Solar PV Modules aims to promote manufacturing of high efficiency solar PV modules in India.**

vi. **Scheme for Promotion of Manufacturing of Electronic Components and Semiconductors (SPECS) was notified on April 01, 2020 to provide financial incentive of 25% on capital expenditure for the identified list of electronic goods that comprise downstream value chain of electronic products, i.e., electronic components, semiconductor / display fabrication units, ATMP units, specialized sub-assemblies and capital goods for manufacture of aforesaid goods.**

.....3.

vii. **Electronics Manufacturing Clusters Scheme and Modified Electronics Manufacturing Clusters (EMC 2.0) Scheme were launched to provide support for creation of world-class infrastructure along with common facilities and amenities for attracting investment.**

viii. **As per extant Foreign Direct Investment (FDI) policy, FDI up-to 100% under the automatic route is permitted for electronics manufacturing (except from countries sharing land border with India), subject to applicable laws / regulations; security and other conditions.**

ix. **Tariff structure has been rationalized to promote domestic manufacturing of electronic goods, including, inter-alia, Cellular mobile phones, Televisions, Electronic components, Set Top Boxes for TV, LED products and Medical electronics equipment.**

x. **Notified capital goods for manufacture of specified electronic goods are permitted for import at "NIL" Basic Customs Duty.**

xi. **Establishment of 65 Export Facilitation Centres (EFCs) across the country with an aim to provide requisite mentoring and handholding support to exporters especially MSMEs in exporting their products and services to foreign markets.**

xii. **Assistance being provided through several schemes to promote exports, namely, Trade Infrastructure for Export Scheme (TIES) and Market Access Initiatives (MAI) Scheme.**

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5354
ANSWERED ON 03.04.2025

RURAL ELECTRIFICATION CORPORATION LIMITED

5354. THIRU D M KATHIR ANAND:
DR. T SUMATHY *ALIAS* THAMIZHACHI THANGAPANDIAN:

Will the Minister of POWER
be pleased to state:

(a) whether the Rural Electrification Corporation Limited (RECL) has been funding loans to Private Limited Companies for the power generation projects, power infrastructure development projects and other infrastructure projects and if so, the details thereof;

(b) the details of the complete list of Private Limited Companies provided loans by REC Limited during the last four years, year and company-wise;

(c) whether the REC Limited has provided refinance loans to many Private entities during the last three years and if so, the details thereof along with the total amount provided for refinancing the projects, entity-wise; and

(d) whether the REC Limited has provided any loans to the Private Limited Companies registered in Tamil Nadu and if so, the details thereof and if not, the reasons therefor?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) to (d) : Yes. The list of private sector projects funded by REC during last four years is placed at Annexure-I. The list of private entities wherein REC Limited has provided refinance loan during last three years is placed at Annexure-II. The list of Private Limited Companies registered in Tamil Nadu wherein REC Limited has provided loan is placed at Annexure-III.

****

ANNEXURE-I

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 5354 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

List of private sector projects funded by REC during last four years

Sr. No.	Borrower	Details of the Project	Sanctioned Year (FY)
		Power Generation Projects	
1.	Jindal Urban Waste Management Ahmedabad Ltd	15 MW Municipal Solid Waste to Energy Project in Ahmedabad, Gujarat	FY 22
2.	Sri Avantika	Additional loan of Rs 14.98 to 3X6 MW SHP of Sri Avantika	FY 22
3.	JSW Renew Energy Ltd.	540 MW wind project in Tuticorin, Tamil Nadu	FY 22
4.	JSW Renew Energy Ltd.	270 MW wind project in Tuticorin, Tamil Nadu	FY 22
5.	GMR Solar Energy Pvt. Ltd.	GMR 2MW Solar Project, IGI Airport Delhi	FY 23
6.	GMR Solar Energy Pvt. Ltd.	GMR 5 MW Solar Project, GMR MOPA Airport Goa	FY 23
7.	Kanak Renewables Limited	Refinancing of 110.40 MW Wind power project at Kushtagi and SREI Renew	FY 23
8.	Rajat Renewables Limited63	Refinancing of 21 MW Wind power project at Kushtagi Karnataka	FY 23
9.	ReNew Saur Urja Private Limited	Refinancing of 100 MW Solar PV project at Ittigi and Raichur	FY 23
10.	ReNew Wind Energy (Budh 3) Pvt Ltd	Refinancing of 60 MW Solar PV project at Wadgera, Nirna and Ladha Karnataka	FY 23
11.	ReNew Clean Energy Pvt Ltd	Refinancing of 51 MW Solar PV project at MP Solar Madhya Pradesh	FY 23
12.	Mahan Energen Limited Ph-II	2 X 800 MW Ultra Supercritical Coal Based Thermal Power Plant	FY 23
13.	ReNew Power Private Limited	Refinancing of 4 nos operational wind energy Projects	FY 23
14.	Greenko	Greenko MP01 Pvt Ltd 1440 MW Standalone Pumped Storage Project (PSP)	FY 23
15.	ReNew Wind Energy (Devgarh) Private Limited	Refinancing of 49.5 MW Wind power project at Vaspet 4 Maharashtra	FY 23
16.	ReNew Wind Energy (Rajasthan 3) Private Limited	Refinancing of 100.80 MW Wind power project at Bhesada Rajasthan	FY 23
17.	SB11 (SBSR Power Cleantech Eleven Ltd.)	Cost Overrun - 300MW/ 450MWp Solar Project in Bikaner	FY 23
18.	M/s Acme Raisar Solar Energy Pvt. Ltd.	300 MW Solar M/s Acme Raisar Solar Energy Pvt. Ltd.	FY 23
19.	M/s Acme Dhaulpur Powertech Pvt. Ltd.	300 MW Solar M/s Acme Dhaulpur Powertech Pvt. Ltd.	FY 23
20.	ReNew Solar Energy (Telangana) Private Limited	Refinancing of 143 MW Solar PV project at Digipalli Telangana	FY 23
21.	Adani Renewable Energy Forty-Two Limited	500 MW/3165 MWH Standalone Chitravathi Pumped Storage Project (CPSP) at Peddakotla in Sri Sathya Sai District of Andhra Pradesh	FY 24

22.	Adani Green Energy Twenty-Six B Limited	167 MW Solar PV Project in Khavda Village, Kutch, Gujarat	FY 24
23.	Adani Green Energy Twenty-Four A Limited	500 MW Seci PPA + 400 MW Merchant Sale Solar Project in Khavda Village, Kutch, Gujarat	FY 24
24.	Greenko KA01 IREP Pvt. Ltd.	1600 MW Pump Storage Project in Karnataka	FY 24
25.	Serentica Renewables India 3 Pvt Ltd	560 MW (270 MW wind & 290 MW solar) Greenfield hybrid project of Serentica Renewables India 3 Pvt Ltd	FY 24
26.	Adani Solar Energy RJ Two Pvt Ltd	150 MW/205.5 MWdc Solar Power Plant of Adani Solar Energy RJ Two Pvt Ltd	FY 24
27.	Adani Solar Energy RJ Two Pvt Ltd	180 MW/246.6 MWdc Solar Power Plant of Adani Solar Energy RJ Two Pvt Ltd	FY 24
28.	Serentica Renewables India 9 Private Limited (SRI9PL)	600MW Greenfield Solar power project for captive consumption to be set up at Fatehgarh district, Rajasthan	FY 24
29.	BluePine Energy Pvt. Ltd.	Refinancing of 11 operational projects 355MWac/403 MWp	FY 24
30.	Renew	RTL for refinancing of 13 operational projects of 11 SPVs of Renew group	FY 24
31.	Azure	Refinancing of 7 SPVs of 615 MW Solar Project at Multiple Locations	FY 24
32.	Clean Renewable Energy Hybrid 3 private Limited	120 MW FDRE Hero Project in Andhra Pradesh	FY 25
33.	Aarohi Solar Private Limited (ASPL)	50MW Aarohi Solar Private Limited (ASPL), Anantpur , AP	FY 25
34.	Acme Jaisalmer Solar Power Private Limited (AJSPPL)	20MW Acme Jaisalmer Solar Power Private Limited (AJSPPL) Anantpur , AP	FY 25
35.	Dayanidhi Solar Power Private Limited (DSPPL)	40MW Dayanidhi Solar Power Private Limited (DSPPL), Chitoor, AP	FY 25
36.	Niranjana Solar Energy Private Limited (NSEPL)	20MW Niranjana Solar Energy Private Limited (NSEPL) Kurnool, AP	FY 25
37.	Vishwatma Solar Energy Private Limited (VSEPL)	30MW Vishwatma Solar Energy Private Limited (VSEPL) Kurnool, AP	FY 25
38.	M/s Gentari Renewables India Castor One Private Limited (GRICOPL)	650 MW RTC Project comprising of Solar - 850 MW/ 1232 MWp, Wind - 1200 MW in Andhra Pradesh and Karnataka	FY 25
39.	ACME Nalanda Solar Power Private Limited (ANSPPL)	15 MW Solar Plant at Banka, Bihar	FY 25
40.	ACME Magadh Solar Power Pvt Ltd (AMSPPL)	10 MW Solar Plant at Banka, Bihar	FY 25
41.	ACME Raipur Solar Power Pvt Ltd (ARSPPL)	30 MW Solar Plant at Raipur, Chattisgarh	FY 25
42.	JSP GREEN WIND 1 PRIVATE LIMITED	1400 MW JGW1PL Wind	FY 25
43.	Adani Green Energy Twenty-Six B Limited	900 MW AGE26BL (Solar+ Hybrid)	FY 25
44.	ACME SURYA POWER PRIVATE LIMITED	250 MW ACME FDRE Hybrid	FY 25
45.	ACME Solar Technologies (Gujarat) Pvt Ltd (ASTPL)	15 MW Solar Plant at Anand, Gujarat	FY 25

46.	MEIL SOLAR ENERGY PRIVATE LIMITED	MEIL Solar Energy Private Limited	FY 25
47.	Rinnovabile Energy Private Limited	IRIS Phase 2 Rinnovabile	FY 25
48.	Iris Renewables Six Private Limited	IRIS Renewables 6 Phase 2	FY 25
49.	IRIS Renewables Six Pvt Ltd (IR6PL)	99 MW Wind Project at Hatalgeri, Gadag, Karnataka	FY 25
50.	GREENKO MP01 IREP PRIVATE LIMITED	Addl Loan Greenko 1920 MW PSP	FY 25
51.	ACME Solar Energy (Madhya Pradesh) Pvt Ltd (ASEMPPL)	25 MW Solar Plant at Rajgarh, Madhya Pradesh	FY 25
52.	MSKVY Fourth Solar SPV Limited	208 MW MSKVY Fourth Solar SPV	FY 25
53.	MSKVY Eighth Solar SPV Limited	MSKVY Eighth Solar SPV Limited	FY 25
54.	MSKVY Chaturdash Saur SPV Limited	MSKVY Chaturdash Saur SPV Limited	FY 25
55.	MSKVY Thirteenth Solar SPV Limited	MSKVY Thirteenth Solar SPV Limited	FY 25
56.	MSKVY Twelfth Solar SPV Limited	MSKVY Twelfth Solar SPV Limited	FY 25
57.	MSKVY Saptam Saur SPV Limited	MSKVY Saptam Saur SPV Limited	FY 25
58.	MSKVY Sixth Solar SPV Limited	MSKVY Sixth Solar SPV Limited	FY 25
59.	MSKVY Second Solar SPV Limited	MSKVY Second Solar SPV Limited	FY 25
60.	MSKVY Third Solar SPV Limited	170 MW MSKVY Third Solar SPV	FY 25
61.	Maharashtra State Power Generation Company Ltd	MSPGCL 1071 MWac Solar Power Projects under PM-KUSUM	FY 25
62.	ACME Odisha Solar Power Pvt Ltd (AOSPPL)	25 MW Solar Plant at Bolangir, Odisha	FY 25
63.	ACME Solar Rooftop Systems Pvt. Ltd. (ASRSPL)	30MW ACME Solar Rooftop Systems Pvt. Ltd. (ASRSPL) Bhatinda (Nangla), Punjab (Plant-1) & Mansa (Jhunir), Punjab (Plant-2)	FY 25
64.	Acme Heergarh Powertech Private Limited	Addl loan 300 MW AHPPL	FY 25
65.	XL Xergi Power Private Limited	400 MW Solar XL Xergi PPL	FY 25
66.	SUNBREEZE RENEWABLES NINE PRIVATE LIMITED	1400 MW SRNPL Solar	FY 25
67.	Acme Sun power private Limited	Acme 320MW FDRE at Rajastan& Gujarat	FY 25
68.	ACME Jodhpur Solar Power Pvt Ltd (AJSPPL)	100 MW Solar Plant at Jodhpur, Rajasthan	FY 25
69.	ACME Rewa Solar Energy Pvt Ltd (ARSEPL)	100 MW Solar Plant at Rewa, Rajasthan	FY 25
70.	Energizent Power Private Limited (EPPL)	355.6 MW EPPL Greenfield Hybrid Project at Jaisalmer, Rajasthan & Anantapur, Andhra Pradesh	FY 25
71.	Teq Green Power XVIII Private Limited (Teq XVIII)	325.7 MW Teq XVIII Greenfield Hybrid Project at Jaisalmer, Rajasthan & Anantapur, Andhra Pradesh	FY 25

