

**GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.1554
ANSWERED ON 10.02.2022**

HYDROELECTRIC POWER PLANTS

1554. SHRI CHANDRA PRAKASH CHOUDHARY:

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

- (a) whether the Government proposes to install hydroelectric power plants in the States with the objective of reducing pollution;
- (b) if so, the details thereof;
- (c) the details of hydroelectric and thermal power plants installed in the State of Jharkhand during the last three years and the current year, district-wise; and
- (d) the details of the progress of such projects undertaken in the said state alongwith the estimated time frame within which these are likely to be completed?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b) : Hydro Electric Projects (HEPs) are allotted to Central, State and Private Sector Developers by the concerned State Governments. As per Section 8 (1) of the Electricity Act, 2003, any generating company intending to set up a hydro generating station is required to prepare and submit to the Central Electricity Authority (CEA) for its concurrence, a scheme estimated to involve a capital expenditure exceeding such sum (presently, ₹1000 crore), as may be fixed by the Central Government, from time to time, by notification.

The development of hydropower is of paramount importance as it is clean, green, sustainable, renewable, non-polluting and environmental friendly. It promotes conservation of fossil fuel and provides escalation free & cheapest energy in the long run.

As per information available in CEA, the status of development of HEPs (above 25 MW), is as under:

- 70 HEPs (above 25 MW capacity) aggregating to a capacity 29336.5 MW have been envisaged during the period 2021-22 to 2029-30. This includes 36 HEPs (12663.5 MW) that are under construction and 2 HEPs (213 MW) commissioned in 2021-22. The details of the same are given at Annexure-I.
- Out of 36 HEPs (above 25 MW capacity) with an aggregate installed capacity of 12,663.5 MW that are under construction in the country, 27 projects (11,427.5 MW) are under active construction and 9 projects (1,236 MW) are held up. The details of the same are given at Annexure-II.

- **29 HEPs with an aggregate installed capacity of 22768 MW were concurred by the CEA and yet to be taken up for construction for various reasons. The details of the same are given at Annexure-III.**
- **The DPR of 2 HEPs with aggregate installed capacity of 1700 MW is yet to receive concurrence of the CEA. The details of the same are given at Annexure-IV.**

(c) & (d) : No Large HEP as well as Thermal Power Project has been installed during the last three years and in the current year in the State of Jharkhand and also no large Hydroelectric Power Project is currently under construction in that State.

Two Thermal Power Projects, with an aggregate installed capacity of 4,380 MW are under construction in the State of Jharkhand. The details of the same are given at Annexure-V.

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 1554 ANSWERED IN THE LOK SABHA ON 10.02.2022

