GOVERNMENT OF INDIA MINISTRY OF POWER

RAJYA SABHA UNSTARRED QUESTION NO.3836

ANSWERED ON 05.04.2022

INSTALLATION OF HYDROELECTRIC POWER PLANTS ACROSS THE COUNTRY

3836 DR. KANIMOZHI NVN SOMU:

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

- (a) the details of plans proposed by Government for the installation of hydroelectric power plants across the country with the objective of reducing pollution, State-wise;
- (b) the details of hydroelectric and thermal power plants installed in Tamil Nadu during the last three years, district-wise; and
- (c) the details of progress of such projects undertaken in Tamil Nadu and the estimated time frame within which these are likely to be completed?

ANSWER

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY (SHRI R.K. SINGH)

(a): As per Section 8 (1) of Electricity Act, 2003, any generating company intending to set-up a hydro generating station involving capital expenditure of more than 1000 Cr. is required to get its project cleared by the Central Electricity Authority.

As per information available in CEA, 98 HEPs with aggregate installed capacity of 58,196.5 MW are in pipeline in the country at various stages. The present status of these HEPs is as under:

- 31 HEPs with aggregate installed capacity of 21,065 MW are at Survey and Investigation stage. Details are given at **Annexure-I.**
- Detailed Project Reports (DPRs) of 2 HEPs with aggregate installed capacity of 1,700 MW are at examination stage in CEA for concurrence. Details are given at **Annexure-II.**
- DPRs of 29 HEPs with aggregate installed capacity of 22,768 MW have been concurred by CEA and yet to be taken up for construction for various reasons. Details are given at Annexure-III.
- 36 HEPs (above 25 MW) with aggregate installed capacity of 12,663.5 MW are under construction in the country. Details are given at **Annexure-IV**.
- (b): No HEP was installed during last three years in the State of Tamil Nadu. However, 3 Thermal Power Projects (TPPs) with aggregate installed capacity of 1,525 MW have been commissioned during last three years in the State. Details are given at **Annexure-V.**
- (c): The details of under construction power projects in the State of Tamil Nadu alongwith their expected date of commissioning are given at **Annexure-VI**.

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 3836 ANSWERED IN THE RAJYA SABHA ON 05.04.2022

As on 30.03.2022

Hydro Electric Projects under Survey and Investigation, being coordinated by Central Electricity Authority

Sl. No.	Name of Project	State	Developer	Туре	Sector	Installed Capacity (MW)
1	Uri-I (Stage-II)	Jammu &Kashmir	NHPC Ltd.	ROR	Central	240
2	Dulhasti Stage-II	Jammu & Kashmir	NHPC Ltd.	ROR	Central	260
3	Luhri Stage-II	Himachal Pradesh	SJVN Ltd.	ROR	Central	172
4	Jangi Thopan Powari	Himachal Pradesh	SJVN Ltd.	ROR	Central	804
5	Purthi	Himachal Pradesh	SJVN Ltd.	ROR	Central	232
6	Bardang	Himachal Pradesh	SJVN Ltd.	ROR	Central	175
7	Sachkhas	Himachal Pradesh	SJVN Ltd.	ROR	Central	288
8	Sirkari Bhyol Rupsiabagar	Uttarakhand	UJVNL	ROR	State	120
9	Bokang Bailing	Uttarakhand	THDC India Ltd.	ROR	Central	200
10	Devsari	Uttarakhand	SJVN Ltd.	ROR	Central	194
11	Anjaw	Arunachal Pradesh	Lohit Urja Pvt. Ltd.	ROR	Private	270
12	Demwe Upper St-I	Arunachal Pradesh	Lohit Urja Pvt. Ltd.	ROR	Private	270
13	Niare	Arunachal Pradesh	Andra Power Private Limited	ROR	Private	860
14	Myntdu Leshka Stage-II	Meghalaya	MePGCL	ROR	State	210
15	Upper Indravati	Odisha	OHPCL	PSP	State	600
16	Balimela	Odisha	OHPCL	PSP	State	500
17	Upper Kolab	Odisha	OHPCL	PSP	State	320
18	Sharavathy	Karnataka	KPCL	PSP	State	2000
19	Saundatti	Karnataka	Greenko	PSP	Private	1260
20	MP 30 Gandhi Sagar	Madhya Pradesh	Greenko	PSP	Private	1440
21	Kodayar	Tamil Nadu	TANGEDCO	PSP	State	500
22	Sillahalla St-I	Tamil Nadu	TANGEDCO	PSP	State	1000
23	Upper Sileru	Andhra Pradesh	APGENCO	PSP	State	1350
24	Kurukutti	Andhra Pradesh	NREDCAP	PSP	State	1200
25	Karrivalasa	Andhra Pradesh	NREDCAP	PSP	State	1000
26	Gandikota	Andhra Pradesh	NREDCAP	PSP	State	1000
27	Owk	Andhra Pradesh	NREDCAP	PSP	State	800
28	Somasila	Andhra Pradesh	NREDCAP	PSP	State	900
29	Chitravathi	Andhra Pradesh	NREDCAP	PSP	State	500
30	Yerravaram	Andhra Pradesh	NREDCAP	PSP	State	1200
31	Warasagaon	Maharashtra	WRD, Maharashtra	PSP	State	1200
	Total					21065