72.	JSW RENEW ENERGY LIMITED	Addl loan 540 MW wind JSW	FY 25
73.	JSW RENEW ENERGY LIMITED	Addl loan 270 MW wind JSW	FY 25
74.	ACME Mahbubnagar Solar Energy Pvt Ltd (AMSEPL)	30 MW Solar Plant at Mahbubnagar, Telengana	FY 25
75.	ACME Yamunanagar Solar Power Pvt Ltd (AYSPPL)	30 MW Solar Plant at Yamunanagar, Telengana	FY 25
76.	Nirosha Power Pvt Ltd (NPPL)	30 MW Solar Plant at Nirosha, Uttar Pradesh	FY 25
77.	ACME PV Powertech Pvt Ltd (APPPL)	50 MW Solar Plant at Sangareddy, Telengana	FY 25
Power Infrastructure Development Projects			
78.	M/s Mundra solar Energy Ltd (MSEL)	2000 MWp Solar module and cell manufacturing	FY 22
79.	Suzlon	Refinancing of existing debt against Suzlon WTG manufacturing, EPC Business and O&M Services Future Cash Flow	FY 22
80.	Avaada Clean Sustainable Energy Pvt Ltd	50 MWac (70 MWdc) Solar PV project at village Jamua, district Banka, Bihar of Avaada Clean Sustainable Energy Pvt Ltd	FY 24
81.	Khavda Bhuj Transmission Limited	InSTS Transmission Line in Gujarat	FY 24
82.	MSPVL	Upgradation of existing manufacturing Facility of MSPVL	FY 24
83.	Anvil Cables Pvt Ltd - STL	Implementation of Advanced Metering Infrastructure in J&K	FY 24
84.	R S Infra projects Pvt Ltd	Transmission Line in Ladakh under PMDP-15 scheme	FY 24
85.	Suzlon Energy Limited	Wind (Corporate Loan for Manufacturing Purposes)	FY 24
86.	Suzlon Energy Limited	PSF of Rs. 695 Cr to Suzlon for 180.6 MW Wind Project in Karnataka	FY 24
87.	MP Power Package-I	InSTS Transmission Line in Madhya Pradesh	FY 24
88.	MP Power Transmission Package-II Limited	InSTS Transmission Line in Madhya Pradesh	FY 24
89.	Beawar Transmission Ltd	ISTS Transmission Line in Rajasthan	FY 24
90.	Nsure Reliable Power Solutions Private Limited	1 GWh Lithium Ion Cell Manufacturing Facility at Malur, Karnataka	FY 25
Non-Power Infrastructure Projects			
91.	GMR Vishakhapatnam International Airport Limited (GVIAL)	Part financing of Development and Construction of Phase-I of Greenfield Airport at Bhogapuram, Andhra Pradesh	FY 23
92.	Thriveni Sainik Mining Pvt Ltd	Mining & Delivery of Coal from Pakri Barwadih West Coal Blocks as Mine Developer & Operator (MDO) to NTPC Ltd	FY 23
93.	Evey Trans (BLR) Pvt. Ltd.	Financing of 50 E-buses in Karnataka	FY 23
94.	XEMX Projects Private Limited (XPPL)	3 nos of Compressed Biogas (CBG) production plants of XEMX Projects Private Limited aggregating to capacity of 15 TPD in the state of Maharashtra .	FY 23

95.	Evey Trans	Financing of 2100 E-buses in Mumbai	FY 23
96.	Evey Trans (MHS) Pvt. Ltd.	Financing of 100 E-buses in Maharashtra	FY 23
97.	KSRPL	Six laning of Kagal Satara section of NH-48 (Old NH-4) package-II from km 658.000 to Km 725.000 in the state of Maharashtra	FY 23
98.	JSOL	6 MTPA Integrated Steel Plant at Angul, Odisha	FY 23
99.	MEIL Hanamkonda Roadways Private Limited	Financing of construction of the 4-Lane GFH section on NH-163G from Oorugonda village in Hanamkonda District to Venkatapur village in Warangal District on HAM (Package-I)	FY 23
100.	MEIL Remidicherla Roadways Private Limited	Financial Assistance for construction of the 4-Lane GFH section on NH-163G from Brahmanapalli(K) village to Remidicherla village on HAM (Package-II)	FY 23
101.	MEIL Jakkampudi Roadways Private Limited	Financial Assistance for construction of the 4-Lane GFH on NH-163G (Warangal-Khammam) from Remidicherla Village to Jakkampudi Village (on NH-16) HAM (Package-III)	FY 23
102.	Vishvam City Bus Operations Private Limited	Financing of 100 E-Buses in Rajkot, Gujarat	FY 24
103.	Gopinathpur	Mining of Coal from Gopinathpur Coal Block as Mine Developer & Operator (MDO) to Eastern Coalfields Ltd (ECL)	FY 24
104.	Evey Trans (MSR) Private Limited (ETMPL)	5150 E-Buses under the contract awarded by Maharashtra State Road Transport Corporation (MSRTC)	FY 24
105.	Evey Trans (TEL) Pvt Ltd	Financing of 500 E-Buses in Hyderabad awarded by TSRTC	FY 24
106.	Mundra Petrochem Ltd	Setting up of 1MMTPA Poly Vinyl Chloride (PVC) Plant at Mundra	FY 25

****

ANNEXURE-II

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 5354 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

List of private entities wherein REC Limited has provided refinance loan during last three years

Sr. No.	Borrower	Details of the Project	Sanctioned amount (In Rs Cr)	Disbursed amount (In Rs Cr)
1	Thriveni Sainik Mining Pvt Ltd	Mining & Delivery of Coal from Pakri Barwadih West Coal Blocks as Mine Developer & Operator (MDO) to NTPC Ltd	336	180.09
2	Kanak Renewables Limited	Refinancing of 110.40 MW Wind power project at Kushtagi and SREI Renew	463.27	458.64
3	Rajat Renewables Limited63	Refinancing of 21 MW Wind power project at Kushtagi Karnataka	113.71	112.57
4	ReNew Saur Urja Private Limited	Refinancing of 100 MW Solar PV project at Ittigi and Raichur	532.8	520.4
5	ReNew Wind Energy (Budh 3) Pvt Ltd	Refinancing of 60 MW Solar PV project at Wadgera, Nirna and Ladha Karnataka	326.71	322.63
6	ReNew Clean Energy Pvt Ltd	Refinancing of 51 MW Solar PV project at MP Solar Madhya Pradesh	266.49	261.16
7	ReNew Wind Energy (Devgarh) Private Limited	Refinancing of 49.5 MW Wind power project at Vaspet 4 Maharashtra	256.94	251.8
8	ReNew Wind Energy (Rajasthan 3) Private Limited	Refinancing of 100.80 MW Wind power project at Bhesada Rajasthan	620.22	613.09
9	ReNew Solar Energy (Telangana) Private Limited	Refinancing of 143 MW Solar PV project at Digipalli Telangana	899.86	889.96
10	Blue Pine Energy Pvt. Ltd.	Refinancing of 11 operational projects 355MWac/403 MWp	1540.82	Nil
11	Azure	Refinancing of 7 SPVs of 615 MW Solar Project at Multiple Locations	2500	2370

****

ANNEXURE-III

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 5354 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

The list of Private Limited Companies registered in Tamil Nadu wherein REC Limited has provided loan

Sr. No.	Borrower	Details of Project
1	Gemini Geoss Energy Pvt Ltd	1MW SPV in Tamil Nadu
2	M/s Shalivahana Wind Energy Ltd	6.8MW Wind Project in Distt Tirupur, Tamil Nadu
3	M/s SEPC Power pvt. Ltd (SEPCPPL)	1 X 525 MW Coal based Thermal Power Plant
4	M/s Aura Power Pvt Ltd	5 MW solar pV project in Tamil Nadu
5	M/s Palvai Green Power Pvt Ltd	5 MW Solar Project in Kurundamdam, Virundanagar Distt., Tamil Nadu
6	M/s Mytrah Vayu (Sabarmati) Pvt. Ltd	252 MW Wind Energy Project in Maniyachi, Thoothukkudi District, Tamil Nadu.
7	Solitaire BTN Solar Pvt Ltd.	100 MW Solar PV Project in Dindigul district of Tamil Nadu
8	Sprng Renewable Energy PVt Ltd	300 MW Wind Project in Tirpur District, Tamil Nadu
9	Vivid Solaire Energy Pvt. Ltd.	252 MW Wind project in Tuticorin, Tamil Nadu
10	JSW Renew Energy Ltd.	540 MW wind project in Tuticorin, Tamil Nadu
11	JSW Renew Energy Ltd.	270 MW wind project in Tuticorin, Tamil Nadu
12	JSP GREEN WIND 1 PRIVATE LIMITED	1400 MW JGW1PL Wind

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5362
ANSWERED ON 03.04.2025

ELECTRIFIED HOUSES UNDER SAUBHAGYA IN KERALA

5362. SHRI RAJMOHAN UNNITHAN:

Will the Minister of POWER
be pleased to state:

(a) the details of the total number of houses electrified under the Pradhan Mantri Sahaj Bijli Har Ghar Yojana SAUBHAGYA in the country and the total number and percentage of the households electrified through the installation of solar energy systems under the said scheme;

(b) the details of the number of households electrified under SAUBHAGYA Scheme in the State of Kerala through installation of solar power systems, district-wise; and

(c) the details of the funds allocated/released and utilized in the State under SAUBHAGYA Scheme during the last five years and the current year, year and district-wise?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) & (b) : Government of India (GoI) launched the Pradhan Mantri Sahaj Bijli Har Ghar Yojana (SAUBHAGYA) in October, 2017 with the objective of providing electricity connections to all willing un-electrified households in rural areas and all willing poor households in urban areas in the country. All works sanctioned under SAUBHAGYA have been successfully completed and the scheme stands closed as on 31.03.2022. As reported by the States, around 2.86 Cr. households were electrified during the SAUBHAGYA period at the National level, out of which 4,70,415 households i.e. 1.64% of total households, were electrified through installation of Solar energy systems.

As reported by Kerala State Electricity Board Limited (KSEBL), there were no household in the State of Kerala that were electrified under SAUBHAGYA through installation of solar power systems.

(c) : Funds under the SAUBHAGYA scheme were sanctioned at DISCOM level and accordingly the funds were released to them. The details of funds released and utilized in the State of Kerala under SAUBHAGYA in the last five years and during the current financial year are as follows:

(Rs. in Cr.)

Financial Year	Central Govt. Grant released	Central Govt. Grant expended
2019-20	26.12	26.12
2020-21	13.27	13.27
2021-22	11.75	11.75
2022-23	-	-
2023-24	-	-
2024-25	-	-

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5391
ANSWERED ON 03.04.2025

AUDIT OF NTPC'S THERMAL POWER PLANTS

5391. SHRI RAHUL GANDHI:

Will the Minister of POWER be pleased to state:

(a) whether the Government has conducted any audit of NTPC's thermal power plants over 25 years old and if so, the details thereof, State-wise;

(b) whether the Government has taken any initiatives for the renovation and modernization of NTPC's Feroze Gandhi Unchahar Power Station at Raebareli and if so, the details thereof;

(c) the details of the measures taken by the Government to improve the operational efficiency at the Feroze Gandhi Unchahar Power Station at Raebareli; and

(d) the details of the measures taken by the Government to improve safety and institutional accountability at the Unchahar Power Station in the aftermath of the boiler explosion in 2017?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a): In compliance to the Hon'ble National Green Tribunal's Order dated 22.12.2020, a Safety Audit Committee was constituted by Central Electricity Authority (CEA)under Ministry of Power, comprising of representatives from Central Electricity Authority (CEA), Ministry of Coal, Central Boiler Board (CBB), Director General Fire Safety (DGFS), Oil Industry Safety Directorate (OISD), NTPC Ltd., NLC India Limited (NLCIL) and Bharat Heavy Electrical Limited (BHEL).

