

GOVERNMENT OF INDIA
MINISTRY OF POWER
RAJYA SABHA
UNSTARRED QUESTION NO.311
ANSWERED ON 19.07.2022

ASSESSMENT OF DEMAND AND SUPPLY OF ELECTRICITY

311 SHRI RAGHAV CHADHA:

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

- (a) whether Government has conducted any assessment of the supply and demand of electricity and if so, the details thereof, State/UT-wise;
- (b) the estimated requirement of electricity in the country in the year 2022;
- (c) the quantity of electricity likely to be available from the existing and ongoing projects in the country;
- (d) whether 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 Government for the next five years, project-wise and State/UT-wise?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) to (c): Central Electricity Authority (CEA) has conducted assessment of the supply and demand of the electricity for the year 2022-23. As per the Load Generation Balance Report (LGBR) 2022-23 published by CEA, the All India Energy Requirement is assessed to be 1,505,198 Million Units (MU) as against the assessed Energy Availability 1,549,597 MU in the country for the year 2022-23.

As per the Load Generation Balance Report (LGBR) 2022-23, the details of the State/UT/Region-wise Estimated Requirement of electricity and the quantity of electricity likely to be available from the existing and ongoing projects in the country during the year 2022-23, are given at **Annexure-I**.

(d) & (e): As per the Electricity Act, 2003, Generation is a de-licensed activity and any generating company may establish, operate and maintain a generating station without obtaining a license under this Act if it complies with the technical standards related to connectivity with the grid. Concurrence of the Central Electricity Authority (CEA) is required only in case of setting up of a hydro-generating station.

The project-wise and State/UT-wise details of conventional Thermal Power Projects (TPPs), Hydro Electric Projects (HEPs) and Nuclear Power Plants which are under construction are given at **Annexure-II, Annexure-III** and, **Annexure-IV** respectively.

**ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 311
ANSWERED IN THE RAJYA SABHA ON 19.07.2022**

The details of the State/UT/Region-wise Estimated Requirement of electricity and the quantity of electricity likely to be available from the existing and ongoing projects in the country for the year 2022-23

State/UT/Region	Energy Requirement	Energy Availability	Surplus(+) / Deficit(-)	
	(MU)	(MU)	(MU)	(%)
Chandigarh	1,610	1,680	(+) 70	(+) 4.3
Delhi	35,580	29,610	(-) 5,970	(-) 16.8
Haryana	61,820	59,330	(-) 2,490	(-) 4.0
Himachal Pradesh	11,770	14,330	(+) 2,560	(+) 21.8
UT of J&K and Ladakh	20,490	17,140	(-) 3,350	(-) 16.3
Punjab	65,830	67,870	(+) 2,040	(+) 3.1
Rajasthan	104,280	104,010	(-) 270	(-) 0.3
Uttar Pradesh	147,390	151,050	(+) 3,660	(+) 2.5
Uttarakhand	14,450	12,830	(-) 1,620	(-) 11.2
Northern Region	463,220	457,850	(-) 5,370	(-) 1.2
Chhattisgarh	34,293	35,358	(+) 1,066	(+) 3.1
Gujarat	137,555	143,428	(+) 5,873	(+) 4.3
Madhya Pradesh	94,655	103,999	(+) 9,344	(+) 9.9
Maharashtra	178,257	190,247	(+)11,990	(+) 6.7
Daman & Diu	2,820	2,820	0	0.0
Dadra & Nagar Haveli	8,950	8,950	0	0.0
Goa	4,560	5,153	(+) 593	(+)13.0
Western Region	461,090	489,955	(+)28,865	(+) 6.3
Andhra Pradesh	73,438	74,505	(+) 1,067	(+) 1.5
Karnataka	81,549	98,933	(+)17,384	(+)21.3
Kerala	28,204	26,550	(-) 1,654	(-) 5.9
Tamil Nadu	119,789	122,319	(+) 2,530	(+) 2.1
Telangana	80,899	76,038	(-) 4,861	(-) 6.0
Puducherry	3,145	3,545	(+) 400	(+)12.7
Southern Region	387,024	402,852	(+)15,828	(+) 4.1
Bihar	41,102	45,136	(+) 4,034	(+) 9.8
Damodar Valley Corporation	23,959	22,385	(-) 1,574	(-) 6.6
Jharkhand	11,680	10,750	(-) 930	(-) 8.0
Odisha	39,000	40,487	(+) 1,487	(+) 3.8
West Bengal	59,118	57,637	(-)1,481	(-) 2.5
Sikkim	661	1,368	(+) 707	(+)107.0
Eastern Region	175,520	177,764	(+) 2,244	(+) 1.3
Arunachal Pradesh	851	1,373	(+) 521	(+) 61.2
Assam	11,244	11,400	(+) 156	(+) 1.4
Manipur	1,041	1,334	(+) 294	(+)28.2
Meghalaya	2,216	2,882	(+) 667	(+)30.1
Mizoram	706	974	(+) 268	(+)38.0
Nagaland	872	1,167	(+) 296	(+)33.9
Tripura	1,577	2,932	(+)1,355	(+)85.9
North-Eastern Region	18,344	21,176	(+)2,832	(+)15.4
ALL INDIA	1,505,198	1,549,597	(+)44,399	(+) 2.9

ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PARTS (d) & (e) OF UNSTARRED QUESTION NO. 311 ANSWERED IN THE RAJYA SABHA ON 19.07.2022

The project-wise and State/UT-wise details of under construction conventional Thermal Power Projects (TPPs)

Sl. No.	Project Name/ Implementing Agency	Sector	Unit No.	Capacity (MW)
	Bihar			
1	Barh STPP-I (NTPC)	Central	U-2	660
2	Barh STPP-I (NTPC)	Central	U-3	660
3	Buxar TPP (SJVN)	Central	U-1	660
			U-2	660
	Sub-total: Bihar			2640
	Telangana			
4	Telangana STPP St- I, (NTPC)	Central	U-1	800
			U-2	800
5	Yadadri TPS (TSGENCO)	State	U-1	800
			U-2	800
			U-3	800
6	Yadadri TPS	State	U-4	800
7	Yadadri TPS	State	U-5	800
	Sub-total: Telangana			5600
	Jharkhand			
8	North Karanpura STPP, (NTPC)	Central	U-1	660
9	North Karanpura STPP(NTPC)	Central	U-2	660
			U-3	660
10	Patratu STPP	Central	U-1	800
11	Patratu STPP	Central	U-2	800
12	Patratu STPP	Central	U-3	800
	Sub-total: Jharkhand			4380
	Andhra Pradesh			
13	Dr. Narla Tata Rao TPS St-V (APGENCO)	State	U-1	800
14	Sri Damodaran Sanjeevaiah TPP St-II (APPDCL)	State	U-1	800
	Sub-total: Andhra Pradesh			1600
	Karnataka			
15	Yelahanka CCPP (KPCL)	State	GT+ST	370
	Sub-total: Karnataka			370
	Uttar Pradesh			
16	Ghatampur TPP (NUPPL)	Central	U-1	660
			U-2	660
			U-3	660

17	Khurja SCTPP (THDC)	Central	U-1	660
18	Jawaharpur STPP (UPRVUNL)	State	U-1	660
			U-2	660
19	Obra-C STPP (UPRVUNL)	State	U-1	660
			U-2	660
20	Panki TPS Extn. (UPRVUNL)	State	U-1	660
21	Khurja SCTPP	Central	U-2	660
	Sub-total: Uttar Pradesh			6600
	Tamil Nadu			
22	Udangudi STPP Stage I (TANGEDCO)	State	U-1	660
23	Ennore SCTPP (TANGEDCO)	State	U-1	660
24	Ennore SCTPP	State	U-2	660
25	Udangudi STPP Stage I (TANGEDCO)	State	U-2	660
26	Uppur Super Critical TPP	State	U-1	800
27	Uppur Super Critical TPP	State	U-2	800
28	North Chennai TPP St-III (TANGEDCO)	State	U-1	800
	Sub-total: Tamil Nadu			5040
	Maharashtra			
29	Bhusawal TPS (MAHAGENCO)	State	U-6	660
	Sub-total: Maharashtra			660
	West Bengal			
30	Sagardighi Thermal Power Plant Ph-III	State	U-1	660
	Sub-total: West Bengal			660
	Total			27550

ANNEXURE REFERRED TO IN REPLY TO PARTS (d) & (e) OF UNSTARRED QUESTION NO. 311 ANSWERED IN THE RAJYA SABHA ON 19.07.2022

The project-wise and State/UT-wise details of under construction conventional Hydro Electric Projects (HEPs)

Sl. No.	Name of Scheme	Sector	District	I.C. (No. X MW)	Cap. Under Execution (MW)	River/Basin
	(Executing Agency)					
	Andhra Pradesh					
1	Polavaram (APGENCO/ Irrigation Dept., A.P.)	State	East & West Godavari	12x80	960.00	Godavari/EFR
2	Pinnapuram (Greenko AP01 IREP Private Limited)	Private	Kurnool	4x240+2x120	1200.00	Pennar Basin
	Sub-total: Andhra Pradesh				2160.00	
	Arunachal Pradesh					
3	Subansiri Lower (NHPC) #	Central	Lower Subansiri	8x250	2000.00	Subansiri/ Brahmaputra
	Sub-total: Arunachal Pradesh				2000.00	
	Assam					
4	Lower Kopli (APGCL)	State	Dima Hasao & Karbi Anglong	2x55+2x2.5+1x5	120.00	Kopili
	Sub-total: Assam				120.00	
	Himachal Pradesh					
5	Parbati St. II (NHPC)	Central	Kullu	4x200	800.00	Parbati/Beas/Indus
6	Luhri-I (SJVN)	Central	Kullu/Shimla	2x80+2x25	210.00	Satluj/Indus
7	Dhaulasidh (SJVN)	Central	Hamirpur / Kangra	2x33	66.00	Beas
8	Uhl-III (BVPCL)	State	Mandi	3x33.33	100.00	Uhl/Beas/ Indus
9	Shongtong Karcham (HPPCL)	State	Kinnaur	3x150	450.00	Satluj/ Indus
10	Tidong-I (Statkraft IPL)	Private	Kinnaur	100.00	100.00	Tidong/Satluj/Indus
11	Kutehr (JSW Energy Ltd)	Private	Chamba	3x80	240.00	Ravi/ Indus