Note: ROR- Run of River

PSP- Pumped Storage Project

ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 3836 ANSWERED IN THE RAJYA SABHA ON 05.04.2022

As on 30.03.2022

Hydro Electric Schemes under Examination in Central Electricity Authority for concurrence

Sl. No.	Name of the Project	State	Sector	Developer	Installed Capacity (MW)		
1.	Dugar HE Project	Himachal Pradesh	Central	NHPC	500		
2.	Pinnapuram Standalone PSP	Andhra Pradesh	Private	Private	1200		
	Total						

ANNEXURE-III

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 3836 ANSWERED IN THE RAJYA SABHA ON 05.04.2022

As on 30.03.2022

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

Sl. No	Name of Scheme	State/UT	Sector	Developer	Installed Capacity (MW)	Date of CEA concurrence	Remarks
1.	Teesta St-IV	Sikkim	Central	NHPC	520	13.05.10	EC accorded on 09.01.14. FC-I accorded on 26.02.13. FC-II yet to be obtained.
2.	Tawang St-I	Arunachal Pradesh	Central	NHPC	600	10.10.11	EC accorded on 10.6.11. FC-I & FC-II yet to be obtained.
3.	Tawang St-II	Arunachal Pradesh	Central	NHPC	800	22.09.11	EC accorded on 10.06.11 (valid till 09.06.2024). FC-I accorded on 08.01.14. FC-II yet to be obtained.
4.	TalongLonda	Arunachal Pradesh	Private	GMR	225	16.08.13	EC accorded on 07.08.15. FC-I & FC-II yet to be obtained.
5.	Etalin	Arunachal Pradesh	Private	EHEPCL	3097	12.07.13	EC recommended by EAC on 31.01.17. Formal letter will be issued after FC-I. FC-I & FC-II yet to be obtained.
6.	maD innuS	lahcamiH hsedarP	lartneC	LNVJS	382	11.02.21	EC accorded by MoEF&CC on 04.02.2022. FC-I accorded on 22.12.2021. FC-II yet to be obtained.
7.	Wah-Umiam Stage-III	Meghalaya	Central	NEEPCO	85	26.07.21	EC recommended by EAC on 26.02.2018. FC-I and FC-II yet to be obtained.
8.	Thana Plaun	Himachal Pradesh	State	HPPCL	191	07.09.2021	EC recommended by EAC subject to condition of Stage-I FC. FC-I and FC-II yet to be obtained.
9.	Kirthai-II	J&K	JV	CVPPL	930	14.06.19	EC recommended by MoEF&CC on 15.04.2021 and FC yet to be obtained.
10.	Turga Pumped Storage Project	West Bengal	State	WBSPCL	1000	05.10.16	FC-I accorded on 12.04.18. FC-II yet to be obtained.

11.	Sawalkot	J&K	Central	NHPC	1856	18.04.18	EC recommended by EAC on
							31.01.2017 (MoEF&CC delisted EC for the project on 04.08.2017 and further relisted on
							24.01.2022). FC yet to be obtained.
12.	Dikhu	Nagaland	Private	NMPPL	186	31.03.14	EC yet to be obtained by developer. FC not applicable as forest land is not involved.
13.	Attunli	Arunachal Pradesh	Private	AHEPCL	680	02.07.18	Both EC and FC are yet to be obtained.
14.	Kotlibhel Stage -IA	Uttarakhand	Central	NHPC	195	03.10.06	EC accorded on 09.05.2007. EC expired in May'2012. FC-I accorded on 13.10.2011 FC-I expired on Oct'2016
							The project is included in the list of 24 projects under review by Hon'ble Supreme Court.
15.	Kotlibhel Stage-IB	Uttarakhand	Central	NHPC	320	31.10.06	EC accorded earlier on 14.08.07 is withdrawn on 22.11.10. MoEF&CC declined FC-I on 07.07.11.
							The project is included in the list of 24 projects under review by Hon'ble Supreme Court.
16.	Alaknanda	Uttarakhand	Private	GMRL	300	08.08.08	EC accorded on 12.3.2008, FC-I accorded on 08.11.2011. FC-II accorded on 09.11.2012.
							The project is included in the list of 24 projects under review by Hon'ble Supreme Court.
17.	Kwar	J&K	Joint Venture	CVPPL	540	23.02.17	EC accorded on 10.04.17. FC accorded on 08.08.14.
							Investment approval under process.
18.	Loktak Downstream	Manipur	JV	LDHCL	66	05.05.17	EC accorded on 16.01.13. FC-I accorded on 03.03.11 & FC-II accorded on 22.12.2014.
							Investment approval under process.
19.	Dibang	Arunachal Pradesh	Central	NHPC	2880	18.09.17	EC accorded on 19.05.15. FC-I accorded on 15.04.15. FC-II accorded on 12.03.20.
							Investment approval under process.