Sl. No.	Name of Project	State/ Implem. Agency	Sector	Design Energy (MU)	Likely Commissioning Year	Remarks
	2021-22					
1	Rongnichu 2x56.5= 113 MW	Sikkim/ Madhya Bharat Power Corporation Ltd.	Private	384	-	Commissioned in June 2021
2	Sorang 2x50= 100 MW	Himachal Pradesh/ Himachal Sorang Power	Private	524	-	Commissioned in Sept'2021
3	Bajoli Holi 3x60= 180 MW	Himachal Pradesh/ GMR Bajoli Holi Hydro Power Pvt. Ltd.	Private	769	2021-22	Under Construction
4	Vyasi 2x60=120 MW	UJVNL/ Uttarakhand	State	375	2021-22	Under Construction
	2022-23					
5	Naitwar Mori 2x30=60 MW	Uttarakhand/ SJVNL	Central	266	2022-23	Under Construction
6	Parbati St. II 4x200= 800 MW	Himachal Pradesh/ NHPC	Central	3125	2022-23	Under Construction
7	Thottiyar 1x30 + 1x10= 40 MW	Kerala/ KSEB	State	99	2022-23	Under Construction
8	Pallivasal 2x30= 60 MW	Kerala/ KSEB Ltd.	State	164.87	2022-23	Under Construction
9	Tidong-I 2x50= 100 MW	Himachal Pradesh/ M/s Statkraft India Pvt. Ltd.	Private	414	2022-23	Under Construction
	2023-24					
10	Subansiri Lower 8x250= 2000 MW	Arunachal Pradesh/ NHPC	Central	7421	2023-24	Under Construction
11	Tehri PSS 4x250= 1000 MW	Uttarakhand/ THDC	Central	2797	2023-24	Under Construction
12	Uhl-III 3x33.33= 100 MW	Himachal Pradesh/ Beas Valley Power Corp. Ltd. (BVPC)	State	391	2023-24	Under Construction
13	Parnai 3x12.5= 37.5 MW	Jammu & Kashmir/ JKSPDC	State	219	2023-24	Under Construction
14	Kundah Pumped Storage Phase-I 4x125=500 MW	Tamil Nadu/ TANGEDCO	State	1041	2023-24	Under Construction
15	Teesta- VI 4x125= 500 MW	Sikkim/ NHPC	Central	2440	2023-24	Under Construction
16	Tapovan Vishnugad 4x130=520 MW	Uttarakhand / NTPC	Central	2558	2023-24	Under Construction
	2024-25					
17	Pinnapuram	Andhra Pradesh/ Greenco Energy	Private	3745	2024-25	Under Examination
18	Shahpurkandi 3x33+3x33+1x8= 206 MW	Punjab/ Irr. Deptt. & PSPCL	State	999	2024-25	Under Construction
19	Vishnugad Pipalkoti 4x111= 444 MW	Uttarakhand/ THDC	Central	1674	2024-25	Under Construction
20	Rammam - III 3x40=120 MW	West Bengal/ NTPC Ltd.	Central	476	2024-25	Under Construction
21	Shongtong Karcham 3x150= 450 MW	Himachal Pradesh/ HPPCL	State	1594	2024-25	Under Construction

22	Kiru	J&K/ CVPPL	Central	2364	2024-25	Under Construction
23	Lower Kopilli	Assam/ APGCL	State	470	2024-25	Under Construction
24	Rangit-IV 3x40= 120 MW	Sikkim/ NHPC	Central	513	2024-25	Under Construction
	2025-26					
25	Polavaram 12x80=960	Andhra Pradesh/Polavaram Project Authority	State	2308	2025-26	Under Construction
26	Dhulasidh 2x24= 48 MW	Himachal Pradesh/ SJVNL	Central	304	2025-26	Under Construction
27	Kutehr	Himachal Pradesh/ JSWEPL	Private	969	2025-26	Under Construction
28	Ratle 4x205+1x30= 850 MW	Jammu & Kashmir/ Ratle Hydro Electric Project Pvt. Ltd.	Central	3137	2025-26	Under Construction
29	Pakal Dul 4x250= 1000 MW	Jammu & Kashmir/ CVPPL	Central	3330	2025-26	Under Construction
30	Luhri Stage-I	Himachal Pradesh/ SJVNL	Central	758	2025-26	Under Construction
	2026-27					
31	Phata Byung 2x38= 76 MW	Uttarakhand/ M/s Lanco	Private	341	2026-27	Under Construction
32	Tangnu Romai- I 2x22= 44 MW	Himachal Pradesh/ Tangu Romai Power Generation	Private	184	2026-27	Under Construction
33	Bhasmey 3x17= 51 MW	Sikkim/ Gati Infrastructure	Private	244	2026-27	Under Construction
34	Rangit-II 2x33= 66 MW	Sikkim/ Sikkim Hydro Power Ltd.	Private	272	2026-27	Under Construction
35	Maheshwar 10x40= 400 MW	Madhya Pradesh/ SMHPCL	Private	823	2026-27	Under Construction
36	Chanju-III	HPPCL	State	176	2026-27	Concurred
37	Deothal Chanju	HPPCL	State	101	2026-27	Concurred
38	New Ganderbal	J&K/ JKSPDC	State	383	2026-27	Concurred
39	MP 30 PSP	Madhya Pradesh/Greenko	Private	3606	2026-27	Under S&I
	2027-28					
40	Koyna Left Bank PSS 2x40= 80 MW	Maharashtra/ WRD, GO Mah.	State	168	2027-28	Under Construction
41	Lower Kalnai 2x24= 48 MW	Jammu & Kashmir/ JKSPDC	State	222	2027-28	Under Construction
42	Lata Tapovan 3x57= 171 MW	Uttarakhand/ NTPC	Central	869	2027-28	Under Construction
43	Panan 4x75= 300 MW	Sikkim/ Himgiri Hydro Energy Pvt. Ltd.	Private	1148	2027-28	Under Construction
44	Kwar	J&K/ CVPP	Central	1976	2027-28	Concurred
45	Loktak Down Stream	Manipur/ LDHCL	Central	334	2027-28	Concurred
46	Mawphu Stage-II (Wah Umiam Stage-III)	Meghalaya/ NEEPCO	Central	336	2027-28	Concurred
47	Sharavathy PSP	Karnataka/KPCL	State	4160	2027-28	Under S&I
48	Saundatti PSP	Karnataka/ Greenko	Private		2027-28	Under S&I
49	Upper Indravati	Odisha/OHPCL	State	729	2027-28	Under S&I
50	Sunni dam	SJVNL	Central	1382	2027-28	Concurred

