GOVERNMENT OF INDIA MINISTRY OF POWER

LOK SABHA UNSTARRED QUESTION NO.2050 ANSWERED ON 31.07.2025

AIR QUALITY AT NTPC THERMAL POWER PLANTS

2050. SHRI VAMSI KRISHNA GADDAM:

Will the Minister of POWER be pleased to state:

- (a) the air quality monitoring data recorded at the NTPC Thermal Power plants operating in Peddapalli Lok Sabha Constituency during the past twelve months including particulate matter and sulfur dioxide emission levels;
- (b) the timeline for carbon capture technology deployment at NTPC facilities in the district following the successful pilot project at Vindhyachal that captures twenty tonnes of carbon dioxide daily;
- (c) whether the Union Government has conducted health impact assessment studies on communities residing within ten kilometers of thermal power plants in Peddapalli Lok Sabha Constituency and if so, the outcomes thereof;
- (d) the compensation fund allocation for affected farmers whose agricultural productivity has declined due to fly ash deposition from thermal power generation activities; and
- (e) the renewable energy transition roadmap for phasing out coal-fired units older than 25 years in the constituency as per the Union Government's pollution reduction policy?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a): NTPC Ltd is currently operating its two-coal based thermal power plant (TPPs) in Peddapalli Lok Sabha Constituency, in the Peddapalli district of Telangana namely Ramagundam (2,600 MW) and Telangana (1,600 MW) Thermal Power Plants located adjacent to each other.

The ambient air quality monitoring data for emission levels including Particulate Matters and Sulfur Dioxide recorded, and monitored through Central Pollution Control Board (CPCB) recognized laboratory, for the past twelve months at various locations nearby TPPs are given at Annexure.

- (b): NTPC Ltd has taken up the following small-scale pilot/R&D projects for flue gas CO₂ capture and utilization:
- (i) A 10 tons per day flue gas CO₂-to-Methanol project at NTPC Vindhyachal, Madhya Pradesh.
- (ii) A 10 tons per day flue gas CO₂-to-Gen-4 Ethanol project at NTPC Lara, Chhattisgarh.

The projects are in demonstration stage. As of now, there is no plan for carbon capture technology deployment at NTPC thermal power plants in the Peddapalli district, Telangana.

- (c): No such study has been conducted by Government of India to study the health impact on communities residing within ten Kms of thermal power plants in Peddapalli Lok Sabha constituency. However, NTPC Ramagundam thermal power plant has independently carried out "Occupational Health and Epidemic Health Disorder Survey" including human health risk, epidemiological study and ecological risk for addition of 2x800 MW Telangana Super Thermal Power Plants in 2017-18 and as per the study, no negative health effects were reported in the areas surrounding the thermal power plant.
- (d): No such incidences have been reported to NTPC thermal power plants for compensation in Peddapalli district. Further, these plants of NTPC Ltd. are disposing off their fly ash in an eco-friendly manner as per MoEF&CC ash Notification dated 31.12.2021 and its subsequent amendments.
- (e): As part of its commitment to renewable energy, NTPC Ltd. has commissioned a 100 MW floating solar power plant and a 10 MW ground-mounted solar plant in Peddapalli district.

The Central Electricity Authority(CEA) has issued an advisory dated 20.01.2023 and 07.07.2023 to all Thermal Power Utilities not to retire or repurpose their coal-based power stations before 2030 and to ensure the availability of thermal units after carrying out Renovation and Modernization(R&M) activities, if required, considering the expected energy demand scenario in future.

Further, electricity generation is a de-licensed activity as per Section-7 of the Electricity Act, 2003 and phasing out/retirement of units are decided by Power Generating Utilities/Companies based on their own techno-economic, energy demand and environmental reasons.

ANNEXURE

ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 2050 ANSWERED IN THE LOK SABHA ON 31.07.2025

Ambient Air Quality Data near NTPC Thermal Power Plants, Peddapali-District

SI. No.	Months / Parameters	Location-1: Balancing Reservoir				Location-2: Ramagundam Pump House				Location-3: Permanent Township			
		PM-10 (µg/m3), Limit: 100	PM-2.5 (μg/m3), Limit:60	SO ₂ (µg/m3) Limit:80	NO ₂ (µg/m3), Limit:80	PM-10 (μg/m3), Limit: 100	PM-2.5 (μg/m3), Limit:60	SO ₂ (μg/m3), Limit:80	NO₂ (μg/m3), Limit:80	PM-10 (μg/m3), Limit: 100	PM-2.5 (μg/m3), Limit:60	SO ₂ (µg/m3), Limit:80	NO ₂ (μg/m Limit:
1	JUNE 2024	38.26	21.60	15.60	24.80	59.15	42.24	12.52	20.79	54.26	37.47	9.51	16.8
2	JULY 2024	37.62	21.93	15.68	23.12	44.35	33.28	13.03	20.69	45.63	33.64	9.51	17.9
3	AUGUST 2024	37.46	19.19	17.55	24.26	39.22	19.14	13.45	21.81	39.24	19.86	9.81	17.9
4	SEPTEMBER 2024	38.29	18.42	18.48	25.43	40.17	19.10	13.37	20.59	38.79	20.58	9.99	18.2
5	OCTOBER 2024	39.94	20.14	20.25	25.02	41.25	20.93	13.66	21.24	40.78	21.32	10.26	19.4
6	NOVEMBER 2024	43.99	22.17	21.89	25.68	43.61	22.35	13.80	23.01	43.55	24.13	11.56	20.6
7	DECEMBER 2024	48.84	24.47	23.73	25.63	48.37	22.87	15.29	24.97	46.76	26.76	13.36	21.7
8	JANUARY 2025	52.60	26.66	24.13	25.96	51.28	25.66	17.08	26.03	50.75	28.33	16.49	22.7
9	FEBRUARY 2025	53.59	26.41	25.36	26.48	51.64	26.03	17.81	24.72	52.70	27.77	17.47	23.9
10	MARCH 2025	54.68	26.30	16.05	28.05	53.00	26.50	14.16	25.57	54.66	28.17	14.68	23.1
11	APRIL 2025	56.78	27.36	10.82	18.27	55.47	26.19	11.13	16.83	56.12	28.86	11.87	20.8
12	MAY 2025	45.51	23.44	11.44	18.79	44.59	24.58	11.37	18.10	45.16	25.67	12.79	19.7

Note: The data is based on the monthly average of bi-weekly 24-hourly monitoring conducted by a CPCB-recognized laboratory.
