GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3092
ANSWERED ON 18.12.2025

ELECTRICITY GENERATED FROM FOSSIL FUELS AND OTHER SOURCES

3092. SHRI JAGDAMBIKA PAL:
SHRI TATKARE SUNIL DATTATREY:

Will the Minister of POWER
be pleased to state:

(a) the present energy mix of the country in terms of installed power capacity, with a detailed breakup of electricity generated from fossil fuels, renewable energy sources and other non-fossil fuel-based sources in the country including Maharashtra;

(b) the major power projects, across all sectors that are currently sanctioned or under implementation and the manner in which the national energy mix is projected to evolve during the next five years;

(c) the steps taken by the Government to expand hydropower and nuclear power generation and the role envisaged for these sectors in strengthening grid stability and ensuring long-term energy security; and

(d) whether the Government is examining the feasibility of developing new hydropower assets in coordination with river-linking initiatives proposed under the National Perspective Plan and if so, the details thereof?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : The current total installed power generation capacity in the country is 5,05,023 MW comprising of 2,45,600 MW (48.63%) from fossil fuel sources and 2,59,423 MW (51.37%) from non-fossil fuel sources. The details of the source-wise installed generation capacity and electricity generated during FY 2024-25 and FY 2025-26 (upto October, 2025) in the country and Maharashtra state indicating their energy mix are given at Annexure-I.

(b): List of under construction Thermal power projects, Hydro Power projects including Pump Storage Projects (PSP) and Nuclear power projects are given at Annexure-II, Annexure-III and Annexure-IV respectively. Further, 1,56,900 MW Renewable Capacity including 69,180 MW of Solar, 29,650 MW of Wind and 57,630 MW Hybrid (Wind-Solar) is under construction.

The thrust of the Government is on capacity addition from non-fossil sources. As per the National Electricity Plan (Generation) brought out by CEA in May, 2023, the share of non-fossil fuel based installed capacity is likely to increase to about 68% by the end of 2031-32 from the present level of 51.37 % (as on October, 2025).

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(c) : In order to strengthen the grid stability and to ensure long term energy security in the country, the Government of India has accorded priority to the development of Hydro power and Nuclear power generation.

In this regard, following measures have been taken to promote the development of Hydro Power projects including PSPs in the country:

(i) Declaring Large Hydro Power (LHPs) (> 25 MW projects) as Renewable Energy source.

(ii) Hydro Purchase Obligation (HPO) as a separate entity within Non-solar Renewable Purchase Obligation (RPO).

(iii) Tariff rationalization measures for bringing down hydro power tariff.

(iv) Budgetary Support for Flood Moderation/Storage Hydro Electric Projects (HEPs).

(v) Budgetary Support towards Cost of Enabling Infrastructure, i.e. roads/bridges, etc.

(vi) Ministry of Power (MoP) has notified Guidelines to promote development of Pumped Storage Projects in the country on 10th April, 2023.

(vii) Waiver of ISTS Charges on the transmission of power from new Hydro Power Projects, for which construction work is awarded and PPA is signed on or before 30.06.2025.Subsequently, part waiver of ISTS charges, in steps of 25% from 01.07.2025 to 01.07.2028,have been extended for HEPs for which construction work is awarded and PPA is signed upto 30.06.2028.

(viii) MoP has extended the 100% waiver of ISTS charges for PSPs for which construction work is awarded on or before 30.06.2028.

(ix) MoP has approved the Central Financial Assistance (CFA) to the State Governments of NER towards their equity participation for development of Hydro Electric Projects in the North Eastern Region (NER) through Joint Venture (JV) Collaboration between State entities and Central Public Sector Undertakings.

(x) MoP has increased the limit for concurrence requirement for hydro generating stations by CEA from ₹1,000 crore to ₹3,000 crore, and has exempted off-stream closed loop PSPs from the requirement of concurrence from the Authority.