20.	New Ganderwal	J&K	State	JKSPDC	93	10.06.14	EC restored on 9.10.15. FC accorded on 02.04.2012.
21.	Chhatru	Himachal Pradesh	Private	DSIL	126	15.01.15	EC recommended by EAC on 24.02.15, Letter will be issued after FC-I.
							FC-I & FC-II yet to be obtained.
							Govt. of Himachal Pradesh vide its letter dated 3.10.2019 has cancelled allotment of Chhatru HEP which was allotted on 28.7.2007 to M/S DCM Shriram Infrastructure limited, and terminated the Pre-Implementation Agreement (PIA) signed on 15.2.2008.
22.	Hirong	Arunachal Pradesh	Private	JAPL	500	10.04.13	EC & FC yet to be obtained by developer.
		Tradesii					Government of Arunachal Pradesh videletter dated 21.04.2021 withdrawn/cancelled allotment of Hirong HEP to M/s. JAPL.
23.	Naying	Arunachal Pradesh	Private	NDSCPL	1000	11.09.13	EC & FC yet to be obtained by developer. Government of Arunachal Pradesh vide letter dated 27.04.2021 cancelled allotment of Naying HEP to M/s. NDSCPL.
24.	Lower Siang	Arunachal Pradesh	Private	JAVL	2700	16.02.10	EC & FC yet to be obtained by developer.
25.	Demwe Lower	Arunachal Pradesh	Private	ADPL	1750	20.11.09	EC accorded on 12.02.10. EC extended till 11.02.2023. FC-I accorded on 01.03.2012. FC-II accorded on 03.05.2013. Presently, Project is under NCLT.
26.	Kalai-II	Arunachal Pradesh	Private	Kalai PPL	1200	27.03.15	EC accorded 20.5.15. Final order will be issued after obtaining FC-I. FC-I and FC-II yet to be obtained.
27.	Нео	Arunachal Pradesh	Private	HHPPL	240	28.07.15	EC accorded on 10.11.15. FC-I accorded on 27.10.15. FC-II yet to be obtained.
28.	Tato-I	Arunachal Pradesh	Private	SHPPL	186	28.10.15	EC accorded on 10.11.15. FC-I accorded on 27.10.15. FC-II yet to be obtained.
29.	Miyar	Himachal Pradesh	Central	NTPC	120	07.02.13	EC accorded on 30.07.12. FC-I accorded on 27.07.12. FC-II yet to be obtained.
	Grand Total	•			22768	3	

Abbreviations:

EC : Environment Clearance

FC : Forest Clearance

EAC : Environment Appraisal Committee

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 3836 ANSWERED IN THE RAJYA SABHA ON 05.04.2022

As on 30.03.2022

Hydro Electric Project (above 25 MW) under construction in the Country

Sl. No.	Name of Project	State	Sector	Developer	Installed Capacity (MW)	Anticipated commissioning Date
1	Polavaram	Andhra Pradesh	State	(APGENCO/ Irrigation Dept., A.P.)	960.00	2024-26
2	Subansiri Lower #	Arunachal Pradesh	Central	NHPC	2000.00	2022-24 (Aug'23)**
3	Lower Kopli	Assam	State	APGCL	120.00	2024-25 (Jun'24)
4	Parbati St. II	Himachal Pradesh	Central	NHPC	800.00	2022-23 (Mar'23)
5	Luhri-I	Himachal Pradesh	Central	SJVN	210.00	2025-26 (Jan'26)
6	Dhaulasidh	Himachal Pradesh	Central	SJVN	66.00	2025-26 (May'25)
7	Uhl-III	Himachal Pradesh	State	BVPCL	100.00	2023-24 (Dec'23)
8	Shongtong Karcham	Himachal Pradesh	State	HPPCL	450.00	2024-25 (Mar'25)
9	Bajoli Holi	Himachal Pradesh	Private	GMR	180.00	2021-22 (Mar'22)
10	Tidong-I	Himachal Pradesh	Private	Statkraft IPL	100.00	2022-23 (Oct'22)
11	Kutehr	Himachal Pradesh	Private	JSW Energy Ltd	240.00	2025-26 (Nov'25)
12	Tangnu Romai	Himachal Pradesh	Private	TRPG	44.00	2024-25 *
13	Pakal Dul	UT of Jammu & Kashmir	Central	CVPPL	1000.00	2025-26 (July'25)
14	Parnai	UT of Jammu & Kashmir	State	JKSPDC	37.50	2023-24 (Dec'23)
15	Kiru	UT of Jammu & Kashmir	Central	CVPPL	624.00	2024-25 (Aug.'24)
16	Lower Kalnai	UT of Jammu & Kashmir	State	JKSPDC	48.00	2025-26 *
17	Ratle	UT of Jammu & Kashmir	Central	RHEPPL / NHPC	850.00	2025-26 (Feb'26)
18	Pallivasal	Kerala	State	KSEB	60.00	2022-23 (Sept'22)
19	Thottiyar	Kerala	State	KSEB	40.00	2022-23 (Dec'22)