The committee had conducted the physical audit of Farakka Super Thermal Power Station of NTPC Limited situated in the state of West Bengal from 24.11.2021 to 25.11.2021 and given their recommendations on safety concerns in thermal power plants. The recommendations of the safety audit committee were shared by NTPC Ltd. among their stations and the recommendations are being complied with.

(b) : As per Section 7 of Electricity Act, 2003, setting up of a power plant is a de-licensed activity in the country. Any generating company may establish, operate and maintain a generating station without requiring a license under Electricity Act, 2003 if it complies with the technical standards relating to connectivity with the grid. Carrying out renovation & modernization (R&M) works in thermal units are decided by Power generating utilities/companies on their own based on techno-economic and environmental reasons.

.....2.

The details of major upgradation/ replacement work executed by NTPC Ltd. at Feroze Gandhi Unchahar Power Station are as under:-

1. **Replacement of Low-Pressure Heaters, some parts of High Pressure By Pass system, DC Charges, Coal handling plants HP travelling trippers, Turbine related valves, Boiler Feed Pump, Condensate Extraction Pump, Condenser Tubes of Unit #1 Condenser, Scrapper conveyor of Bottom ash hopper.**

2. **R&M of control & Power cables and Electrostatic Precipitators (ESPs), Refurbishment of cooling tower, Residual Life Assessment study of critical piping & hangers, Conversion of open channel ash water flow to closed pipe corridor flow, Renovation of fire fighting system.**

(c) : The following measures have been/are being taken by NTPC Ltd. for improving the operational efficiency at the Feroze Gandhi Unchahar Power Station at Raebareli:

1) **Unit parameters are being monitored offline/online for any deviation with respect to design performance.**

2) **Preventive maintenance of critical equipment related to Boiler, TG and other systems.**

3) **Benchmarking of unit performance parameters.**

4) **Overhauling of units is being done regularly and during overhauling, Critical systems and equipment related to Boiler, TG(Turbine-Generator) and BoP (Balance of Plants) are inspected, repaired and replaced as per the requirement.**

(d) : Government investigated the cause of boiler explosion at Unchahar Power Station to improve safety and institutional accountability. To investigate the causes of the accident, six (06) nos. of enquiry committees were constituted. Reports submitted by these committees which inter-alia mentioned high ash build up and consequent tube failure due to dislodging of this build up ash in the boiler as one of the causes of accident in the boiler. The key recommendations/findings of these Committees along with the actions taken thereon are given as under:

Recommendations of the Committees:

1. Accumulation of ash should be controlled, and continuous ash removal should be ensured without blocking the furnace bottom opening and ash hopper.

2. All Technical considerations of plant operating conditions should be part of Standard Operating Procedures (SOPs).

3. The plant Engineers and operation general team should have adequate and relevant experience as per the duties.

4. Opening of manhole doors/scaffold doors during operation is not resorted and water injection for dislodging should be avoided.

5. Whenever people attend to any problem during boiler operation, there should be a clear checklist for safe practice.

.....3.

6. The protocol of work permit for carrying out any activity in the unit should be strictly adhered to.

Action Taken by NTPC ltd:-

- **Operation guidance note was reviewed with additional points of safety and the same has been complied by all NTPC Stations.**

- **NTPC executive trainees undergo 12 Months training at entry level covering all aspects of the power plant. Further, regular trainings are being conducted across all stations in respect of assigned duties.**

- **International certification courses like NEBOSH-IGC and NOSA are being organized every year for employees for capability building.**

- **Training program for contractors' employees are being conducted at all sites on regular basis covering all relevant topics on occupational health and safety.**

- **Safety behavior index has been introduced in the Performance Management System (PMS).**

- **To strengthen the elements of Institutional Accountability internally, NTPC safety Framework was rolled out in 2021which is integrated with NTPC SAP system. The framework provides a consistent conceptual structure and serve as the guidance document to the various functions and roles. It contains a set of expectations that ensure that all efforts are aligned with the overall Policy and objectives of NTPC. The expectations are expressed broadly in the form of components – Safety Policy, Safety Risk Management, Safety Assurance and Safety Promotion.**

- **Cross-functional safety task force for operating plants and under construction projects are functional at all projects/stations to monitor and ensure safe working conditions.**

- **For early detection of ash build up, cameras have been installed for monitoring by desk operator.**

- **Internal and external safety audits are undertaken by NTPC through its safety officers at regular intervals and external (third party) safety audit through reputed agencies from time to time.**

- **Job Safety analysis has been made a part of permit to work system, and stations are strictly following it.**

- **For early detection and mitigation of the on-site emergencies, effective control systems are provided at all operating stations.**

- **Regular Mock drills are conducted to check the healthiness of the systems, and any abnormalities are immediately rectified.**

- **Awareness program on disaster management plan are also conducted regularly.**

.....4.

- **To inculcate safety culture, various messages/instructions are displayed in the form of posters/hoardings at various vulnerable locations of working sites. Different competitions and campaigns on safety are also organized time to time to enhance the safety awareness of employees, contractors' workers and nearby villagers.**

- **Regular Medical examinations are conducted to monitor the health condition of workers at workplace. Safety trainings and pep-talks are also organized for workers at sites to make them aware about the hazards at workplace.**

- **Disaster management plan and emergency action plans are prepared in consultation with district & state authorities and nearby industries to tackle any emergency situation.**

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5402
ANSWERED ON 03.04.2025

QUANTUM OF ENERGY PRODUCTION

†5402. SHRI SANJAY HARIBHAU JADHAV:

Will the Minister of POWER
be pleased to state:

(a) the total quantum of energy produced across the country through various sources of energy during the last three years and the current year;

(b) whether this production is proportionate to the demand, if not, the reasons therefor;

(c) the details of the total distribution of energy through various sources of energy across the country during the said period;

(d) the details of the regions having the lowest share in production and consumption of renewable sources of energy, State-wise;

(e) the details of the total value of exports made to other countries in terms of both renewable and non-renewable energy;

(f) the details of the share of exports and export earnings during the last three years and the current year; and

(g) whether the Government proposes to rationalize those standards for ease of business, if so, the details thereof?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : The source-wise details of total quantum of energy produced across the country during the last three years and current year 2024-25 (upto February, 2025) are given at Annexure-I.

(b) : There is adequate availability of power in the country. Present installed generation capacity of the country is 470 GW. Government of India has addressed the critical issue of power deficiency by adding 238 GW of generation capacity since April, 2014, transforming the country from power deficit to power sufficient. Further, addition of 2,01,088 circuit kilometer (ckm) of Transmission lines, 7,78,017 MVA of Transformation capacity and 82,790 MW of Inter-Regional capacity has been done since 2014 with capability of transferring 1,18,740 MW from one corner of the country to another.

.....2.

The details of All India Power Supply Position in the country during the last three years and current year 2024-25 (upto February, 2025) are given at Annexure-II. This indicates that the gap between Energy Requirement and Energy Supplied has declined to marginal level of 0.1% only during current year 2024-25 (upto February, 2025). Even this marginal gap between Energy Requirement and Energy Supplied is generally on account of constraints in the State transmission/distribution network.

(c) : The State/UT-wise details of the total distribution of electrical energy produced across the country as reflected in the Energy Supplied figures, during the last three years and current year (upto February,2025), are given at Annexure-III.

(d) : The State/UT-wise details of production of electricity from Renewable Energy during the last three years and the current year (upto February, 2025), are given at Annexure-IV.

(e) to (g) : The details of export of electricity by India to neighboring countries during the last three years and current year (upto February, 2025), are given at Annexure-V.

The Import/Export of Electricity is done purely on commercial terms by buying and selling entities, therefore, no information is available regarding value of total exports to other countries and earnings.

****

ANNEXURE-I

ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 5402 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

The source-wise details of total quantum of energy produced across the country during the last three years and current year 2024-25 (upto February, 2025):

All figures are in Million Units (MU)

Fuel		2021-22	2022-23	2023-24	2024-25 (Upto February, 2025)
THERMAL	COAL	10.41,487	11,45,908	12,60,903	11,80,981
	DIESEL/HSD	117	230	401	401
	LIGNITE	37,094	36,188	33,950	30,177
	MULTI FUEL	0	0	0	0
	NAPTHA	0	1	0	0
	NATURAL GAS	36,016	23,884	31,296	29,702
THERMAL Total:		11,14,714	12,06,211	13,26,549	12,41,261
NUCLEAR		47,112	45,861	47,937	51,962
HYDRO		1,51,627	1,62,099	1,34,054	1,39,780
Bhutan Import		7,493	6,742	4,716	5369
Conventional Total:		13,20,947	14,20,913	15,13,256	14,38,372
RENEWABLE	Wind	68,640	71,814	83,385	78,214
	Solar	73,484	1,02,014	1,15,975	1,27,339
	Biomass	3,483	3,161	3,417	3,392
	Bagasse	12,574	12,863	10,826	8,349
	Small Hydro	10,464	11,171	9,485	10,951
	Others	2,268	2,529	2,747	2,621
Renewable Total (excluding Conventional Hydro) :		1,70,912	2,03,553	2,25,835	2,30,868
Grand Total:		14,91,859	16,24,466	17,39,091	16,69,240

****

ANNEXURE-II

ANNEXURE REFERRED IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 5402 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

The details of All India Power Supply Position in the country during the last three years and current year 2024-25 (upto February, 2025)

Year	Energy Requirement	Energy Supplied	Energy Not Supplied	
	(MU)	(MU)	(MU)	%
2021-22	13,79,812	13,74,024	5,787	0.4
2022-23	15,13,497	15,05,914	7,583	0.5
2023-24	16,26,132	16,22,020	4,112	0.3
2024-25* (upto February, 2025)	15,47,785	15,46,229	1,555	0.1

Note: (*) Provisional for February, 2025

****

ANNEXURE-III

ANNEXURE REFERRED IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 5402 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

The State/UT-wise details of the total distribution of electrical energy produced across the country as reflected in the Energy Supplied figures, during the year 2021-22 to 2022-23

State/UT/Region	April, 2021 - March, 2022				April, 2022 - March, 2023			
	Energy Requirement	Energy Supplied	Energy not Supplied		Energy Requirement	Energy Supplied	Energy not Supplied	
	(MU)	(MU)	(MU)	(%)	(MU)	(MU)	(MU)	(%)
Chandigarh	1,606	1,606	0	0.0	1,788	1,788	0	0.0
Delhi	31,128	31,122	6	0.0	35,143	35,133	10	0.0
Haryana	55,499	55,209	290	0.5	61,451	60,945	506	0.8
Himachal Pradesh	12,115	12,088	27	0.2	12,649	12,542	107	0.8
Jammu & Kashmir	19,957	18,434	1,524	7.6	19,639	19,322	317	1.6
Punjab	62,846	62,411	436	0.7	69,522	69,220	302	0.4
Rajasthan	89,814	89,310	504	0.6	1,01,801	1,00,057	1,745	1.7
Uttar Pradesh	1,29,448	1,28,310	1,138	0.9	1,44,251	1,43,050	1,201	0.8
Uttarakhand	15,521	15,426	94	0.6	15,647	15,386	261	1.7
Northern Region	4,17,934	4,13,915	4,019	1.0	4,63,088	4,58,640	4,449	1.0
Chhattisgarh	31,908	31,872	35	0.1	37,446	37,374	72	0.2
Gujarat	1,23,953	1,23,666	287	0.2	1,39,043	1,38,999	44	0.0
Madhya Pradesh	86,501	86,455	46	0.1	92,683	92,325	358	0.4
Maharashtra	1,72,823	1,72,809	14	0.0	1,87,309	1,87,197	111	0.1
Dadra & Nagar Haveli and Daman & Diu	9,433	9,433	0	0.0	10,018	10,018	0	0.0
Goa	4,448	4,448	0	0.0	4,669	4,669	0	0.0
Western Region	4,29,065	4,28,683	383	0.1	4,77,393	4,76,808	586	0.1
Andhra Pradesh	68,413	68,219	194	0.3	72,302	71,893	410	0.6
Telangana	70,539	70,523	16	0.0	77,832	77,799	34	0.0
Karnataka	72,437	72,417	20	0.0	75,688	75,663	26	0.0
Kerala	26,579	26,570	9	0.0	27,747	27,726	21	0.1
Tamil Nadu	1,09,816	1,09,798	18	0.0	1,14,798	1,14,722	77	0.1
Puducherry	2,894	2,893	1	0.0	3,051	3,050	1	0.0
Lakshadweep (#)	56	56	0	0.0	64	64	0	0.0
Southern Region	3,50,678	3,50,421	258	0.1	3,71,467	3,70,900	567	0.2

State/UT/Region	April, 2021 - March, 2022				April, 2022 - March, 2023			
	Energy Requirement	Energy Supplied	Energy not Supplied		Energy Requirement	Energy Supplied	Energy not Supplied	
	(MU)	(MU)	(MU)	(%)	(MU)	(MU)	(MU)	(%)
Bihar	36,216	35,761	455	1.3	39,545	38,762	783	2.0
DVC	23,741	23,736	4	0.0	26,339	26,330	9	0.0
Jharkhand	11,148	10,590	558	5.0	13,278	12,288	990	7.5
Odisha	38,339	38,332	7	0.0	42,631	42,584	47	0.1
West Bengal	54,001	53,945	57	0.1	60,348	60,274	74	0.1
Sikkim	610	609	0	0.0	587	587	0	0.0
Andaman-Nicobar (#)	335	327	8	2.3	348	348	0	0.1
Eastern Region	1,64,054	1,62,973	1,081	0.7	1,82,791	1,80,888	1,903	1.0
Arunachal Pradesh	875	874	1	0.1	915	892	24	2.6
Assam	10,844	10,825	19	0.2	11,465	11,465	0	0.0
Manipur	1,019	1,018	1	0.1	1,014	1,014	0	0.0
Meghalaya	2,256	2,243	13	0.6	2,237	2,237	0	0.0
Mizoram	656	644	12	1.8	645	645	0	0.0
Nagaland	852	851	1	0.1	926	873	54	5.8
Tripura	1,578	1,578	0	0.0	1,547	1,547	0	0.0
North-Eastern Region	18,079	18,033	47	0.3	18,758	18,680	78	0.4
All India	13,79,812	13,74,024	5,787	0.4	15,13,497	15,05,914	7,583	0.5

(#) Lakswadeep and Andaman and Nicobar Islands are standalone systems, power supply position of these do not form part of regional requirement and energy supplied.