The Government of India has set an ambitious target of 100 GW nuclear power capacity by 2047. Following steps have been taken to promote the development of nuclear generation in the country:

(i) A dedicated Nuclear Energy Mission with an allocation of ₹20,000 crore has been launched to develop at least five indigenously designed Small Modular Reactors (SMRs) by 2033 and promote advanced nuclear technologies.

(ii) Sustainable Harnessing and Advancement of Nuclear energy for Transforming India (SHANTI) Bill, 2025 has been introduced in Parliament to pave a way to harness the full potential of India's nuclear energy based on indigenous resources to the maximum extent through active involvement of both the public and private sectors.

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(iii) **Bharat Small Reactors (BSRs) of 220 MW capacity based on India's proven Pressurized Heavy Water Reactor (PHWR) technology are being upgraded for deployment in industrial hubs to support decarbonisation. BARC is also developing Small Modular Reactors for repurposing retiring coal stations and for remote-area applications.**

(iv) **India's fuel security is being enhanced through new uranium discoveries, including a significant discovery that would extend the life of the Jaduguda mine by over 50 years. Progress in the closed fuel cycle, such as milestones achieved in the Prototype Fast Breeder Reactor, will further support sustainable fuel supply.**

(v) **To accelerate capacity addition, NPCIL and NTPC have formed the joint venture ASHVINI for developing nuclear power plants within the existing legal framework**

(d) : For Interlinking of Rivers (ILR) projects as identified under National Perspective Plan, one of the benefit components is hydropower generation in addition to main benefits of irrigation and augmentation of domestic and industrial water.

These benefits are firmed up/finalized at the stage of preparation of Detailed Project Report for ILR Projects.

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ANNEXURE-I

ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 3092 ANSWERED IN THE LOK SABHA ON 18.12.2025

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The details of the source-wise installed generation capacity and electricity generated during FY 2024-25 and FY 2025-26 (upto October, 2025) in the country:

Category	Installed Capacity as on 31.10.2025 (MW)	% Share in Installed Capacity	Generation [FY 2024-25] in MUs	Generation [FY 2025-26 (upto Oct)] in MUs
Total capacity-Fossil Fuel based Sources	2,45,600	48.63%	13,63,890	7,52,583
Total capacity-Non-Fossil based sources	2,59,423	51.37%	4,60,324	3,44,037
Renewable Energy Sources (including Hydro)	2,50,643	49.63%	4,03,643	3,11,954
Nuclear	8,780	1.74%	56,681	32,082
Grand Total	5,05,023	100.00%	18,24,214	10,96,620

The details of the source-wise installed generation capacity and electricity generated during FY 2024-25 and FY 2025-26 (upto October, 2025) in Maharashtra:

Category	Installed Capacity as on 31.10.2025 (MW)	% Share in Installed Capacity	Generation [FY 2024-25] in MUs	Generation [FY 2025-26 (upto Oct)] in MUs
Total capacity-Fossil Fuel based Sources	26,135	46.82%	1,36,548	77,711
Total capacity-Non-Fossil based sources	29,683	53.18%	33,694	21,112
Renewable Energy Sources (including Hydro)	28,283	50.67%	25,226	16,172
Nuclear	1,400	2.51%	8,467	4,940
Grand Total	55,818	100.00%	1,70,242	98,823

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ANNEXURE-II

ANNEXURE REFERRED IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 3092 ANSWERED IN THE LOK SABHA ON 18.12.2025

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Details of Under Construction Thermal power projects as on 30/11/2025:

Sl. No	Project Name / Implementing Agency	Sector	State	Unit No.	Capacity (MW)	Anticipated Trial Run Date
1	North Chennai TPP, St-III (TNPGCL)	STATE	Tamil Nadu	U-6	800	Dec-25
2	Yadadri TPS (TGGENCO)	STATE	Telangana	U-4	800	Dec-25
3	Sagardighi TPP St-III (WBPDCL)	STATE	West Bengal	U-5	660	Dec-25
4	Malibrahmani TPP, M/s Jindal Power	PRIVATE	Odisha	U-2	525	Dec-25
5	Yadadri TPS (TGGENCO)	STATE	Telangana	U-3	800	Mar-26
6	Korba TPP, Ph-II (Lanco Amarkantak TPP),M/s Adani Power	PRIVATE	Chhattisgarh	U-3	660	Feb-26
7	Udangudi STPP St-I (TNPGCL)	STATE	Tamil Nadu	U-1	660	Mar-26
8	Buxar TPP (SJVN)	CENTRAL	Bihar	U-2	660	Mar-26
9	Udangudi STPP St-I (TNPGCL)	STATE	Tamil Nadu	U-2	660	Mar-26
10	Ghatampur TPP (NUPPL)	CENTRAL	Uttar Pradesh	U-3	660	Mar-26
11	Patratu STPP (PVUNL)	CENTRAL	Jharkhand	U-2	800	Mar-26
12	Yadadri TPS (TGGENCO)	STATE	Telangana	U-5	800	Mar-26
13	Patratu STPP (PVUNL)	CENTRAL	Jharkhand	U-3	800	Jul-26
14	Singhitarai TPP, (M/s Vedanta)	PRIVATE	Chhattisgarh	U-2	600	Jul-26
15	Ennore SCTPP (TNPGCL)	STATE	Tamil Nadu	U-1	660	Sep-26
16	Ennore SCTPP (TNPGCL)	STATE	Tamil Nadu	U-2	660	Nov-26
17	Korba TPP, Ph-II (Lanco Amarkantak TPP),M/s Adani Power	PRIVATE	Chhattisgarh	U-4	660	Nov-26
18	Mahan STPP,St-II (Mahan Energen)	PRIVATE	Madhya Pradesh	U-3	800	Dec-26
19	Mahan STPP,St-II (Mahan Energen)	PRIVATE	Madhya Pradesh	U-4	800	May-27
20	Talcher TPP St-III (NTPC)	CENTRAL	Odisha	U-1	660	Sep-27
21	Talcher TPP St-III (NTPC)	CENTRAL	Odisha	U-2	660	Dec-27
22	Lara STPP St-II (NTPC)	CENTRAL	Chhattisgarh	U-3	800	Dec-27
23	Raipur Ext TPP, Ph-II /Adani Power	PRIVATE	Chhattisgarh	U-3	800	Jan-28
24	Raigarh USCTPP, St-II/ Adani Power	PRIVATE	Chhattisgarh	U-2	800	Jan-28
25	Lara STPP St-II (NTPC)	CENTRAL	Chhattisgarh	U-4	800	Jun-28

