

**GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.795
ANSWERED ON 02.12.2021**

SUPPLY AND DEMAND OF ELECTICITY

795. SHRI RAM KRIPAL YADAV:

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

- (a) the details of assessment of the supply and demand of electricity, State/UT-wise;**
- (b) the estimated requirement of electricity in the country during the last three years and the current year;**
- (c) the quantity of electricity likely to be available from the existing and ongoing projects in the country;**
- (d) whether the Government has decided to set up new power generation units to meet the shortage of electricity and if so, the details thereof, State/UT-wise; and**
- (e) the details of power projects to be set up by the Government for the next five years, project and State/UT-wise?**

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a): As per the Load Generation Balance Report (LGBR) 2021-22 published by Central Electricity Authority (CEA), the All India Energy Requirement for 2021-22 has been assessed as 1,474,025 Million Units (MU) and as against this, the Energy Availability is estimated as 1,568,247 MU. The States/UTs-wise details of assessment of the supply and demand of electricity in terms of Energy Requirement and Energy Availability for the year 2021-22, as estimated in LGBR 2021-22, are given at Annexure-I.

(b): The requirement of electricity in the country during the last three years and the current year is given at Annexure-II.

(c) to (e): Yes, Sir. The total installed capacity of the existing generating plants in the country is about 391 GW which has been able to cater to the Peak Demand of about 203 GW during the year 2021-22. The details of under implementation power projects project-wise and States/UTs-wise, are given in Annexure III. Besides this, Renewable energy capacity of 500 GW is targeted to be commissioned by 2030. The power projects under different stages of construction would be available to meet the increasing demand of the electricity in the country.

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 795 ANSWERED IN THE LOK SABHA ON 02.12.2021

The State/UT-wise details of assessment of the supply and demand of electricity in terms of Energy Requirement and Energy Availability for the year 2021-22, as estimated in LGBR 2021-22

State / Region	Energy			
	Requirement	Availability	Surplus / Deficit(-)	
	(MU)	(MU)	(MU)	(%)
Chandigarh	1,730	1,300	-430	-24.9
Delhi	34,850	35,430	580	1.7
Haryana	58,240	64,910	6,670	11.5
Himachal Pradesh	11,150	13,620	2,470	22.2
Jammu & Kashmir	20,120	21,590	1,470	7.3
Punjab	62,310	66,800	4,490	7.2
Rajasthan	95,740	103,870	8,130	8.5
Uttar Pradesh	141,330	152,980	11,650	8.2
Uttarakhand	14,890	12,770	-2,120	-14.2
Northern Region	440,360	473,270	32,910	7.5
Chhattisgarh	31,743	37,288	5,545	17.5
Gujarat	134,925	143,175	8,250	6.1
Madhya Pradesh	89,135	103,132	13,996	15.7
Maharashtra	188,347	196,737	8,390	4.5
Daman & Diu	2,659	2,762	103	3.9
Dadra & Nagar Haveli	8,706	8,941	235	2.7
Goa	5,050	5,325	275	5.4
Western Region	467,045	503,840	36,794	7.9
Andhra Pradesh	71,252	79,164	7,913	11.1
Karnataka	83,032	97,196	14,164	17.1
Kerala	28,085	24,986	-3,098	-11.0
Tamil Nadu	119,549	127,635	8,086	6.8
Telangana	80,003	81,829	1,826	2.3
Puducherry	3,089	3,365	276	8.9
Southern Region	386,076	415,242	29,166	7.6
Bihar	38,830	39,659	829	2.1
Damodar Valley Corporation	23,952	19,944	-4,008	-16.7
Jharkhand	11,045	9,301	-1,744	-15.8
Odisha	31,085	38,298	7,213	23.2
West Bengal	57,168	53,409	-3,759	-6.6
Sikkim	649	1,188	539	83.1
Eastern Region	162,728	153,809	-8,920	-5.5
Arunachal Pradesh	806	1,411	605	75.0
Assam	10,586	11,815	1,229	11.6
Manipur	996	1,416	420	42.2
Meghalaya	2,218	3,093	874	39.4
Mizoram	764	1,003	239	31.3
Nagaland	861	1,038	177	20.6
Tripura	1,584	3,244	1,660	104.8
North-Eastern Region	17,816	22,086	4,270	24.0
All India	1,474,025	1,568,247	94,222	6.4