The State/UT-wise details of the total distribution of electrical energy produced across the country as reflected in the Energy Supplied figures, during the year 2023-24 to 2024-25 (upto February, 2025)

State/UT/Region	April, 2023 - March, 2024				April,2024 - February, 2025*			
	Energy Requirement	Energy Supplied	Energy not Supplied		Energy Requirement	Energy Supplied	Energy not Supplied	
	(MU)	(MU)	(MU)	(%)	(MU)	(MU)	(MU)	(%)
Chandigarh	1,789	1,789	0	0.0	1,843	1,843	0	0.0
Delhi	35,501	35,496	5	0.0	35,935	35,924	12	0.0
Haryana	63,983	63,636	348	0.5	65,605	65,575	30	0.0
Himachal Pradesh	12,805	12,767	38	0.3	12,495	12,458	37	0.3
Jammu & Kashmir	20,040	19,763	277	1.4	18,526	18,439	87	0.5
Punjab	69,533	69,528	5	0.0	72,623	72,623	0	0.0
Rajasthan	1,07,422	1,06,806	616	0.6	1,04,549	1,04,245	304	0.3
Uttar Pradesh	1,48,791	1,48,287	504	0.3	1,53,505	1,53,203	302	0.2
Uttarakhand	15,644	15,532	112	0.7	15,563	15,521	42	0.3
Northern Region	4,76,852	4,74,946	1,906	0.4	4,82,076	4,81,133	943	0.2
Chhattisgarh	39,930	39,872	58	0.1	38,757	38,729	28	0.1
Gujarat	1,45,768	1,45,740	28	0.0	1,38,514	1,38,514	0	0.0
Madhya Pradesh	99,301	99,150	151	0.2	95,286	95,162	124	0.1
Maharashtra	2,07,108	2,06,931	176	0.1	1,83,137	1,83,078	59	0.0
Dadra & Nagar Haveli and Daman & Diu	10,164	10,164	0	0.0	9,925	9,925	0	0.0
Goa	5,111	5,111	0	0.0	4,904	4,904	0	0.0
Western Region	5,17,714	5,17,301	413	0.1	4,80,698	4,80,488	210	0.0
Andhra Pradesh	80,209	80,151	57	0.1	71,471	71,468	3	0.0
Telangana	84,623	84,613	9	0.0	78,531	78,527	4	0.0
Karnataka	94,088	93,934	154	0.2	82,127	82,123	4	0.0
Kerala	30,943	30,938	5	0.0	28,597	28,588	8	0.0
Tamil Nadu	1,26,163	1,26,151	12	0.0	1,18,313	1,18,308	5	0.0
Puducherry	3,456	3,455	1	0.0	3,244	3,244	0	0.0
Lakshadweep (#)	64	64	0	0.0	61	61	0	0.0
Southern Region	4,19,531	4,19,293	238	0.1	3,82,325	3,82,300	24	0.0

State/UT/Region	April, 2023 - March, 2024				April, 2024 - February, 2025*			
	Energy Requirement	Energy Supplied	Energy not Supplied		Energy Requirement	Energy Supplied	Energy not Supplied	
Bihar	41,514	40,918	596	1.4	41,259	41,085	174	0.4
DVC	26,560	26,552	8	0.0	23,708	23,704	3	0.0
Jharkhand	14,408	13,858	550	3.8	13,941	13,865	76	0.5
Odisha	41,358	41,333	25	0.1	39,132	39,108	24	0.1
West Bengal	67,576	67,490	86	0.1	65,075	64,984	91	0.1
Sikkim	544	543	0	0.0	516	516	0	0.0
Andaman-Nicobar (#)	386	374	12	3.2	386	375	11	2.9
Eastern Region	1,92,013	1,90,747	1,266	0.7	1,83,681	1,83,314	367	0.2
Arunachal Pradesh	1,014	1,014	0	0.0	956	956	0	0.0
Assam	12,445	12,341	104	0.8	11,897	11,891	6	0.0
Manipur	1,023	1,008	15	1.5	978	974	5	0.5
Meghalaya	2,236	2,066	170	7.6	1,874	1,873	0	0.0
Mizoram	684	684	0	0.0	647	647	0	0.0
Nagaland	921	921	0	0.0	865	865	0	0.0
Tripura	1,691	1,691	0	0.0	1,779	1,779	0	0.0
North-Eastern Region	20,022	19,733	289	1.4	19,004	18,993	11	0.1
All India	16,26,132	16,22,020	4,112	0.3	15,47,785	15,46,229	1,555	0.1

Note: (*) Data for the month of February 2025 is provisional

(#) Lakswadeep and Andaman and Nicobar Islands are standalone systems, power supply position of these do not form part of regional requirement and energy supplied.

****

ANNEXURE-IV

ANNEXURE REFERRED IN REPLY TO PART (d) OF UNSTARRED QUESTION NO. 5402 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

The State/UT-wise details of production of electricity from Renewable Energy during the last three years and the current year (upto February, 2025)

All figures are in Million Units (MUs)

Name of State/UT	2021-22	2022-23	2023-24	2024-25 (Upto February, 2025)
Andaman & Nicobar Islands	34.77	37.88	39.50	35.63
Andhra Pradesh	15,662.61	16,411.91	17,464.48	14,605.40
Arunachal Pradesh	2.13	24.85	2.55	1.67
Assam	122.10	279.01	381.26	479.36
Bhutan	0.00	0.00	0.00	0.00
Bihar	239.83	288.85	342.08	394.90
Chandigarh	14.19	12.61	11.70	8.39
Chhattisgarh	1,938.21	2,003.05	2,477.44	2,919.23
Dadra & Nagar Haveli and Daman & Diu	96.83	30.62	28.86	25.95
Delhi	458.73	530.20	728.81	688.36
Goa	16.82	19.96	67.95	59.81
Gujarat	24,839.53	29,762.63	38,483.22	40,483.05
Haryana	1,135.42	1,419.73	1,651.50	2,042.87
Himachal Pradesh	2,043.76	2,912.83	2,586.52	3,035.72
Jammu and Kashmir	415.81	393.20	408.69	372.17
Jharkhand	28.71	22.10	23.16	21.06
Karnataka	28,634.28	29,574.48	30,526.55	31,457.53
Kerala	1,614.62	1,946.26	2,204.24	2,497.10
Ladakh	0.00	0.00	0.00	0.00
Lakshadweep	0.30	0.10	0.09	0.08
Madhya Pradesh	8,716.73	8,872.72	9,655.02	11,183.44
Maharashtra	15,845.64	17,206.59	18,765.41	17,970.04
Manipur	6.72	8.79	8.96	7.94
Meghalaya	44.68	72.16	66.55	112.88
Mizoram	28.09	62.27	99.11	71.85
Nagaland	63.47	111.95	81.14	96.96
Odisha	1,081.10	1,192.10	1,261.72	1,192.68
Puducherry	12.24	12.24	12.24	11.22
Punjab	3,242.15	4,169.58	4,122.40	2,849.22
Rajasthan	24,099.31	40,990.05	47,148.96	50,322.11
Sikkim	12.35	12.35	12.35	11.33
Tamil Nadu	24,061.28	27,626.45	29,603.31	31,659.49
Telangana	7,345.89	7,429.89	7,509.10	6,871.44
Tripura	7.62	6.58	7.01	5.36
Uttar Pradesh	6,328.94	7,217.18	7,201.59	6,739.04
Uttarakhand	872.32	932.39	930.94	855.91
West Bengal	1,845.09	1,959.12	1,920.39	1,778.72
Grand Total:	1,70,912.29	2,03,552.68	2,25,834.83	2,30,867.92

****

ANNEXURE-V

ANNEXURE REFERRED IN REPLY TO PARTS (e) TO (g) OF UNSTARRED QUESTION NO. 5402 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

The details of export of electricity by India to neighboring countries, during the last three years and current year (upto February, 2025):

All figures are in Million Units (MU)

Year	Bhutan	Bangladesh	Nepal	Myanmar
2021-22	322	7,327	2,127	8.81
2022-23	522	8,581	1,552	9.8
2023-24	1,868	8,394	1,850	8.78
2024-25 (upto February, 2025)	1,492	7,355	1,355	8.43

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5406
ANSWERED ON 03.04.2025

RENEWABLE ENERGY GENERATION IN KARNATAKA

5406. SHRI P C MOHAN:

Will the Minister of POWER be pleased to state:

(a) the total power/electricity generation capacity in the country specifying the sources of energy like coal, natural gas, hydro, solar, wind, etc. State-wise including Karnataka;

(b) the details of power generation by these sources during the last three years, year-wise;

(c) the plans and initiatives proposed by the Government to enhance renewable energy capacity in each State including Karnataka including specific targets and timelines; and

(d) the challenges faced by the States including Karnataka in transitioning to renewable energy and the strategies being implemented to address these challenges?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : The State/ UT-wise and source-wise details of electricity generation capacity in the country (as on 28.02.2025) including Karnataka are given at Annexure-I and Annexure-II.

(b) : The details of electricity generated from various sources during the last three years and the current year (upto Feb, 2025) are given at Annexure-III.

(c) & (d) : The Government of India has committed to augment non-fossil based installed electricity generation capacity to 500 GW by the year 2030. As on 28.02.2025, a total of 2,14,680 MW Renewable Energy capacity has been installed in the country including 23,074.89 MW Renewable Energy capacity in Karnataka.

Further, 1,75,890 MW Renewable Capacity including 84,310 MW of Solar, 28,280 MW of Wind, 40,890 MW Hybrid power and 21,970 MW of large Hydro is under construction. 70,210 MW of Renewable Capacity including 46,670 MW of Solar, 600 MW of Wind and 22,940 MW Hybrid Power is at various stages of planning and targeted to be completed by 2029-30.

The Government of India has taken following steps to enhance Renewable Energy Generation in the country including Karnataka:

(i) Ministry of New & Renewable Energy (MNRE) has issued Bidding Trajectory for issuance of RE power procurement bids of 50 GW/annum by Renewable Energy Implementing Agencies from FY 2023-24 to FY 2027-28.

(ii) Foreign Direct Investment (FDI) has been permitted up to 100 percent under the automatic route.

(iii) Inter State Transmission System (ISTS) charges have been waived for inter-state sale of solar and wind power for projects to be commissioned by 30th June 2025, for Green Hydrogen Projects till December, 2030 and for offshore wind projects till December, 2032.

(iv) To boost RE consumption, Renewable Purchase Obligation (RPO) followed by Renewable Consumption Obligation (RCO) trajectory has been notified till 2029-30. The RCO which is applicable to all designated consumers under the Energy Conservation Act, 2001 will attract penalties for non-compliance.

(v) Standard Bidding Guidelines for tariff based competitive bidding process for procurement of Power from Grid Connected Solar, Wind, Wind-Solar Hybrid and Firm & Dispatchable RE (FDRE) projects have been issued.

(vi) Schemes such as Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM), PM Surya Ghar Muft Bijli Yojana, National Programme on High Efficiency Solar PV Modules, National Green Hydrogen Mission, Viability Gap Funding (VGF) Scheme for Offshore Wind Energy Projects have been launched.