	2028-29					
51	Talong Londa	Arunachal Pradesh/ GMR	Private	890	2028-29	Concurred
52	Turga PSP	West Bengal/ WBSEDCL	State	3066	2028-29	Concurred
53	Nafra	Arunachal Pradesh/ allotted to NEEPCO	Private	481	2028-29	Concurred
54	Heo	Arunachal Pradesh/ Velcan Energy Ltd.	Private	1000	2028-29	Concurred
55	Dibbin	Arunachal Pradesh/ fresh allotment likely	Private	371	2028-29	Concurred
56	Tato-I	Arunachal Pradesh/ fresh allotment likely	Private	803	2028-29	Concurred
57	Thana Plaun	Himachal Pradesh/HPPCL	State	544	2028-29	Concurred
58	Dikhu	Nagaland/ NMPPL	Private	614	2028-29	Concurred
59	Jhakol Sankhri	SJVNL	Central	166	2028-29	Concurred
60	Chitravathi PSP	NREDCAP/Andhra Pradesh	State	963	2028-29	Under S&I
61	Kirthai-II	JK/CVPPL		3330	2028-29	Concurred
62	Upper Sileru	APGENCO	State	3511	2028-29	Under S&I
	2029-30					
63	Teesta St-IV	Sikkim/ NHPC	Central	2373	2029-30	Concurred
64	Devsari	Uttarakhand/SJVN	Central	556	2029-30	DPR returned
65	Kirthai-I	J&K/ JKSPDC	State	1504	2029-30	DPR returned
66	Goriganga-IIIA	Uttarakhand/NHPC	Central	645	2029-30	Examination of DPR suspended
67	Kynshi-I	Meghalaya/ AKPPL	Private	1066	2029-30	Concurred
68	Bowala Nand Prayag	Uttarakhand/UJVNL	State	1340	2029-30	Returned
69	Gandikota PSP	NREDCAP/Andhra Pradesh	State	1964.92	2029-30	Under S&I
70	Owk PSP	NREDCAP/Andhra Pradesh	State	1703.33	2029-30	Under S&I

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 1554 ANSWERED IN THE LOK SABHA ON 10.02.2022