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO.795 ANSWERED IN THE LOK SABHA ON 02.12.2021**The actual requirement of electricity in the country during the last three years and the current year**

Year	Energy Requirement	Energy Supplied
	(MU)	(MU)
2018-19	1,274,595	1,267,526
2019-20	1,291,010	1,284,444
2020-21	1,275,534	1,270,663
2021-22 (upto October 2021)*	821,705	817,816

()-Provisional*

ANNEXURE REFERRED TO IN REPLY TO PARTS (c) to (e) OF UNSTARRED QUESTION NO.795 ANSWERED IN THE LOK SABHA ON 02.12.2021

List of Hydro Electric Projects (above 25 MW) under active construction

Sl. No	Name of Scheme (Executing Agency)	Sector	District	I.C. (No. X MW.)	Cap. Under Execution(MW)
	Andhra Pradesh				
1	Polavaram (APGENCO/ Irrigation Dept., A.P.)	State	East & West Godavari	12x80	960.00
	Sub-total: Andhra Pradesh				960.00
	Arunachal Pradesh				
2	Subansiri Lower (NHPC)	Central	Lower Subansiri	8x250	2000.00
	Sub-total: Arunachal Pradesh				2000.00
	Assam				
3	Lower Kopli (APGCL)	State	DimaHasao&KarbiAnglong	2x55+2x2.5+1x5	120.00
	Sub-total: Assam				120.00
	Himachal Pradesh				
4	Parbati St. II (NHPC)	Central	Kullu	4x200	800.00
5	Luhri-I (SJVN)	Central	Kullu/Shimla	2x80+2x25	210.00
6	Dhaulasidh (SJVN)	Central	Hamirpur/ Kangra	2x33	66.00
7	Uhl-III (BVPCL)	State	Mandi	3x33.33	100.00
8	ShongtongKarcham (HPPCL)	State	Kinnaur	3x150	450.00
9	BajoliHoli (GMR)	Private	Chamba	3x60	180.00
10	Tidong-I (Statkraft IPL)	Private	Kinnaur	100.00	100.00
11	Kutehr (JSW Energy Ltd)	Private	Chamba	3x80	240.00
12	TangnuRomai (TRPG)	Private	Shimla	2x22	44.00
	Sub-total: Himachal Pradesh				2190.00
	Jammu & Kashmir				
13	PakalDul (CVPPL)	Central	Kishtwar	4x250	1000.00
14	Parnai (JKSPDC)	State	Poonch	3x12.5	37.50
15	Kiru (CVPPL)	Central	Kishtwar	4x156	624.00
16	Lower Kalnai (JKSPDC)	State	Kishtwar	2x24	48.00
17	Ratle (RHEPPL / NHPC)	Central	Kishtwar	4x205 + 1x30	850.00
	Sub-total: Jammu & Kashmir				2559.50
	Kerala				
18	Pallivasal (KSEB)	State	Idukki	2x30	60.00
19	Thottiyar (KSEB)	State	Idukki	1x30+1x10	40.00
	Sub-total: Kerala				100.00

	Madhya Pradesh	-	-		
20	Maheshwar (SMHPCL)	Private	Khargone&Khandwa	10x40	400.00
	Sub-total: Madhya Pradesh				400.00
	Maharashtra				
21	Koyna Left Bank (WRD,MAH)	State	Satara	2x40	80.00
	Sub-total: Maharashtra				80.00
	Punjab				
22	Shahpurkandi (PSPCL/ Irrigation Deptt.,Pb.)	State	Gurdaspur	3x33+3x33+1x8	206.00
	Sub-total: Punjab				206.00
	Sikkim				
23	Teesta St. VI NHPC	Central	South Sikkim	4x125	500.00
24	Rangit-IV (NHPC)	Central	West Sikkim	3x40	120.00
25	Bhasmey (Gati Infrastructure)	Private	East Sikkim	2x25.5	51.00
26	Rangit-II (Sikkim Hydro)	Private	West Sikkim	2x33	66.00
27	Panan (Himagiri)	Private	North Sikkim	4x75	300.00
	Sub-total: Sikkim				1037.00
	Tamil Nadu				
28	Kundah Pumped Storage Phase-I,II&III)	State	Nilgiris	4x125	500.00
	Sub-total: Tamil Nadu				500.00
	Uttarakhand				
29	Vishnugad Pipalkoti (THDC)	Central	Chamoli	4x111	444.00
30	Naitwar Mori (SJVNL)	Central	Uttarkashi	2x30	60.00
31	Tapovan Vishnugad (NTPC)	Central	Chamoli	4x130	520.00
32	Vyasi (UJVNL)	State	Dehradun	2x60	120.00
33	Tehri PSS (THDC)	Central	TehriGarhwal	4x250	1000.00
34	Lata Tapovan (NTPC)	Central	Chamoli	3x57	171.00
35	PhataByung (LANCO)	Private	Rudraprayag	2x38	76.00
	Sub-total: Uttarakhand				2391.00
	West Bengal				
36	Rammam-III (NTPC)	Central	Darjeeling	3x40	120.00
	Sub-total: West Bengal				120.00
	Total:				12663.50

