

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.4471
ANSWERED ON 27.03.2025**

THERMAL POWER PROJECTS IN TAMIL NADU

4471. SHRI MANI A:

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

- (a) the number of thermal power projects being developed in the country, including Tamil Nadu;**
- (b) the rationale behind the Government's proposal to expand thermal power capacity in the country and the specific capacity addition targets in megawatts set for the upcoming projects;**
- (c) whether the Government has a detailed plan outlining the proposed thermal power projects including their locations, expected timelines for commissioning and the projected financial outlays, if so, the details thereof; and**
- (d) the manner in which the Government plans to reconcile the expansion of thermal power capacity with its long-term commitments to renewable energy development and reduction of carbon emissions under international climate agreements?**

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) to (c): In order to meet the estimated electricity demand by 2031-32, generation planning studies has been carried out by Central Electricity Authority (CEA). As per the study results, it is envisaged that to meet the base load requirement of the country in 2032, the required coal & lignite based installed capacity would be 283 GW. Considering this, Government of India (Gol) has proposed in November, 2023 for setting up of an additional minimum 80,000 MW coal-based thermal capacity by 2031-32.

Against this target, a total coal-based capacity of 9,350 MW has already been commissioned in 2023-24 & 2024-25 and currently, 32,300 MW of thermal capacity is under construction. In FY 2024-25, contracts for 23,440 MW thermal capacity have been awarded, out of which about 8,000 MW is now under construction. Further, 35,180 MW of coal-based candidate capacity has been identified which is at various stages of planning in the country. This includes both Brownfield expansion and Greenfield capacity.

A total number of 23 Coal Based Thermal Power Projects (43 Units) are being developed(under construction) in the country, including 3 number of Coal Based Thermal Power Projects (5 Units)in State of Tamil Nadu. The detailed plan outlining the under construction thermal power projects including their locations & expected timelines for commissioning is at Annexure.

The estimated capital cost for setting up of new coal based thermal capacity as considered in National Electricity Plan is Rs 8.34 Cr/ MW (at 2021-22 price level). Hence, the thermal capacity addition of 80,000 MW is expected to entail an expenditure of minimum Rs 6,67,200 Crs by 2031-32.

(d) : While the expansion of thermal power capacity, as mentioned above, is essential to meet the base load requirement of the country, India stands committed to achieve about 50 percent cumulative electric power installed capacity from non-fossil fuel based energy resources by 2030 in its Intended Nationally Determined Contributions (INDCs). At present India has already achieved 47.3 percent installed capacity from non-fossil fuel based resources. In line with its long term commitment for renewable energy development and reduction of carbon emissions, following initiatives have been taken by Government of India:

- 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 augment transmission infrastructure needed for steep RE trajectory, transmission plan has been prepared till 2030.**
- xii. **Electricity (Promoting Renewable Energy Through Green Energy Open Access) Rules, 2022, has been notified on 06th June 2022 with objective of ensuring access to affordable, reliable, and sustainable green energy for all. Green Energy Open Access is allowed to any consumer with contract demand of 100 kW or above through single or multiple single connection aggregating One Hundred kW or more located in same electricity division of a distribution licensee.**
- xiii. **Green Term Ahead Market (GTAM) has been launched to facilitate sale of Renewable Energy Power through exchanges.**
- xiv. **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 with an outlay of Rs. 24,000 crore. This will enable manufacturing capacity of Giga Watt (GW) scale in High Efficiency Solar PV Module.**
- xv. **Promotion of installation of efficient Ultra Supercritical/Supercritical units over Subcritical Thermal Units.**
- xvi. **Biomass co-firing- Ministry of Power has issued revised policy on Bio-mass Utilization for Power Generation through Co-firing in Coal based Power Plants which mandated all coal based thermal power plants in the country to use 5-7% biomass along with coal for power production.**
- xvii. **MoEF&CC vide its notification dated 07.12.2015 and its subsequent amendments has notified norms in respect of reducing stack emissions from coal based Thermal Power Plants.**

ANNEXURE

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 4471 ANSWERED IN THE LOK SABHA ON 27.03.2025

Details of Under Construction Thermal Capacity (Coal Based) [As on 25.03.2025]