(vii) Scheme for setting up of Ultra Mega Renewable Energy Parks is being implemented to provide land and transmission to RE developers for installation of RE projects at large scale.

(viii) Laying of new transmission lines and creating new sub-station capacity has been funded under the Green Energy Corridor Scheme for evacuation of renewable power.

(ix) "Strategy for Establishment of Offshore Wind Energy Projects" has been issued indicating a bidding trajectory of 37 GW by 2030 and various business models for project development.

(x) The Offshore Wind Energy Lease Rules, 2023 have been notified vide Ministry of External Affairs notification dated 19th December 2023, to regulate the grant of lease of offshore areas for development of offshore wind energy projects.

(xi) To achieve the objective of increased domestic production of Solar PV Modules, the Govt. of India is implementing the Production Linked Incentive (PLI) scheme for High Efficiency Solar PV Modules. This will enable manufacturing capacity of Giga Watt (GW) scale in High Efficiency Solar PV Module

Further, Government has taken various measures to facilitate the integration of Renewable Energy (RE) resources into the National Grid to ensure reliability and stability as under:

i. **Development of intra-state transmission network is being planned to keep pace with RE capacity addition. Strong inter connection of ISTS RE schemes with the intra-state network to ensure better reliability in terms of anchoring voltage stability, angular stability, losses reduction etc. is being done.**

ii. **Central Financial Assistance (CFA) is being provided to the States for setting up Transmission infrastructure for RE integration within their State under the Green Energy Corridor Scheme.**

iii. **Encouraging setting up of RE projects with storage facilities for optimal utilisation of transmission facilities.**

iv. **Flexibilization of thermal generation is mandated to address the variability of RE generation.**

v. **CEA (Technical Standards for Connectivity to the Grid) Regulations lay down the minimum technical requirements for the RE generating plants to ensure the safe, secure and reliable operation of the grid. The compliances to the said regulations by RE plants are verified jointly by Central Transmission Utility (CTUIL) and Grid-India/RLDCs before granting connectivity/interconnection to the national grid. Robust compliances verification is done before interconnection of any new plant to the grid.**

vi. **Indian Electricity Grid Code mandates that RE plants participate in the primary and secondary frequency control in case of contingencies. Hybrid RE power plants, Energy Storage Systems such as BESS (Battery Energy Storage System) and PSP (Pump Storage Project) are being promoted for mitigating variability in RE generation and provide adequate frequency support to the grid.**

vii. **Establishment of dedicated 13 No. of Renewable Energy Management Centres (REMC) in RE rich States and Regions for dedicated, monitoring, forecasting and scheduling of Solar and Wind plants.**

****

ANNEXURE-I

ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 5406 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

The details of State/ UT-wise and source-wise Installed Generation Capacity as on 28.02.2025

(All fig in MW)

Sl. No.	STATES / UTs	Coal	Lignite	Gas	Diesel	Hydro	RES (other than Large Hydro)	Nuclear	Total
1	Andhra Pradesh	13,190.00	0.00	4,678.54	36.80	1,610.00	10,013.58	0.00	29,528.92
2	Arunachal Pradesh	0.00	0.00	0.00	0.00	1,115.00	155.46	0.00	1,270.46
3	Assam	750.00	0.00	597.36	0.00	350.00	228.45	0.00	1,925.81
4	Bihar	9,060.00	0.00	0.00	0.00	0.00	530.36	0.00	9,590.36
5	Chhattisgarh	23,688.00	0.00	0.00	0.00	120.00	1,693.63	0.00	25,501.63
6	Goa	0.00	0.00	48.00	0.00	0.00	57.43	0.00	105.43
7	Gujarat	14,692.00	1,400.00	7,551.41	0.00	1,990.00	30,934.03	1,840.00	58,407.44
8	Haryana	5,330.00	0.00	431.59	0.00	0.00	2,391.30	0.00	8,152.89
9	Himachal Pradesh	0.00	0.00	0.00	0.00	10,281.02	1,181.17	0.00	11,462.19
10	Jammu & Kashmir	0.00	0.00	175.00	0.00	3,360.00	264.42	0.00	3,799.42
11	Jharkhand	5,570.00	0.00	0.00	0.00	210.00	224.06	0.00	6,004.06
12	Karnataka	9,480.00	0.00	370.05	25.20	3,689.20	19,385.69	880.00	33,830.14
13	Kerala	0.00	0.00	533.58	159.96	1904.15	1,824.66	0.00	4,422.35
14	Ladakh	0.00	0.00	0.00	0.00	89.00	53.59	0.00	142.59
15	Madhya Pradesh	22,000.00	0.00	0.00	0.00	2,235.00	8,131.76	0.00	32,366.76
16	Maharashtra	24,666.00	0.00	3207.08	0.00	3,047.00	18,537.30	1,400.00	50,857.38
17	Manipur	0.00	0.00	0.00	36.00	105.00	19.24	0.00	160.24
18	Meghalaya	0.00	0.00	0.00	0.00	322.00	73.11	0.00	395.11
19	Mizoram	0.00	0.00	0.00	0.00	60.00	75.86	0.00	135.86
20	Nagaland	0.00	0.00	0.00	0.00	75.00	35.84	0.00	110.84
21	Odisha	9,600.00	0.00	0.00	0.00	2,154.55	797.52	0.00	12,552.07
22	Punjab	5,680.00	0.00	0.00	0.00	1,096.30	2165.78	0.00	8,942.08
23	Rajasthan	9,200.00	1580.00	1022.83	0.00	411.00	33,056.98	1,180.00	46,450.81
24	Sikkim	0.00	0.00	0.00	0.00	2,282.00	62.67	0.00	2,344.67
25	Tamil Nadu	10,522.50	3,640.00	1,027.18	211.70	2,178.20	22,456.40	2,440.00	42,475.98
26	Telangana	10,242.50	0.00	0.00	0.00	2,405.60	5,282.74	0.00	17,930.84
27	Tripura	0.00	0.00	1,067.60	0.00	0.00	37.25	0.00	1,104.85
28	Uttar Pradesh	28,035.00	0.00	1,493.14	0.00	501.60	5,680.28	440.00	36,150.02
29	Uttarakhand	0.00	0.00	664.00	0.00	4,035.35	969.13	0.00	5,668.48
30	West Bengal	1,3487.00	0.00	80.00	0.00	1341.20	767.48	0.00	15,675.68
31	Andaman & Nicobar	0.00	0.00	0.00	92.71	0.00	35.16	0.00	127.87
32	Chandigarh	0.00	0.00	0.00	0.00	0.00	78.85	0.00	78.85
33	Dadar & Nagar Haveli/ Daman & Diu	0.00	0.00	0.00	0.00	0.00	51.87	0.00	51.87
34	Delhi	0.00	0.00	2,208.40	0.00	0.00	397.40	0.00	2,605.80
35	Lakshadweep	0.00	0.00	0.00	26.83	0.00	4.97	0.00	31.80
36	Puducherry	0.00	0.00	32.50	0.00	0.00	54.11	0.00	86.61
	Total	2,15,193.00	6,620.00	25,188.26	589.20	46,968.17	1,67,709.53	8,180.00	4,70,448.16

****

ANNEXURE-II

ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 5406 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

The details of State/UT-wise Installed Renewable Capacity (Excl Large Hydro) as on 28.02.2025

(All fig in MW)

Sl. No.	STATES / UTs	Small Hydro Power	Wind Power	Bio Power	Solar Power	Total Capacity
1	Andhra Pradesh	163.31	4,096.65	574.39	5,179.23	10,013.58
2	Arunachal Pradesh	140.61	0.00	0.00	14.85	155.46
3	Assam	34.11	0.00	2.00	192.34	228.45
4	Bihar	70.70	0.00	140.22	319.44	530.36
5	Chhattisgarh	76.00	0.00	277.09	1340.54	1,693.63
6	Goa	0.05	0.00	1.94	55.44	57.43
7	Gujarat	106.64	12583.88	118.10	18,125.41	30,934.03
8	Haryana	73.50	0.00	292.62	2,025.18	2,391.30
9	Himachal Pradesh	1,000.71	0.00	10.20	170.26	1,181.17
10	Jammu & Kashmir	189.93	0.00	0.00	74.49	264.42
11	Jharkhand	4.05	0.00	20.14	199.87	224.06
12	Karnataka	1,284.73	6878.30	1909.95	9312.71	19385.69
13	Kerala	276.52	63.50	2.50	1482.14	1824.66
14	Ladakh	45.79	0.00	0.00	7.80	53.59
15	Madhya Pradesh	123.71	2844.29	150.88	5012.88	8131.76
16	Maharashtra	384.28	5279.08	2992.57	9881.37	18537.30
17	Manipur	5.45	0.00	0.00	13.79	19.24
18	Meghalaya	55.03	0.00	13.80	4.28	73.11
19	Mizoram	45.47	0.00	0.00	30.39	75.86
20	Nagaland	32.67	0.00	0.00	3.17	35.84
21	Odisha	115.63	0.00	60.05	621.84	797.52
22	Punjab	176.10	0.00	568.25	1,421.43	2,165.78
23	Rajasthan	23.85	5195.82	200.56	27,636.75	33,056.98
24	Sikkim	55.11	0.00	0.00	7.56	62.67
25	Tamil Nadu	123.05	11,518.94	1,045.45	9,768.96	22,456.40
26	Telangana	90.87	128.10	221.67	4,842.10	5,282.74
27	Tripura	16.01	0.00	0.00	21.24	37.25
28	Uttar Pradesh	49.10	0.00	2273.67	3,357.51	5,680.28
29	Uttarakhand	233.82	0.00	142.24	593.07	969.13
30	West Bengal	98.50	0.00	348.36	320.62	767.48
31	Andaman & Nicobar	5.25	0.00	0.00	29.91	35.16
32	Chandigarh	0.00	0.00	0.00	78.85	78.85
33	Dadar & Nagar Haveli/ Daman & Diu	0.00	0.00	3.75	48.12	51.87
34	Delhi	0.00	0.00	84.00	313.40	397.40
35	Lakshadweep	0.00	0.00	0.00	4.97	4.97
36	Puducherry	0.00	0.00	0.00	54.11	54.11
	Total	5,100.55	48,588.56	11,454.40	1,02,566.02	1,67,709.53

****

ANNEXURE-III

ANNEXURE REFERRED IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 5406 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

The details of Electricity generated from various sources /Fuel from 2021-22 to 2024-25 (upto Feb, 2025):

(All Figures are in Million Units)

Fuel		2021-22	2022-23	2023-24	2024-25(Upto Feb,2025)
		Generation (in MU)	Generation (in MU)	Generation (in MU)	Generation (in MU)
THERMAL	COAL	10,41,487.43	11,45,907.58	12,60,902.62	11,80,980.70
	DIESEL/HSD	117.24	229.71	400.58	400.83
	LIGNITE	37,094.04	36,188.34	33,949.79	30,177.23
	MULTI FUEL	0.00	0.00	0.00	0.00
	NAPTHA	0	0.83	0.03	0.00
	NATURAL GAS	36,015.77	23,884.21	31,295.91	29,702.23
THERMAL Total		11,14,714.48	12,06,210.67	13,26,548.93	12,41,261.08
NUCLEAR		47,112.06	45,861.09	47,937.41	51,961.76
HYDRO		1,51,627.33	1,62,098.77	1,34,053.92	1,39,780.44
Bhutan Import		7,493.20	6,742.40	4,716.10	5,368.78
Conventional Total:		13,20,947.07	14,20,912.93	15,13,256.36	14,38,372.06
Renewable Total (excluding Conventional Hydro)		1,70,912.30	2,03,552.68	2,25,834.83	2,29,731.15
Grand Total :		14,91,859.37	16,24,465.61	17,39,091.19	16,68,103.21

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5408
ANSWERED ON 03.04.2025

CURRENT POWER GENERATION CAPACITY IN ASSAM

5408. SHRI JOYANTA BASUMATARY:

Will the Minister of POWER be pleased to state:

(a) the details of Assam's current power generation capacity, regular power requirement or demand and quantum purchased from the neighbouring States;

(b) the details of the progress of the Silchar Power Project, Margherita Thermal Project and Namrup Replacement Projects in Assam;

(c) the reasons for the delay in completion of the above-mentioned power projects beyond thetarget deadline;

(d) whether Assam incurs penalties for importing electricity from the neighbouring States beyond allotted limits and if so, the details thereof;

(e) whether the Government has any plans to expedite the completion of the unfinished power projects in Assam and if so, the details of the specific timelines set for their completion and if not, the reasons therefor; and

(f) the details of the total funds allocated for the said projects and the manner in which the allocated funds have been utilised for each of the specified power projects in Assam, project wise?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : The details of Assam's current power generation capacity (location-wise) are given at Annexure-I. The details of power supply position of Assam in terms of Energy and Peak Demand during the last three years and current year (upto February 2025), are given at Annexure-II. As per the information provided by the State Government, Assam does not procure power from neighboring States directly. However, 646 MW is procured by the State through tied-up Power Purchase Agreements (PPAs) from Central Generating Companies located in neighboring States as per the following details:

(i) 285 MW is procured from NEEPCO's Kameng, Hydro Electric Project and Pare, Hydro Electric Project located in Arunachal Pradesh

(ii) 240 MW is procured from ONGC Tripura Power Company (OTPC) located at Palatana, Tripura and 57 MW from Agartala Gas Based Power Station, Tripura

.....2.