The details of under implementation thermal power projects (as on 15.11.2021)

S.No.	Project Name	State	Implementing Agency	Unit No	Cap. (MW)
CENTRAL SECTOR					
1	Barh STPP-I	Bihar	NTPC	U-2	660
				U-3	660
2	Nabi Nagar STPP	Bihar	NPGCL (Subsidiary of NTPC)	U-3	660
3	Buxar TPP	Bihar	SJVN	U-1	660
				U-2	660
4	North Karanpura STPP	Jharkhand	NTPC	U-1	660
				U-2	660
				U-3	660
5	Patratu STPP	Jharkhand	PVUNL(JV of NTPC & Jharkhand BidyutVitran Nigam Ltd.)	U-1	800
				U-2	800
				U-3	800
6	Rourkela PP-II Expansion	Odisha	NSPCL (JV of NTPC & SAIL)	U-1	250
7	Ghatampur TPP	Uttar Pradesh	NUPPL (JV of NLC and UPRVUNL)	U-1	660
				U-2	660
				U-3	660
8	Khurja SCTPP	Uttar Pradesh	THDC	U-1	660
				U-2	660
9	Telangana STPP St- I	Telangana	NTPC	U-1	800
				U-2	800
TOTAL CENTRAL SECTOR					12830
STATE SECTOR					
1	Dr. Narla Tata Rao TPS St-V	AP	APGENCO	U-1	800
2	Sri Damodaram Sanjeevaiah TPP St-II	AP	APPDCL (JV of APGENCO & ILFS)	U-1	800
3	Harduaganj TPS Exp-II	Uttar Pradesh	UPRVUNL	U-1	660
4	Jawaharpur STPP	Uttar Pradesh	UPRVUNL	U-1	660
				U-2	660
5	Obra-C STPP	Uttar Pradesh	UPRVUNL	U-1	660
				U-2	660
6	Panki TPS Extn.	Uttar Pradesh	UPRVUNL	U-1	660
7	Ennore SCTPP	TN	TANGEDCO	U-1	660
				U-2	660
8	North Chennai TPP St-III	TN	TANGEDCO	U-1	800
9	Uppur Super Critical TPP*	TN	TANGEDCO	U-1	800
				U-2	800
10	Udangudi STPP Stage I	TN	TANGEDCO	U-1	660
				U-2	660
11	Bhadradri TPP	Telangana	TSGENCO	U-4	270

12	Yadadri TPS	Telangana	TSGENCO	U-1	800
				U-2	800
				U-3	800
				U-4	800
				U-5	800
13	Yelahanka CCPP	Karnataka	KPCL	GT+ST	370
14	Bhusawal TPS	Maharashtra	MAHAGENCO	U-6	660
15	Sagardighi Thermal Power Plant Ph-III	West bengal	WBDCL	U-1	660
Total State Sector					16560
PRIVATE SECTOR					
1	Tuticorin TPP St-IV	TN	SEPC	U-1	525
Total Private Sector					525
Grand Total					29915

* Uppur Super Critical TPP (2x 800 MW): Construction activities are on hold and hence not considered in five years plan.

The detailed list of under construction Nuclear Power Project is attached below

Sl. No.	Generator	Installed Capacity (MW)	State
1	PFBR NEW Unit 1	500	Tamil Nadu
2	KAKRAPARA A.P.S. Unit 3 -4	1400	Gujarat
3	RAJASTHAN A.P.S. Unit 7-8	1400	Rajasthan
4	KUDANKULAM Unit 3,4	2000	Tamil Nadu
5	GORAKHPUR Unit 1-2	1400	Haryana
6	KUDANKULAM Unit 5-6	2000	Tamil Nadu
	TOTAL	8700 MW	