Sl. No	Project Name/ Impl. Agency	Sector	State	Unit No.	Capacity (MW)	Anticipated Trial Run Date
F Y. 2024-25						
1	North Chennai TPP, St-III (TANGEDCO)	STATE	Tamil Nadu	U-1	800	Mar-25
2	Yadadri TPS (TSGENCO)	STATE	Telangana	U-1	800	Mar-25
3	Obra-C STPP (UPRVUNL)	STATE	Uttar Pradesh	U-2	660	Mar-25
4	Patratu STPP (PVUNL)	CENTRAL	Jharkhand	U-1	800	Mar-25
5	North Karanpura STPP (NTPC)	CENTRAL	Jharkhand	U-3	660	Mar-25
6	Barh STPP St-I (NTPC)	CENTRAL	Bihar	U-3	660	Mar-25
Sub-Total					4,380	
F Y. 2025-26						
7	Udangudi STPP St-I (TANGEDCO)	STATE	Tamil Nadu	U-1	660	May-25
8	Sagardighi TPP St-III (WBPDCL)	STATE	West Bengal	U-1	660	May-25
9	Ghatampur TPP (NUPPL)	CENTRAL	Uttar Pradesh	U-2	660	May-25
10	Buxar TPP (SJVN)	CENTRAL	Bihar	U-1	660	May-25
11	Yadadri TPS (TSGENCO)	STATE	Telangana	U-4	800	Jun-25
12	Khurja SCTPP (THDC)	CENTRAL	Uttar Pradesh	U-2	660	Jun-25
13	Yadadri TPS (TSGENCO)	STATE	Telangana	U-3	800	Jul-25
14	Udangudi STPP St-I (TANGEDCO)	STATE	Tamil Nadu	U-2	660	Aug-25
15	Yadadri TPS (TSGENCO)	STATE	Telangana	U-5	800	Sep-25
16	Buxar TPP (SJVN)	CENTRAL	Bihar	U-2	660	Sep-25
17	Ghatampur TPP (NUPPL)	CENTRAL	Uttar Pradesh	U-3	660	Oct-25
18	Patratu STPP (PVUNL)	CENTRAL	Jharkhand	U-2	800	Dec-25
19	Patratu STPP (PVUNL)	CENTRAL	Jharkhand	U-3	800	Mar-26
Sub-Total					9,280	
F Y. 2026-27						
20	Ennore SCTPP (TANGEDCO)	STATE	Tamil Nadu	U-1	660	Sept-26
21	Ennore SCTPP (TANGEDCO)	STATE	Tamil Nadu	U-2	660	Nov-26
22	Mahan STPP, St-II (Mahan Energen)	PRIVATE	M. P.	U-3	800	Dec-26
Sub-Total					2,120	
F Y. 2027-28						
23	Mahan STPP, St-II (Mahan Energen)	PRIVATE	M. P.	U-4	800	May-27
24	Raigarh USCTPP, St-II/ Adani Power	PRIVATE	Chhattisgarh	U-3	800	Jun-27
25	Talcher TPP St-III (NTPC)	CENTRAL	Odisha	U-1	660	Sep-27
26	Raigarh USCTPP, St-II/ Adani Power	PRIVATE	Chhattisgarh	U-4	800	Oct-27
27	Talcher TPP St-III (NTPC)	CENTRAL	Odisha	U-2	660	Dec-27
28	Lara STPP St-II (NTPC)	CENTRAL	Chhattisgarh	U-1	800	Dec-27

29	Raipur Ext TPP, Ph-II /Adani Power	PRIVATE	Chhattisgarh	U-1	800	Jan-28
Sub-Total					5,320	
F Y. 2028-29						
30	Lara STPP St-II (NTPC)	CENTRAL	Chhattisgarh	U-2	800	Jun-28
31	Raipur Ext TPP, Ph-II /Adani Power	PRIVATE	Chhattisgarh	U-2	800	Jul-28
32	Koderma TPS, St-II/ DVC	CENTRAL	Jharkhand	U-1	800	Aug-28
33	Koderma TPS, St-II/ DVC	CENTRAL	Jharkhand	U-2	800	Dec-28
34	NLC TALABIRA TPP (NLC)	CENTRAL	Odisha	U-1	800	Mar-29
Sub-Total					4,000	
F Y. 2029-30						
35	Singrauli STPP, St-III (NTPC)	CENTRAL	UP	U-1	800	May-29
36	New Nabi Nagar- II (NTPC)	CENTRAL	Bihar	U-1	800	Jul-29
37	NLC TALABIRA TPP (NLC)	CENTRAL	Odisha	U-2	800	Sep-29
38	DCR TPP Ext., Yamunanagar	State	Haryana	U-1	800	Sep-29
39	Sipat STPP, St-III (NTPC)	CENTRAL	Chhattisgarh	U-1	800	Sep-29
40	Singrauli STPP, St-III (NTPC)	CENTRAL	UP	U-2	800	Nov-29
41	New Nabi Nagar- II (NTPC)	CENTRAL	Bihar	U-2	800	Jan-30
42	NLC TALABIRA TPP (NLC)	CENTRAL	Odisha	U-3	800	Mar-30
Sub Total					6,400	
F Y. 2030-31						
43	New Nabi Nagar- II (NTPC)	CENTRAL	Bihar	U-3	800	Jul-30
Sub-Total					800	
Grand Total (No of Projects: 23)					32,300	