(iii) 33 MW is procured from Doyang Hydro Electric Project, Nagaland

(iv) 31 MW is procured from Loktak Hydro Electric Project, Manipur

(b) & (c) : The details of Silchar Power Project, Margherita Thermal Project and Namrup Replacement Projects in Assam indicating the present status and reason for delay are given at Annexure-III.

(d) : Assam procures power through tied-up Power Purchase Agreement (PPAs) from Generating Companies located in neighboring States. Any shortfall is met from procurement through Power Exchange markets.

(e) & (f) : Presently, two power projects are under implementation by Assam Power generation Company Limited (APGCL) viz Lower Kopili Hydro Electric Project and Karbi Langpi Middle-II Hydro Power project. The details of these projects indicating the progress, funds allocation & utilized and expected date of completion are given at Annexure-IV.

****

ANNEXURE-I

ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 5408 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

The details of Assam's current power generation capacity (location-wise) as on 28.02.2025:

All figures in MW

State	Ownership/Sector	Modewise breakup								Grand Total
		Thermal					Renewable			
		Coal	Lignite	Gas	Diesel	Total	Hydro	RES	Nuclear	
1	STATE SECTOR	0.00	0.00	306.36	0.00	306.36	100.00	5.01	0.00	411.37
2	PVT SECTOR	0.00	0.00	0.00	0.00	0.00	0.00	198.44	0.00	198.44
3	CENTRAL SECTOR	750.00	0.00	291.00	0.00	1041.00	250.00	25.00	0.00	1316.00
Total of Assam		750.00	0.00	597.36	0.00	1347.36	350.00	228.45	0.00	1925.81

****

ANNEXURE-II

ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 5408 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

The details of power supply position of Assam in terms of Energy and Peak Demand during the last three years and current year (upto February 2025, provisional)

Year	Energy Requirement	Energy Supplied	Energy Not Supplied		Peak Demand	Peak Met	Demand not Met	
	(MU)	(MU)	(MU)	%	(MW)	(MW)	(MW)	(%)
2021-22	10,844	10,825	19	0.2	2,126	2,121	5	0.2
2022-23	11,465	11,465	0	0	2,379	2,376	3	0.1
2023-24	12,445	12,341	104	0.8	2,413	2,413	0	0
2024-25* (upto February, 2025)	11,897	11,891	6	0	2,812	2,687	125	4.4

Note: (*) Data for the month of February, 2025 is provisional

MU: Million Units

****

ANNEXURE-III

ANNEXURE REFERRED IN REPLY TO PARTS (b) & (c) OF UNSTARRED QUESTION NO. 5408 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

The details of Silchar Power Project, Margherita Thermal Project and Namrup Replacement Projects of Assam Power Generation Corp Ltd in Assam:

Sl. No.	Project Name	Capacity (MW)	Location	Present Status / Reasons for delay
1.	Silchar Power Project	30	Sonabarighat, Cachar district	Project abandoned due to uncertainly of gas supply on firm basis
2.	Margherita Thermal Power Project	2 x 800	Village Saleki NC, Makum Mauza, Margherita, Tinsukia district	This Project was planned to be developed as a pit head Thermal Power Station using coal from North Eastern Coalfield Ltd (NECL). However, it was informed by CIL that sufficient quantity of coal will not be available for this Thermal Power Plant. Further, Margherita coal has high sulphur content which poses challenges for power generation due to increased emissions and corrosion. In view of these reasons, Government of Assam is not pursuing this project. Instead, Government of Assam is now planning to set up the thermal power plant of 2x800 MW capacity with allocation of coal under SHAKTI Policy.
3.	Namrup Replacement Power Project	100	NTPS, Namrup, Dibrugarh district	Project Commissioned on 16.07.2021

****

ANNEXURE-IV

ANNEXURE REFERRED IN REPLY TO PARTS (e) & (f) OF UNSTARRED QUESTION NO. 5408 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

Details of projects under implementation :

Sl. No.	Project Name	Capacity (MW)	Fund allocation and utilized	Present progress & Estimated completion
1.	Lower Kopili Hydro Electric Project	120	Fund allocation: Rs 2,319.89 Cr. Fund Utilized: Rs 2,292.46 Cr.	Physical Progress- 88 % Estimated completion: December 2025
2.	Karbi Langpi Middle-II Hydro Power project	24	Total project cost: Rs 417.32 Cr. Fund allocated: Rs 70.63 Cr. Fund Utilized: Rs 70.63 Cr. including mobilization advance, land compensation and civil works.	Physical Progress- 5 % Estimated completion: October 2027

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5410
ANSWERED ON 03.04.2025

NEW TRANSMISSION SYSTEM

5410. SHRI ANURAG SINGH THAKUR:

Will the Minister of POWER
be pleased to state:

(a) the quantum of the maximum power demand recorded in the current Financial Year 2024-25;

(b) whether the Government has been able to meet the said demand and if so, the details thereof;

(c) whether there has been an increase in energy shortages at the national level during the said period, if so, the details thereof;

(d) the average availability of electricity in rural and urban areas as of February 2025; and

(e) whether new transmission systems have been added in respect of Transmission Lines and inter-regional Transfer Capacity during the year 2024 and if so, the details thereof?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) to (c) : All India Peak Demand for FY 2024-25 (upto February, 2025) was 2,49,856 MW which occurred on 30.05.2024. This peak demand was successfully met with only a marginal gap of 2 MW.

There is adequate availability of power in the country. Present installed generation capacity of the country is 470 GW. Government of India has addressed the critical issue of power deficiency by adding 238 GW of generation capacity since April, 2014 transforming the country from power deficit to power sufficient. Further, addition of 2,01,088 circuit kilometer (ckm) of Transmission lines, 7,78,017 MVA of Transformation capacity and 82,790 MW of Inter-Regional capacity has been done since 2014 with capability of transferring 1,18,740 MW from one corner of the country to another.

The details of All India Power Supply Position of the country during the last three years and current year 2024-25 (upto February 2025) are given at Annexure. This indicates that the gap between Energy Requirement and Energy Supplied has declined to marginal level of 0.1% only during current year 2024-25 (upto February, 2025). Even this marginal gap between Energy Requirement and Energy Supplied is generally on account of constraints in the State transmission/distribution network.

(d) : The average daily hour of power supply in rural and urban areas as of February, 2025 was 22.6 hrs and 23.4 hrs respectively.

(e) : During 2024 (01-01-2024 to 31-12-2024), 11,116 ckm of transmission lines (of 220 kV & above voltage level) and 2,200 MW of Inter-Regional transfer capacity have been added in the system.

****

ANNEXURE

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 5410 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

The details of All India power supply position during the last three years and current year (upto February 2025):

Year	ENERGY			
	Energy Requirement	Energy Supplied	Energy Not Supplied	
	(MU)	(MU)	(MU)	%
2021-22	13,79,812	13,74,024	5,787	0.4
2022-23	15,13,497	15,05,914	7,583	0.5
2023-24	16,26,132	16,22,020	4,112	0.3
2024-25* (upto February, 2025)	15,47,785	15,46,229	1,555	0.1

*Data for February, 2025 is Provisional.

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5414
ANSWERED ON 03.04.2025

DEVELOPMENT OF ADVANCED TECHNOLOGIES UNDER MAHIR

5414. SHRI MUHAMMED HAMDULLAH SAYEED:

Will the Minister of POWER
be pleased to state:

(a) whether there has been progress under the Mission on Advanced and High-Impact Research (MAHIR) in developing advanced technologies for the power sector and if so, the details thereof;

(b) the details of the number of research projects approved under the scheme so far; and

(c) whether the Government has plans to ensure the commercialization of the technologies developed under the said scheme and if so, the details thereof?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) & (b): "Mission on Advanced and High-Impact Research (MAHIR)" is an initiative to identify emerging technologies in the power sector and develop them indigenously, at scale, for deployment.

The Mission has a two-tier structure - a Technical Scoping Committee (TSC) to examine research proposals on technical angle and an Apex Committee to finally approve the same. Central Power Research Institute (CPRI) has been made as a nodal agency for coordinating the mission and the approved projects will be funded by the Grants provided to CPRI for R&D activities. MAHIR has made significant progress since its launch to support advanced high-impact research in power and renewable energy. A TSC was set up with experts from Academia, Utilities and Regulatory bodies to guide and evaluate research focus areas and project proposals. Priority research domains identified include:

- **Alternatives to Li based Energy storage**
- **Geothermal energy**
- **Carbon capture and utilization**
- **AI and automation in the energy sector**

.....2.

Multiple consultations were held with experts, academia, and industry to refine research directions. A formal call for proposals was issued, resulting in submissions of proposals from various institutes, research organizations, academia and industry players. TSC have scrutinized the submitted proposals and have recommended 05 proposals for final consideration of Apex Committee.

(c) : As per the guidelines, the Mission shall fund pilot projects of technologies developed by Indian Start-ups and also facilitate its commercialization. The Start-ups will have to share the IPR with the Government of India/CPRI.

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5433
ANSWERED ON 03.04.2025

AVERAGE ENERGY EFFICIENCY OF TPPS

5433. SHRI PUTTA MAHESH KUMAR:
SHRI MAGUNTA SREENIVASULU REDDY:

Will the Minister of POWER
be pleased to state:

(a) whether the Government has conducted any study/survey regarding the energy efficiency of Thermal Power Plants (TPPs) in the country during the last five years;

(b) if so, the details and the average energy efficiency thereof;

(c) the details of the steps taken/being taken to increase energy efficiency and output of thermal power plants across the country especially in Andhra Pradesh; and

(d) whether the Government has considered for upgrading the existing technology in thermal power plants to increase efficiency across the country and if so, the details thereof?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) & (b): As per the report of Central Electricity Authority, the all India thermal efficiency of coal and lignite based plants is 35.02 % in the year 2022-23. The all India thermal Efficiency of Coal & Lignite Based Plants for the years 2018-19 to 2022-23 are given below:

Year	Efficiency (%)
2018-19	35.62
2019-20	35.69
2020-21	35.88
2021-22	35.11
2022-23	35.02

(c) & (d) : To improve the energy efficiency in Thermal Power Plants (TPPs), the TPP sector has been included under the PAT scheme. This scheme stipulates improvement in the heat rate of TPPs in a cycle of 3 years. This scheme covers a total capacity of 184 GW including 11.2 GW capacity of TPPs in Andhra Pradesh. As a result of implementation of the scheme, the TPP sector has achieved energy savings of 7.73 million tonnes of oil equivalent (MToE) including 0.146 MToE in Andhra Pradesh.

Power generation is a de-licensed activity and promoters of TPPs take conscious decision in regard to suitable technologies for their TPPs. However, Ministry of Power encourages installation of efficient Super-critical/ Ultra Super-critical units over sub-critical coal based thermal units as these units are more efficient than sub-critical units.

As on 28.03.2025, 98 super critical units totaling to 68,070 MW and 8 Ultra Supercritical units totaling to 5,560 MW have been installed in the country including 8 super critical units with total capacity of 5,840 MW in Andhra Pradesh.

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5473
ANSWERED ON 03.04.2025

DDUGJY IN UTTARAKHAND

†5473. SHRI AJAY BHATT:

Will the Minister of POWER be pleased to state:

(a) whether the Government has conducted any evaluation of the performance of Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) in Uttarakhand;

(b) if so, the details and the findings thereof;

(c) the number of villages electrified and to be electrified across the State during the last three years and the current year;

(d) whether any special steps have been taken by the Government to electrify the remaining villages; and

(e) if so, the details thereof?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) to (c) : Government of India (GoI) launched Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) in year 2014. 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 at the National level, including 91 villages in the state of Uttarakhand, were electrified under DDUGJY. Further, under Pradhan Mantri Sahaj Bijli Har Ghar Yojana (SAUBHAGYA) all willing household in rural areas and all willing poor households in urban areas were electrified of which 2,48,751 households were electrified in the State of Uttarakhand.