20	Maheshwar	Madhya Pradesh	Private	SMHPCL	400.00	2023-24 *
21	Koyna Left Bank	Maharashtra	State	WRD, Maharashtra	80.00	2025-26 *
22	Shahpurkandi	Punjab	State	PSPCL/ Irrigation Deptt., Punjab.	206.00	2024-25 (Aug'24)
23	Teesta St. VI	Sikkim	Central	NHPC	500.00	2023-24 (Mar'24)
24	Rangit-IV	Sikkim	Central	NHPC	120.00	2024-25 (May'24)
25	Bhasmey	Sikkim	Private	Gati Infrastructure	51.00	2024-25*
26	Rangit-II	Sikkim	Private	Sikkim Hydro	66.00	2024-25 *
27	Panan	Sikkim	Private	Himagiri	300.00	2025-26 *
28	Kundah Pumped Storage Phase-I, II & III)	Tamil Nadu	State	TANGEDCO	500.00	2023-24 (Mar'24)
29	Vishnugad Pipalkoti	Uttarakhand	Central	THDC	444.00	2024-25 (Jun'24)
30	Naitwar Mori	Uttarakhand	Central	SJVNL	60.00	2022-23 (Dec'22)
31	Tapovan Vishnugad	Uttarakhand	Central	NTPC	520.00	2024-25 (Jun'24)
32	Vyasi	Uttarakhand	State	UJVNL	120.00	2021-22 (Mar'22)
33	Tehri PSS	Uttarakhand	Central	THDC	1000.00	2022-24*** (Jun'23)
34	Lata Tapovan	Uttarakhand	Central	NTPC	171.00	2025-26*
35	Phata Byung	Uttarakhand	Private	LANCO	76.00	2024-25 *
36	Rammam-III	West Bengal	Central	NTPC	120.00	2024-25 (Dec'24)
	Total:				12663.50	

^{*} The Project is presently stalled. Commissioning is subject to immediate restart of works

 $^{**\ 2}$ 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

[#] Part of the project lies in Dhemaji district of Assam.

ANNEXURE-V

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 3836 ANSWERED IN THE RAJYA SABHA ON 05.04.2022

As on 30.03.2022

Details of Thermal Power Plants commissioned during last three years in State of Tami Nadu

Sl. No.	Project Name	District	Developer	LOA Date	Fuel	Unit No.	Installed Capacity (MW)	Date of capacity Addition	
FY 2	018-19								
				NIL					
FY 2	2019-20								
1	Neyveli New TPP	Neyveli	NLC	Jun-11	Lignite	1	500	20.12.2019	
FY 2	020-21								
2	Neyveli New TPP	Neyveli	NLC	Jun-11	Lignite	2	500	03.02.2021	
FY 2	FY 2021-22								
3	Tuticorin TPP, St-IV	Thoothukudi	SEPC	Jan-14	Coal	1	525	30.11.2021	
			1525						

ANNEXURE-VI

ANNEXURE REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 3836 ANSWERED IN THE RAJYA SABHA ON 05.04.2022

Power Projects under Construction in the State of Tamil Nadu

Sl. No.	Project	Capacity	Туре	Physical Progress	Expected Commissioning
1	NCTPS Stage-III	800 MW	Thermal	89.10%	September 2022
2	Ennore SEZ	1320 MW	Thermal	51.80%	2023-2024
3	Udangudi Stage-I	1320 MW	Thermal	57.50%	2023-2024
4	Kundah	500 MW	Pumped Storage	27%	2024
5	Kollimalai	20 MW	Hydro	44.50%	2023