26	Raipur Ext TPP, Ph-II /Adani Power	PRIVATE	Chhattisgarh	U-4	800	Jul-28
27	Raigarh USCTPP, St-II/ Adani Power	PRIVATE	Chhattisgarh	U-3	800	Jul-28
28	Koderma TPS, St-II/ DVC	CENTRAL	Jharkhand	U-1	800	Aug-28
29	Koderma TPS, St-II/ DVC	CENTRAL	Jharkhand	U-2	800	Dec-28
30	Raghunathpur TPS, Ph-II/DVC	CENTRAL	West Bengal	U-3	660	Dec-28
31	Singareni TPP,Ph-II/SCCL	STATE	Telangana	U-3	800	Dec-28
32	NLC TALABIRA TPP (NLC)	CENTRAL	Odisha	U-1	800	Mar-29
33	Raghunathpur TPS, Ph-II/DVC	CENTRAL	West Bengal	U-4	660	Apr-29
34	Singrauli STPP, St-III (NTPC)	CENTRAL	Uttar Pradesh	U-8	800	May-29
35	Koradi TPS,St-V (MSPGCL)	STATE	Maharashtra	U-11	660	May-29
36	Nabinagar STPP, St-II (NTPC)	CENTRAL	Bihar	U-4	800	Jul-29
37	Korba(W) SCTPP (CSPGCL)	STATE	Chhattisgarh	U-1	660	Jul-29
38	Mahan STPP,St-III (Mahan Energen)	PRIVATE	Madhya Pradesh	U-5	800	Aug-29
39	NLC TALABIRA TPP (NLC)	CENTRAL	Odisha	U-2	800	Sep-29
40	DCR TPP Ext., /HPGCL	STATE	Haryana	U-1	800	Sep-29
41	Sipat STPP, St-III (NTPC)	CENTRAL	Chhattisgarh	U-1	800	Sep-29
42	Ukai TPP/GSECL	STATE	Gujarat	U-7	800	Sep-29
43	Gadarwara STPP, Ph-II(NTPC)	CENTRAL	Madhya Pradesh	U-3	800	Sep-29
44	Singrauli STPP, St-III (NTPC)	CENTRAL	Uttar Pradesh	U-9	800	Feb-30
45	Koradi TPS,St-V (MSPGCL)	STATE	Maharashtra	U-12	660	Nov-29
46	Nabinagar STPP, St-II (NTPC)	CENTRAL	Bihar	U-5	800	Jan-30
47	Korba(W) SCTPP (CSPGCL)	STATE	Chhattisgarh	U-2	660	Jan-30
48	Mahan STPP,St-III (Mahan Energen)	PRIVATE	Madhya Pradesh	U-6	800	Feb-30
49	NLC TALABIRA TPP (NLC)	CENTRAL	Odisha	U-3	800	Mar-30
50	Gadarwara STPP, Ph-II(NTPC)	CENTRAL	Madhya Pradesh	U-4	800	Mar-30
51	Nabinagar STPP, St-II (NTPC)	CENTRAL	Bihar	U-6	800	Jul-30
52-54	Akaltara TPP, JSW Energy	PRIVATE	Chhattisgarh	U-4,5,6	1800	Mar-31
55-56	Binjkote TPP, M/s Sarda Energy Mineral	PRIVATE	Chhattisgarh	U-3,4	600	Mar-32
			Grand Total: 40,345			

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ANNEXURE-III

ANNEXURE REFERRED IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 3092 ANSWERED IN THE LOK SABHA ON 18.12.2025

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Details of Under Construction Hydro Power projects:

Sl. No.	Name of the Project (Executing Agency)	State / UT	Installed Capacity (No. X MW.)	Cap. Under Execution (MW)	Expected date of commissioning
1	Subansiri Lower (NHPC)	Arunachal Pradesh/Assam	8x250	2000.00	May'26
2	Dibang Multipurpose Project (NHPC)	Arunachal Pradesh	12x240	2880.00	Feb'32
3	Teesta St. VI NHPC	Sikkim	4x125	500.00	Dec'27
4	Rangit-IV (NHPC)	Sikkim	3x40	120.00	Dec'25
5	Ratle (RHEPPL / NHPC)	UT of Jammu & Kashmir	4x205 + 1x30	850.00	Nov'28
6	Pakal Dul (CVPPL)	UT of Jammu & Kashmir	4x250	1000.00	Dec'26
7	Kiru (CVPPL)	UT of Jammu & Kashmir	4x156	624.00	Dec'26
8	Kwar (CVPPPL)	UT of Jammu & Kashmir	4x135	540.00	Mar'28
9	Luhri-I (SJVN)	Himachal Pradesh	2x80+2x25	210.00	Feb'30
10	Dhaulasidh (SJVN)	Himachal Pradesh	2x33	66.00	Mar'27
11	Sunni Dam (SJVN)	Himachal Pradesh	4x73+1x73+1x17	382.00	Dec'29
12	Vishnugad Pipalkoti (THDC)	Uttarakhand	4x111	444.00	Mar'27
13	Tapovan Vishnugad (NTPC)	Uttarakhand	4x130	520.00	Mar'29
14	Rammam-III (NTPC)	West Bengal	3x40	120.00	Mar'29
15	HEO (NEEPCO)	Arunachal Pradesh	3x80	240.00	Sept'29
16	Tato-I (NEEPCO)	Arunachal Pradesh	3x62	186.00	Sept'29
17	Polavaram (APGENCO/ Irrigation Dept., A.P.)	Andhra Pradesh	12x80	960.00	Jan'28
18	Lower Sileru Extension (APGENCO)	Andhra Pradesh	2x115	230.00	Mar'26
19	Shongtong Karcham (HPPCL)	Himachal Pradesh	3x150	450.00	Sep'28
20	Chanju-III (HPPCL)	Himachal Pradesh	3x16	48.00	Dec'27
21	Mankulam (KSEB)	Kerala	2x20	40.00	Nov'27
22	Lower Kopli (APGCL)	Assam	2x55+2x2.5+1x5	120.00	Apr'26
23	Parnai (JKSPDC)	UT of Jammu & Kashmir	3x12.5	37.50	Dec'27
24	Shahpurkandi (PSPCL/ Irrigation Deptt., Pb.)	Punjab	3x33+3x33+1x8	206.00	May'27
25	Lakhwar Multipurpose Project (UJVNL)	Uttarakhand	3x100	300.00	Dec'31
26	Tidong-I (Statkraft IPL)	Himachal Pradesh	3x50	150.00	Jul'26
	Total:			13,223.50	