The impact assessment study of DDUGJY had been conducted by the M/S Ernst & Young LLP in 2022 at pan India level which highlighted 100% of villages and consumers covered under the study have reported improvement in electricity supply hours. The study mentions that many DISCOMs have reduced distribution losses owing to the revamped infrastructure. Improvements in billing efficiency and ACS-ARR gap, critical indicators of DISCOMs operational & financial performance, have also shown an improvement post-DDUGJY. However, it is pertinent to mention that, as highlighted in the report, during the implementation of the DDUGJY, DISCOMs undertook developmental works in the supply areas under other schemes as well which may also have contributed to improvement in various parameters.

.....2.

Further, the study also highlighted significant positive effect that the scheme had on business growth, education, health care, community safety and banking.

The study mentions following in respect of the State of Uttarakhand:

i. Hours of electricity supply increased to 23 hours in 2022 in comparison to 18 hours in 2015.

ii. 33% growth was observed in income between 2015 & 2022.

(d) & (e) : Government of India (GoI) launched the Revamped Distribution Sector Scheme (RDSS) in July 2021 with the objective of improving the quality and reliability of power supply to consumers through a financially sustainable and operationally efficient distribution Sector.

Grid based electrification works have also been sanctioned, wherever found feasible, under RDSS for households left out during SAUBHAGYA. Till date, works amounting to Rs. 4,643 Cr. have been sanctioned for grid electrification of 10,19,030 households. For the State of Uttarakhand, projects worth Rs 14.59 Cr. have been sanctioned for electrification works of 2049 households.

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5474
ANSWERED ON 03.04.2025

PROJECTS SANCTIONED UNDER RDSS

5474. SHRI B K PARTHASARATHI:

Will the Minister of POWER be pleased to state:

(a) the details of the total number of projects sanctioned under the Revamped Distribution Sector Scheme (RDSS), State and year-wise till date;

(b) the details of the funds sanctioned and released for the approved projects, State and year wise;

(c) whether the Government has any details regarding the total number of smart meters sanctioned under the said scheme;

(d) if so, the details thereof, State-wise and district-wise for Andhra Pradesh along with the sanctioned and awarded quantities of smart meters; and

(e) the details of the cost of the sanctioned project, grants allocated and disbursed for smart meters in the State of Andhra Pradesh?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) to (d) : Government of India launched the Revamped Distribution Sector Scheme (RDSS) in July 2021 with the objective of improving the quality and reliability of power supply to consumers through a financially sustainable and operationally efficient distribution Sector. Under the scheme, projects worth Rs. 1.51 lakh crore for loss reduction infrastructure and Rs. 1.31 lakh crore for smart metering works have been sanctioned. The State/ UT-wise and year-wise details of loss-reduction and smart metering works are placed at Annexure-IA, IB, and IC.

As part of the scheme, Government of India has been supporting grid-based electrification of households left out during SAUBHAGYA (Pradhan Mantri Sahaj Bijli Har Ghar Yojana) period, wherever found feasible. Till date, works amounting to Rs. 6,113 Cr. have been sanctioned for electrification of 12,91,833 households. This includes electrification works for households belonging to Particularly Vulnerable Tribal Group (PVTG) identified under PM-JANMAN (Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan), households belonging to Scheduled Tribes identified under DA-JGUA (Dharti Aaba Janjatiya Gram Utkarsh Abhiyan) and households identified under PM-AJAY (Pradhan Mantri Anusuchit Jaati Abhyuday Yojana). The State/UT-wise and year-wise details of household electrification works sanctioned under RDSS are placed at Annexure-IIA and IIB.

.....2.

The State/UT-wise and year-wise details of funds expended under RDSS for loss reduction works are at Annexure-III.

State-wise details of smart-meter works sanctioned are placed at Annexure-IV. District-wise details of smart metering works sanctioned and awarded under RDSS for State of Andhra Pradesh are at Annexure-V.

(e) : DISCOM-wise details of sanctioned cost, grants allocated and disbursed for smart meters under RDSS are as under:

DISCOMs	Project Cost (Rs. Cr.)	GoI Grant (Rs. Cr.)	GoI grant expended (Rs. Cr.)
APSPDCL	1,664	249	0
APCPDCL	1,513	230	0
APEPDCL	951	144	0
AP Total	4,128	623	0

****

ANNEXURE-IA

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 5474 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

State/UT-wise Loss Reduction and Smart Metering works sanctioned under RDSS

(in Rs. Cr.)

State/UTs	Sanctioned Cost of Loss Reduction Infrastructure Works	Sanctioned Cost of Smart Metering	Total Sanctioned Project Cost
Andaman & Nicobar Islands	462	54	516
Andhra Pradesh	10,710	4,128	14,838
Arunachal Pradesh	1,042	184	1,226
Assam	3,395	4,050	7,444
Bihar	9,983	2,021	12,004
Chhattisgarh	4,021	4,105	8,126
Delhi	324	13	337
Goa	247	469	716
Gujarat	6,089	10,642	16,731
Haryana	6,797	-	6,797
Himachal Pradesh	2,327	1,788	4,116
Jammu & Kashmir	4,771	1,064	5,835
Jharkhand	3,462	858	4,320
Karnataka	36	-	36
Kerala	3,018	8,231	11,249
Ladakh	876	-	876
Madhya Pradesh	9,426	8,911	18,336
Maharashtra	17,238	15,215	32,453
Manipur	615	121	737
Meghalaya	1,232	310	1,542
Mizoram	319	182	500
Nagaland	461	208	668
Puducherry	84	251	335
Punjab	3,873	5,769	9,642
Rajasthan	18,693	9,715	28,408
Sikkim	416	97	514
Tamil Nadu	9,568	19,235	28,803
Telangana	120	-	120
Tripura	598	319	917
Uttar Pradesh	21,661	18,956	40,617
Uttarakhand	1,718	1,106	2,824
West Bengal	7,223	12,670	19,893
Grand Total	1,50,803	1,30,671	2,81,474

****

ANNEXURE-IB

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 5474 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

State/UT-wise and year-wise Loss Reduction works sanctioned under RDSS

State/UT	FY22	FY23	FY24	FY25	Total
Andaman & Nicobar Islands		183	279		462
Andhra Pradesh	9,277		97	1,336	10,710
Arunachal Pradesh		800	143	99	1,042
Assam	2,609	0		786	3,395
Bihar		7,081		2,902	9,983
Chhattisgarh		3,598	34	390	4,021
Delhi		324			324
Goa		247			247
Gujarat	6,021			68	6,089
Haryana		3,158	0	3,638	6,797
Himachal Pradesh	1,913		367	47	2,327
Jammu & Kashmir	4,636			135	4,771
Jharkhand		3,262	61	139	3,462
Karnataka			4	32	36
Kerala	2,347		1	670	3,018
Ladakh		697	178		876
Madhya Pradesh	9,403		105	(83)*	9,426
Maharashtra		14,158	27	3,053	17,238
Manipur		401		214	615
Meghalaya	796		436		1,232
Mizoram	237		70	11	319
Nagaland		391	65	4	461
Puducherry		84			84
Punjab		3,873			3,873
Rajasthan	8,912		500	9,281	18,693
Sikkim		264	134	19	416
Tamil Nadu	9,066		501		9,568
Telangana			7	114	120
Tripura		485	62	52	598
Uttar Pradesh	16,746		2,266	2,649	21,661
Uttarakhand	1,447		249	22	1,718
West Bengal		7,223			7,223
Total	73,412	46,229	5,585	25,578	1,50,803

** due to cost revision*

****

ANNEXURE-IC

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 5474 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

State/UT-wise and year-wise Smart Metering works sanctioned under RDSS

(Rs. Cr.)

State/UT	FY 22	FY 23	FY 24	FY 25	Total
Andaman & Nicobar Islands		54			54
Andhra Pradesh	4,128				4,128
Arunachal Pradesh		184			184
Assam	3,677	372			4,050
Bihar		2,021			2,021
Chhattisgarh		4,105			4,105
Delhi		13			13
Goa		469			469
Gujarat	10,642				10,642
Haryana		4,967	(4,967)*		0
Himachal Pradesh	1,788				1,788
Jammu & Kashmir	1,064				1,064
Jharkhand		858			858
Karnataka					0
Kerala	8,231				8,231
Ladakh		0			0
Madhya Pradesh	8,769			142	8,911
Maharashtra		15,215			15,215
Manipur		121			121
Meghalaya	310				310
Mizoram	182				182
Nagaland		208			208
Puducherry		251			251
Punjab		5,769			5,769
Rajasthan	9,715				9,715
Sikkim		97			97
Tamil Nadu	19,235				19,235
Telangana					0
Tripura		319			319
Uttar Pradesh	18,956				18,956
Uttarakhand	1,051			55	1,106
West Bengal		12,670			12,670
Total	87,748	47,693	(4,967)	197	1,30,671

* ***Smart metering works got desanctioned***

****

ANNEXURE-II A

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 5474 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

State/UT-wise details of household electrification works sanctioned under RDSS

Sl. No.	State	Sanctioned Project Cost (Rs. Cr.)	Central Gross Budgetary Support (Rs. Cr.)	No. of Households Sanctioned
1	Andhra Pradesh	161.27	96.76	46,443
2	Arunachal Pradesh	75.52	67.97	10,136
3	Assam	785.55	706.99	1,27,111
4	Bihar	300.55	180.33	42,635
5	Chhattisgarh	423.17	253.90	80,734
6	Himachal Pradesh	6.63	5.96	100
7	Jammu & Kashmir	77.10	69.39	10,730
8	Jharkhand	199.98	119.98	38,672
9	Karnataka	35.90	21.54	5,844
10	Kerala	7.07	4.24	1,482
11	Madhya Pradesh	184.70	110.81	36,045
12	Maharashtra	57.02	34.21	17,529
13	Manipur	214.44	193.00	36,972
14	Meghalaya	435.70	392.13	50,501
15	Mizoram	79.90	71.91	15,167
16	Nagaland	69.55	62.59	10,004
17	Rajasthan	1765.08	1059.04	4,39,372
18	Tamil Nadu	29.89	17.94	10,673
19	Telangana	120.42	72.25	31,081
20	Tripura	104.52	94.08	19,853
21	Uttar Pradesh	964.48	578.69	2,58,700
22	Uttarakhand	14.59	13.13	2,049
	Total	6,113	4,227	12,91,833

****

ANNEXURE-II B

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 5474 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

State/UT-wise and year-wise details of household electrification works sanctioned under RDSS

(in Rs. Cr.)

S. No.	State	FY24	FY25	Total
1	Andhra Pradesh	97	64	161
2	Arunachal Pradesh	20	55	76
3	Assam		786	786
4	Bihar		301	301
5	Chhattisgarh		423	423
6	Himachal Pradesh		7	7
7	Jammu & Kashmir		77	77
8	Jharkhand	61	139	200
9	Karnataka	4	32	36
10	Kerala	1	6	7
11	Madhya Pradesh	105	80	185
12	Maharashtra	27	30	57
13	Manipur		214	214
14	Meghalaya	436		436
15	Mizoram	69	11	80
16	Nagaland	65	4	70
17	Rajasthan	500	1,266	1,765
18	Tamil Nadu	30		30
19	Telangana	7	114	120
20	Tripura	62	43	105
21	Uttar Pradesh	932	32	964
22	Uttarakhand	13	2	15
	Total	2,427	3,686	6,113

****

ANNEXURE-III

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 5474 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

State/UT-wise and year-wise details of funds expended under RDSS for loss reduction works

S. No.	STATE	FY 22	FY 23	FY 24	FY 25	Total
1	Andaman & Nicobar	0	0	0	0	0
2	Andhra Pradesh	274	-24	311	901	1,463
3	Arunachal Pradesh	0	0	0	43	43
4	Assam	0	10	635	761	1,406
5	Bihar	0	4	1,268	1,207	2,479
6	Chandigarh	0	0	0	0	0
7	Chhattisgarh^	0	45	178	304	527
8	Dadra & Nagar Haveli & Daman & Diu	0	0	0	0	0
9	Delhi	0	0	0	0	0
10	Goa	0	0	15	0	15
11	Gujarat	178	-167	507	670	1,188
12	Haryana	0	0	35	205	241
13	Himachal pradesh	85	-84	6	80	87
14	Jammu & Kashmir	0	67	349	624	1,040
15	Jharkhand	0	0	0	222	222
16	Karnataka	0	0	0	5	5
17	Kerala	0	0	22	153	176
18	Ladakh	0	0	79	0	79
19	Lakshadweep	0	0	0	0	0
20	Madhya Pradesh	0	179	1,006	820	2,005
21	Maharashtra	0	29	820	1,614	2,463
22	Manipur	0	17	20	58	94
23	Meghalaya	0	0	51	146	197
24	Mizoram	0	0	22	27	50
25	Nagaland	0	0	1	10	11
26	Odisha	0	0	0	0	0
27	Puducherry	0	0	0	0	0
28	Punjab	0	0	115	114	229
29	Rajasthan	0	0	531	1,094	1,624
30	Sikkim	0	0	24	12	36
31	Tamil Nadu	0	0	97	448	545
32	Telangana	0	0	2	0	2
33	Tripura	0	17	36	91	143
34	Uttar Pradesh	277	161	1,801	1,822	4,061
35	Uttarakhand	0	3	11	116	131
36	West Bengal	0	0	221	601	822
Total		814	259	8,160	12,150	21,383