12	Tangnu Romai (TRPG)	Private	Shimla	2x22	44.00	Pabbar/Tons/ Yamuna/ Ganga
	Sub-total: Himachal Pradesh				2010.00	
	UT of Jammu & Kashmir					
13	Pakal Dul (CVPPL)	Central	Kishtwar	4x250	1000.00	Marusadar/ Chenab / Indus
14	Parnai (JKSPDC)	State	Poonch	3x12.5	37.50	Jhelum/ Indus
15	Kiru (CVPPL)	Central	Kishtwar	4x156	624.00	Chenab/ Indus
16	Lower Kalnai (JKSPDC)	State	Kishtwar	2x24	48.00	Chenab/ Indus
17	Ratle (RHEPPL / NHPC)	Central	Kishtwar	4x205 + 1x30	850.00	Chenab/Indus
18	Kwar (CVPPPL)	Central	Kishtwar	4x135	540.00	Chenab
	Sub-total: Jammu & Kashmir				3099.50	
	Kerala					
19	Pallivasal (KSEB)	State	Idukki	2x30	60.00	Mudirapuzha/ Periyar/ Baypore Periyar/ WFR
20	Thottiyar (KSEB)	State	Idukki	1x30+1x10	40.00	Thottiyar/ Periyar/ / Baypore Periyar/ WFR
	Sub-total: Kerala				100.00	
	Madhya Pradesh	-	-			
21	Maheshwar (SMHPCL)	Private	Khargone & Khandwa	10x40	400.00	Narmada/CIRS
	Sub-total: Madhya Pradesh				400.00	
	Maharashtra					
22	Koyna Left Bank (WRD, MAH)	State	Satara	2x40	80.00	Koyna/ Krishna/EFR
	Sub-total: Maharashtra				80.00	
	Punjab					
23	Shahpurkandi (PSPCL/ Irrigation Deptt., Pb.)	State	Gurdaspur	3x33+3x33+1x8	206.00	Ravi/ Indus
	Sub-total: Punjab				206.00	
	Sikkim					
24	Teesta St. VI NHPC	Central	South Sikkim	4x125	500.00	Teesta/Brahmaputra
25	Rangit-IV (NHPC)	Central	West Sikkim	3x40	120.00	Rangit/ Teesta/ Brahmaputra

26	Bhasmey (Gati Infrastructure)	Private	East Sikkim	2x25.5	51.00	Rangpo/ Teesta/ Brahmaputra
27	Rangit-II (Sikkim Hydro)	Private	West Sikkim	2x33	66.00	Greater Rangit/ Teesta/ Brahmaputra
28	Panan (Himagiri)	Private	North Sikkim	4x75	300.00	Rangyongchu/ Teesta/ Brahmaputra
	Sub-total: Sikkim				1037.00	
	Tamil Nadu					
29	Kundah Pumped Storage Phase-I,II&III)	State	Nilgiris	4x125	500.00	Kundah/Bhavani/ Cauvery/EFR
	Sub-total: Tamil Nadu				500.00	
	Uttarakhand					
30	Vishnugad Pipalkoti (THDC)	Central	Chamoli	4x111	444.00	Alaknanada/Ganga
31	Naitwar Mori (SJVNL)	Central	Uttarkashi	2x30	60.00	Tons/Yamuna/Ganga
32	Tapovan Vishnugad (NTPC)	Central	Chamoli	4x130	520.00	Dhauliganga / Alaknanada & /Ganga
33	Tehri PSS (THDC)	Central	Tehri Garhwal	4x250	1000.00	Bhilangna/Bhagirathi/ Ganga
34	Lata Tapovan (NTPC)	Central	Chamoli	3x57	171.00	Dhauliganga /Alaknanada & Ganga
35	Phata Byung (LANCO)	Private	Rudraprayag	2x38	76.00	Mandakini/Alaknanda Ganga
	Sub-total: Uttarakhand				2271.00	
	West Bengal					
36	Rammam-III (NTPC)	Central	Darjeeling	3x40	120.00	Rammam/ Rangit/Teesta Brahmaputra
	Sub-total: West Bengal				120.00	
	Total:				14103.50	

Part of the project lies in Dhemaji district of Assam.

ANNEXURE-IV**ANNEXURE REFERRED TO IN REPLY TO PARTS (d) & (e) OF UNSTARRED QUESTION NO. 311 ANSWERED IN THE RAJYA SABHA ON 19.07.2022**

The details of under construction Nuclear Power Plants of 8,700 MW of capacity in the country

Sl. No.	Description of Nuclear Plant	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	