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

Sl. No.	Name of Scheme (Executing Agency)	Sector	District	I.C. (No. X MW.)	Cap. Under Execution (MW)	River/Basin	Date of finish/ commissioning
	Andhra Pradesh						
1	Polavaram (APGENCO/ Irrigation Dept., A.P.)	State	East & West Godavari	12x80	960.00	Godavari/EFR	2024-26
	Sub-total: Andhra Pradesh				960.00		
	Arunachal Pradesh						
2	Subansiri Lower (NHPC)	Central	Lower Subansiri	8x250	2000.00	Subansiri/ Brahmaputra	2022-24 (Aug'23)**
	Sub-total: Arunachal Pradesh				2000.00		
	Assam						
3	Lower Kopli (APGCL)	State	Dima Hasao&Karb iAnglong	2x55+2x 2.5+1x5	120.00	Kopili	2024-25 (Jun'24)
	Sub-total: Assam				120.00		
	Himachal Pradesh						
4	Parbati St. II (NHPC)	Central	Kullu	4x200	800.00	Parbati/Beas/ Indus	2022-23 (Mar'23)
5	Luhri-I (SJVN)	Central	Kullu/Shimla	2x80+2x 25	210.00	Satluj/Indus	2025-26 (Jan'26)
6	Dhulasidh (SJVN)	Central	Hamirpur/ Kangra	2x33	66.00	Beas	2025-26 (May'25)
7	Uhl-III (BVPCL)	State	Mandi	3x33.33	100.00	Uhl/Beas/ Indus	2023-24 (Dec'23)
8	Shongtong Karcham (HPPCL)	State	Kinnaur	3x150	450.00	Satluj/Indus	2024-25 (Mar'25)
9	Bajoli Holi (GMR)	Private	Chamba	3x60	180.00	Ravi/ Indus	2021-22 (Mar'22)
10	Tidong-I (Statkraft IPL)	Private	Kinnaur	100.00	100.00	Tidong/Satluj/ Indus	2022-23 (Oct'22)
11	Kutehr (JSW Energy Ltd)	Private	Chamba	3x80	240.00	Ravi/ Indus	2025-26 (Nov'25)
12	Tangnu Romai (TRPG)	Private	Shimla	2x22	44.00	Pabbar/Tons/ Yamuna/Ganga	Presently held-up
	Sub-total: Himachal Pradesh				2190.00		
	Jammu & Kashmir						
13	Pakal Dul (CVPPL)	Central	Kishtwar	4x250	1000.00	Marusadar/ Chenab / Indus	2025-26 (July'25)
14	Parnai (JKSPDC)	State	Poonch	3x12.5	37.50	Jhelum/ Indus	2023-24 (Dec'23)
15	Kiru (CVPPL)	Central	Kishtwar	4x156	624.00	Chenab/ Indus	2024-25 (Aug.'24)
16	Lower Kalnai (JKSPDC)	State	Kishtwar	2x24	48.00	Chenab/ Indus	Presently held-up
17	Ratle (RHEPPL / NHPC)	Central	Kishtwar	4x205 + 1x30	850.00	Chenab/Indus	2025-26 (Feb'26)
	Sub-total: Jammu & Kashmir				2559.50		
	Kerala						
18	Pallivasal (KSEB)	State	Idukki	2x30	60.00	Mudirapuzha/ Periyar/Baypore Periyar/WFR	2022-23 (Jan'23)