****

ANNEXURE-IV

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 5474 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

State/UT-wise Smart Metering works sanctioned under RDSS

State/UTs	Consumer Meters (Nos.)	Distribution Transformer Meters (Nos.)	Feeder Meters (Nos.)	Total (Nos.)
Andaman Nicobar Islands	83,573	1,148	114	84,835
Andhra Pradesh	5,608,846	293,140	17,358	5,919,344
Arunachal Pradesh	287,446	10,116	688	298,250
Assam	6,364,798	77,547	2,782	6,445,127
Bihar	2,350,000	250,726	6,427	2,607,153
Chhattisgarh	5,962,115	210,644	6,720	6,179,479
Delhi		766	2,755	3,521
Goa	741,160	8,369	827	750,356
Gujarat	16,481,871	300,487	5,229	16,787,587
Himachal Pradesh	2,800,945	39,012	1,951	2,841,908
Jammu and Kashmir	1,407,045	88,037	2,608	1,497,690
Jharkhand	1,341,306	19,512	1,226	1,362,044
Kerala	13,289,361	87,615	6,025	13,383,001
Madhya Pradesh	12,980,102	419,396	29,708	13,429,206
Maharashtra	23,564,747	410,905	29,214	24,004,866
Manipur	154,400	11,451	357	166,208
Meghalaya	460,000	11,419	1,324	472,743
Mizoram	289,383	2,300	398	292,081
Nagaland	317,210	6,276	392	323,878
Puducherry	403,767	3,105	180	407,052
Punjab	8,784,807	184,044	12,563	8,981,414
Rajasthan	14,274,956	434,608	27,128	14,736,692
Sikkim	144,680	3,229	633	148,542
Tamil Nadu	30,000,000	472,500	18,274	30,490,774
Tripura	547,489	14,908	473	562,870
Uttar Pradesh	26,979,055	1,526,801	20,874	28,526,730
Uttarakhand	1,587,870	59,212	2,602	1,649,684
West Bengal	20,717,969	305,419	11,874	21,035,262
RDSS-Total	197,924,901	5,252,692	210,704	203,388,297

****

ANNEXURE-V

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 5474 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

District-wise details of sanction and award of Smart Meters under RDSS in the State of Andhra Pradesh

DISCOM	District	Sanctioned Qty. (Nos.)			Awarded Qty. (Nos.)		
		Consumer Meters	DT Meters	Feeder Meters	Consumer Meters	DT Meters	Feeder Meters
AP-CPDCL	Guntur	8,32,962	38,804	1,240	8,56,721	38,804	1,240
	Krishna	8,20,548	43,933	1,233	8,17,632	43,933	1,233
	Prakasam	3,97,452	30,913	1,253	4,33,038	30,913	1,253
AP-EPDCL	Eluru	2,66,487	24,765	1,217	2,67,359	24,765	1,217
	Rajamahendravaram	2,70,176	27,672	931	2,69,885	27,672	931
	Srikakulam	92,606	6,045	405	1,20,638	6,045	405
	Visakhapatnam	3,26,232	11,207	916	3,26,232	11,207	916
	Vizianagaram	2,99,739	7,555	422	2,71,126	7,555	422
AP-SPDCL	Anantapur	5,29,015	11,396	1,800	5,53,075	11,396	1,800
	Chittoor	5,56,262	56,630	2,674	5,86,691	56,630	2,674
	Kadapa	3,67,364	6,040	1,933	3,52,401	6,040	1,933
	Kurnool	4,26,565	10,112	1,574	4,24,702	10,112	1,574
	SPSR Nellore	4,23,438	18,068	1,760	3,91,563	18,068	1,760
Total		56,08,846	2,93,140	17,358	56,71,063	2,93,140	17,358

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5495
ANSWERED ON 03.04.2025

STATUS OF POWER PROJECT IN BIHAR

†5495. SHRI RAMPRIT MANDAL:
SHRI DINESH CHANDRA YADAV:
SHRI KAUSHALENDRA KUMAR:

Will the Minister of POWER be pleased to state:

(a) the details and the present status of setting up of a 2400 MW power project at a cost of Rs.21,400 crore at Pirpainti in Bihar announced at point number 31 during the Budget speech of the year 2024-25 in July; and

(b) the details of the funds utilized on the said project so far?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : Post finalization of feasibility study and detailed deliberations with Ministry of Power, Govt. of Bihar has decided to develop the Pirpainti Thermal Power project through Tariff Based Competitive Bidding (TBCB) route. In this regard, Notice Inviting Tender (NIT) dated 04.03.2025 has been floated for selection of Developer. Standing Linkage Committee (Long-Term) under Ministry of Coal has recommended coal linkage for the project on 24.02.2025.

(b): Govt. of Bihar has incurred the expenditure of about Rs. 58.67 crore for the project preconstruction and site development activities.

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5518
ANSWERED ON 03.04.2025

POWER GENERATION IN NORTH-EASTERN REGION

5518. DR. ANGOMCHA BIMOL AKOIJAM:

Will the Minister of POWER
be pleased to state:

(a) the total power demand and actual power generation in each North-Eastern State, State-wise;

(b) the number of power plants functional in each State categorized into fuel-based and hydro based power plants/stations along with their total power output, State-wise; and

(c) whether there are any ongoing or proposed projects to enhance power generation in each State and if so, the details thereof, State-wise?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) & (b) : The State-wise details of actual power supply position in North-Eastern Region for the current year (upto February, 2025) are given at Annexure-I.

The details of State-wise, Fuel-wise Power Plants functional in North Eastern Region indicating the power generated during the year 2024-25 (upto February, 2025) are given at Annexure-II.

(c) : Presently, 3 nos. of Hydro Electric projects (above 25 MW capacity) with total capacity of 5,000 MW are under construction in Arunachal Pradesh and Assam. The State-wise details of these projects are given at Annexure-III.

Further, 16 nos. of Hydro Electric projects with total capacity of 14,069 MW have been concurred by Central Electricity Authority (CEA) and are yet to be taken up for construction in the North-Eastern Region. The State-wise details of these projects are given at Annexure-IV.

****

ANNEXURE-I

ANNEXURE REFERRED IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 5518 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

The State-wise details of actual power supply position in North-Eastern Region for the current year (upto February, 2025)

State	April, 2024- February, 2025*			
	Energy Requirement	Energy Supplied	Energy not Supplied	
	(MU)	(MU)	(MU)	(%)
Arunachal Pradesh	956	956	0	0.0
Assam	11,897	11,891	6	0.0
Manipur	978	974	4	0.5
Meghalaya	1,874	1,873	1	0.0
Mizoram	647	647	0	0.0
Nagaland	865	865	0	0.0
Tripura	1,779	1,779	0	0.0
North-Eastern Region:	19,004	18,993	11	0.1

Note: (*) Figures of February, 2025 are Provisional.

****

ANNEXURE-II

ANNEXURE REFERRED IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 5518 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

The details of State-wise, Fuel-wise Power Plants in North Eastern Region indicating the power generated during the year 2024-25 (upto February, 2025):

State	Fuel	Organization	Name of Project	Capacity (in MW)	Power Generation (in MU) for 2024-25 (upto February , 2025)
Arunachal Pradesh	Hydro	NEEPCO	KAMENG	600	2,627.11
			PARE	110	368.32
			RANGANADI	405	1,025.72
			Hydro Total:	1115	4,021.15
Arunachal Pradesh Total :				1115	4,021.15
Assam	Coal	NTPC	BONGAIGAON	750	4,481.53
			Coal Total:	750	4,481.53
	Gas	APGCL	LAKWA	97.2	431.9
			LAKWA REPLACEMENT POWER PROJECT	69.755	419.89
			NAMRUP	139.4	824.14
		NEEPCO	KATHALGURI	291	1,446.26
			Gas Total:	597.355	3,122.19
	Hydro	APGCL	KARBILANGPI	100	401.5
		NEEPCO	KHONDONG	50	0
			KOPILI	200	543.13
			Hydro Total:	350	944.63
			Assam Total:	1,697.36	8,548.35
Manipur	Diesel	Electricity Department, Manipur	LEIMAKHONG	36	0
			Diesel Total:	36	0
	Hydro	NHPC	LOKTAK	105	687.4
			Hydro Total:	105	687.4
			Manipur Total:	141	687.4
Meghalaya	Hydro	Meghalaya Energy Corporation Limited (MeECL)	KYRDEMKULAI	60	88.14
			MYNTDU (LESHKA) Stage-I	126	359.86
			NEW UMTRU	40	179.9
			UMIAM Stage-I	36	106.89
			UMIAM Stage-IV	60	139.92
			Hydro Total:	322	874.71
			Meghalaya Total:	322	874.71
Mizoram	Hydro	NEEPCO	TUIRIAL	60	235.93
			Hydro Total:	60	235.93
			Mizoram Total:	60	235.93

State	Fuel	Organization	Name of Project	Capacity (in MW)	Power Generation (in MU) for 2024-25 (upto February, 2025)
Nagaland	Hydro	NEEPCO	DOYANG	75	212.54
			Hydro Total:	75	212.54
			Nagaland Total:	75	212.54
Tripura	Gas	NEEPCO	AGARTALA	135	505.41
			MONARCHAK	101	446.33
		ONGC	TRIPURA	726.6	3,528.29
		Tripura State Electricity Corporation Limited (TSECL)	BARAMURA	42	3.46
			ROKHIA	63	167.8
			Gas Total:	1,067.6	4,651.29
			Tripura Total:	1,067.6	4,651.29
Grand Total (North-Eastern Region):				4,477.96	19,231.37

****

ANNEXURE-III

ANNEXURE REFERRED IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 5518 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

The details of Hydro Electric projects (above 25 MW capacity) under construction in the North-Eastern Region

Sl. No.	Name of Scheme / (Executing Agency)	Sector	District	Installed Capacity (No. X MW.)	Cap. Under Execution (in MW)	River/Basin	Expected Date of finish/ commissioning
Arunachal Pradesh							
1	Subansiri Lower (NHPC)	Central	Lower Subansiri	8x250	2,000.00	Subansiri/ Brahmaputra	2026-27 (May, 2026)
2	Dibang Multipurpose Project (NHPC)	Central	Lower Dibang Valley	12x240	2,880.00	Dibang /Brahmaputra	2031-32 (February, 2032)
Sub-total: Arunachal Pradesh					4,880.00		
Assam							
3	Lower Kopli (APGCL)	State	Dima Hasao & Karbi Anglong	2x55+ 2x2.5+ 1x5	120.00	Kopili/ Brahmaputra	2025-26 (September, 2025)
Sub-total: Assam					120.00		
Total:					5,000.00		

****

ANNEXURE-IV

ANNEXURE REFERRED IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 5518 ANSWERED IN THE LOK SABHA ON 03.04.2025

****

The details of Hydro Electric projects which have been concurred by Central Electricity Authority (CEA) and are yet to be taken up for construction in the North-Eastern Region

Sl. No.	Name of Scheme	Sector	Developer	Installed Capacity (MW)
Arunachal Pradesh				
1.	Tawang Stage- I	Central	NHPC	600
2.	Tawang Stage- II	Central	NHPC	800
3.	Heo	Central	NEEPCO	240
4.	Tato-I	Central	NEEPCO	186
5.	Tato-II	Central	NEEPCO	700
6.	Etalin	Central	SJVNL	3,097
7.	Kalai-II	Central	THDCIL	1,200
8.	Hirong	Central	NEEPCO	500
9.	Naying	Central	NEEPCO	1,000
10.	Attunli	Central	SJVNL	680
11.	Nafra	Central	NEEPCO	120
12.	Lower Siang	Private	JAVL	2,700
13.	Demwe Lower	Private	ADPL	1,750
14.	TalongLonda	Private	GMR	225
Sub-total:				13,798
Meghalaya				
15.	Wah- Umiam Stage-III	Central	NEEPCO	85
Sub-total:				85
Nagaland				
16.	Dikhu	Private	NMPPL	186
Sub-total:				186
Grand Total:				14,069

****