Details of Under Construction Pump Storage projects:

Sl. No.	Name of the Project (Executing Agency)	State / UT	Installed Capacity (No. X MW.)	Cap. Under Execution (MW)	Expected date of commissioning
1	Tehri PSS (THDC)	Uttarakhand	2x250	500.00	Dec'25
2	Upper Sileru PSP (APGENCO)	Andhra Pradesh	9x150	1350.00	Feb'29
3	Sharavathy Pumped Storage Project (KPCL)	Karntaka	8x250	2000.00	Dec'29
4	Kundah Pumped Storage Phase-I,II&III) (TANGEDCO)	Tamil Nadu	4x125	500.00	Apr'26
5	MP30 Gandhi Sagar Pumped Storage Project (Greenko MP01 IREP Private Limited)	Madhya Pradesh	7x240 + 2x120	1920.00	Dec'26
6	Chitravathi PSP(M/s Adani Renewable Energy Forty-Two Limited)	Andhra Pradesh	2x250	500.00	Oct'26
7	Bhivpuri PSP(M/s Tata Power Company Limited)	Maharashtra	4x200 + 2x100	1000.00	Oct'28
8	Saundatti PSP (M/s Greenko KA01 IREP Private Limited)	Karnataka	320x4+160 x2	1600.00	Dec' 2027
9	Bhavali PSP (M/s JSW Energy PSP Two Limited)	Maharashtra	5x250+2x125	1500.00	Dec' 2028
10	Gandikota PSP (M/s Adani Renewable Energy Fifty-One Limited)	Andhra Pradesh	4x250	1000.00	Mar' 2029
			Total:	11,870.00	

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ANNEXURE-IV

ANNEXURE REFERRED IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 3092 ANSWERED IN THE LOK SABHA ON 18.12.2025

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Details of Under Construction Nuclear power projects:

Sr. no.	Project Site	Project- Unit	Capacity (MW)	Expected year of commissioning
1	Rawatbhata, Rajasthan	RAPP-8	1*700	2025-26
2	Kudankulam, Tamil Nadu	KKNPP-3	1*1000	2025-26
3	Kundankulam, Tamil Nadu	KKNPP-4	1*1000	2026-27
4	Kalpakkam, Tamil Nadu	PFBR	1*500	2026-27
5	Kundankulam, Tamil Nadu	KKNPP-5&6	2*1000	2029-30
6	Gorakhpur, Haryana	GHAVP-1	1*700	2030-31
7	Gorakhpur, Haryana	GHAVP-2	1*700	2031-32
Total			6,600	

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