19	Thottiyar (KSEB)	State	Idukki	1x30+1x10	40.00	Thottiyar/ Periyar/ Baypore Periyar/ WFR	2022-23 (July'22)
Sub-total: Kerala					100.00		
Madhya Pradesh		-	-				
20	Maheshwar (SMHPCL)	Private	Khargone & Khandwa	10x40	400.00	Narmada/ CIRS	Presently held-up
Sub-total: Madhya Pradesh					400.00		
Maharashtra							
21	Koyna Left Bank (WRD, MAH)	State	Satara	2x40	80.00	Koyna/ Krishna/EFR	Presently held-up
Sub-total: Maharashtra					80.00		
Punjab							
22	Shahpurkandi (PSPCL/ Irrigation Deptt., Pb.)	State	Gurdaspur	3x33+3x33 +1x8	206.00	Ravi/ Indus	2024-25 (Aug'24)
Sub-total: Punjab					206.00		
Sikkim							
23	Teesta St. VI NHPC	Central	South Sikkim	4x125	500.00	Teesta/ Brahmaputra	2023-24 (Mar'24)
24	Rangit-IV (NHPC)	Central	West Sikkim	3x40	120.00	Rangit/ Teesta/ Brahmaputra	2024-25 (May'24)
25	Bhasmey (Gati Infrastructure)	Private	East Sikkim	2x25.5	51.00	Rangpo/Teesta/ Brahmaputra	Presently held-up
26	Rangit-II (Sikkim Hydro)	Private	West Sikkim	2x33	66.00	Greater Rangit/ Teesta/ Brahmaputra	Presently held-up
27	Panan (Himagiri)	Private	North Sikkim	4x75	300.00	Rangyongchu/ Teesta/ Brahmaputra	Presently held-up
Sub-total: Sikkim					1037.00		
Tamil Nadu							
28	Kundah Pumped Storage Phase-I,II & III)	State	Nilgiris	4x125	500.00	Kundah/ Bhavani/ Cauvery/ EFR	2023-24 (Apr'23)
Sub-total: Tamil Nadu					500.00		
Uttarakhand							
29	Vishnugad Pipalkoti (THDC)	Central	Chamoli	4x111	444.00	Alaknanda/ Ganga	2024-25 (Jun'24)
30	Naitwar Mori (SJVNL)	Central	Uttarkashi	2x30	60.00	Tons/Yamuna/Ga nga	2022-23 (Dec'22)
31	Tapovan Vishnugad (NTPC)	Central	Chamoli	4x130	520.00	Dhauliganga / Alaknanda & /Ganga	2024-25 (Jun'24)
32	Vyasi (UJVNL)	State	Dehradun	2x60	120.00	Yamuna/ Ganga	2021-22 (Mar'22)
33	Tehri PSS (THDC)	Central	Tehri Garhwal	4x250	1000.00	Bhilangna/Bhagir athi/ Ganga	2022-24 (Jun'23)
34	Lata Tapovan (NTPC)	Central	Chamoli	3x57	171.00	Dhauliganga /Alaknanda & Ganga	Presently held-up
35	Phata Byung (LANCO)	Private	Rudraprayag	2x38	76.00	Mandakini/ Alaknanda Ganga	Presently held-up
Sub-total: Uttarakhand					2391.00		
West Bengal							
36	Rammam-III (NTPC)	Central	Darjeeling	3x40	120.00	Rammam/ Rangit/Teesta Brahmaputra	2024-25 (Dec'24)
Sub-total: West Bengal					120.00		
Total:					12663.50		
** 2 units (500 MW) likely during 2022-23 & 6 units (1500 MW) during 2023-24							
*** 2 units (500 MW) likely during 2022-23 & 2 units (500 MW) during 2023-24							

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 1554 ANSWERED IN THE LOK SABHA ON 10.02.2022

Hydro Electric Schemes concurred by Central Electricity Authority and yet to be taken up for construction for various reasons

Sl. No.	Name of Scheme	State/UT	Sector	Developer	Installed Capacity (MW)	Date of CEA concurrence/ appraisal
CATEGORY-I: Pending due to Environment and Forest Clearance issues						
(a) Environment Clearance received and Forest Clearance yet to be obtained						
1.	Teesta St-IV	Sikkim	Central	NHPC	520	13.05.10
2.	Tawang St-I	Arunachal Pradesh	Central	NHPC	600	10.10.11
3.	Tawang St-II	Arunachal Pradesh	Central	NHPC	800	22.09.11
4.	TalongLonda	Arunachal Pradesh	Private	GMR	225	16.08.13
5.	Etalin	Arunachal Pradesh	Private	EHEPCL	3097	12.07.13
6.	Sunni Dam	Himachal Pradesh	Central	SJVNL	382	11.02.21
7.	Wah-Umiam Stage-III	Meghalaya	Central	NEEPCO	85	26.07.21
8.	Thana Plaun	Himachal Pradesh	State	HPPCL	191	07.09.21
9.	Kirthai-II	J&K	JV	CVPPL	930	14.06.19
Sub Total					6830	
(b) Both Environment and Forest Clearance yet to be obtained						
10.	Dikhu	Nagaland	Private	NMPPL	186	31.03.14
11.	Attunli	Arunachal Pradesh	Private	AHEPCL	680	02.07.18
12.	Sawalkot	J&K	Central	NHPC	1856	18.04.18
Sub Total					2722	
(c) Environment and Forest Clearance Sub-judice						
13.	Kotlibhel Stage -1A	Uttarakhand	Central	NHPC	195	03.10.06
14.	Kotlibhel	Uttarakhand	Central	NHPC	320	31.10.06
15.	Alaknanda	Uttarakhand	Private	GMRL	300	08.08.08
16.	Turga Pumped Storage Project	West Bengal	State	WBSPCL	1000	05.10.16
Sub total					1815	
Total (pending for E&F clearance)					11367	
CATEGORY-II: Environment and Forest Clearance accorded and pending due to other reasons						
17.	Kwar	J&K	Joint Venture	CVPPL	540	23.02.17
18.	Loktak Downstream	Manipur	JV	LDHCL	66	05.05.17
19.	Dibang	Arunachal Pradesh	Central	NHPC	2880	18.09.17
20.	New Ganderwal	J&K	State	JKSPDC	93	10.06.14
Total (pending for other reasons)				3579		
CATEGORY-III: MoU/ MoA/ Implementation agreement cancelled/ terminated						

Sl. No.	Name of Scheme	State/UT	Sector	Developer	Installed Capacity (MW)	Date of CEA concurrence/ appraisal
21.	Chhatru	Himachal Pradesh	Private	DSIL	126	15.01.15
22.	Hirong	Arunachal Pradesh	Private	JAPL	500	10.04.13
23.	Naying	Arunachal Pradesh	Private	NDSCPL	1000	11.09.13
	Subtotal (MoU cancelled)				1626	
CATEGORY- IV: Validity of concurrence expired						
24.	Lower Siang	Arunachal Pradesh	Private	JAVL	2700	16.02.10
25.	Demwe Lower	Arunachal Pradesh	Private	ADPL	1750	20.11.09
26.	Kalai-II	Arunachal Pradesh	Private	Kalai PPL	1200	27.03.15
27.	Heo	Arunachal Pradesh	Private	HHPPL	240	28.07.15
28.	Tato-I	Arunachal Pradesh	Private	SHPPL	186	28.10.15
29.	Miyar	Himachal Pradesh	Central	NTPC	120	07.02.13
	Subtotal (Concurrence expired)				6196	
	Grand Total				22768	

ANNEXURE-IV**ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 1554 ANSWERED IN THE LOK SABHA ON 10.02.2022**

Hydro- Electric Schemes under Examination in CEA**As on 31.01.2022**

S. No.	Scheme	State	Sector	Agency	Installed Capacity (MW)		Month of Receipt
1	Pinnapuram PSP	Andhra Pradesh	Private	GEPL	4x240+2x120	1200	Dec-20
2	Dugar	Himachal Pradesh	Central	NHPC	4x103 + 2x44	500	Jan-21
	Total				1700		

ANNEXURE-V**ANNEXURE REFERRED TO IN REPLY TO PARTS (c) & (d) OF UNSTARRED QUESTION NO. 1554 ANSWERED IN THE LOK SABHA ON 10.02.2022**

Details of under construction Thermal Projects in Jharkhand

Sl. No.	Project Name	District	Implementing Agency	Unit No.	Capacity (MW)	Anticipated date of Trial Run
1	North Karanpura STPP	Chatra	NTPC	U-1	660	Apr-22
				U-2	660	May-23
				U-3	660	Jan-24
2	Patratu STPP	Ramgarh	PVUNL (JV of NTPC & Jharkhand Bidyut Vitran Nigam Ltd.)	U-1	800	Feb-24
				U-2	800	Aug-24
				U-3	800	Feb-25
