

GOVERNMENT OF INDIA
MINISTRY OF POWER

RAJYA SABHA
UNSTARRED QUESTION NO.1740
TO BE ANSWERED ON 09.03.2021

UPGRADING HIGH CARBON EMITTING POWER PLANTS

1740# **DR. KIRODI LAL MEENA:**

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

- (a) whether Government has identified high carbon emission coal based power plants across the country;
- (b) if so, the details thereof and the action taken by Government to close down these plants and if not, the reasons therefor;
- (c) whether the demand for electricity and carbon emission has declined as compared to the previous years and, if so, the details thereof; and
- (d) the steps taken by Government to ensure a speedier flu-gas desulfisation (FGD) and other emission upgrades in the light of a steep fall in demand for electricity?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP

(SHRI R.K. SINGH)

(a) & (b) : Power generation is a de-licensed activity; and the decision to retire/close down power generating units is taken by the concerned utilities themselves based on techno-commercial considerations.

Central Electricity Authority (CEA) has informed that 166 coal based units of capacity 14361.38 MW have been retired from 01.04.2002 to 03.03.2021, as per the decisions taken by the concerned utilities themselves based on the techno-economic and commercial considerations. Further, CEA has informed that 34 units of 5139 MW capacities have been identified which have not submitted any plan for compliance of emission control norms. These units would be retired/shutdown as per phasing plan and timelines given by Central Pollution Control Board (CPCB)/ Ministry of Environment, Forest and Climate Change (MoEF&CC) for compliance of emission norms.

(c) : Central Electricity Authority (CEA) has informed that the demand for electricity in terms of Energy has been increasing over a period of time in the country as per the following details of actual power supply position during the last six years i.e. from 2014-15 to 2019-20. However, in the current year 2020-21 (upto January, 2021), there was a slight contraction in demand of electric energy in the first quarter due to Covid-19 pandemic, which has again picked up since the month of September, 2020.

Year	Energy Supplied	
	(MU)	% Growth w.r.t. previous year
2014-15	1,030,785	(+)6.8
2015-16	1,090,850	(+)5.8
2016-17	1,135,334	(+)4.1
2017-18	1,204,697	(+)6.1
2018-19	1,267,526	(+)5.2
2019-20	1,284,444	(+)1.3
2019-20 (upto Jan, 2020)	1,081,677	-
2020-21 (upto Jan, 2021)	1,046,776	(-)3.2

Central Electricity Authority (CEA) compiles a CO₂ database for all grid connected Power Stations in the country and publishes the CO₂ database for the Indian Power Sector. The purpose of this database is to establish authentic and consistent quantification of the CO₂ emission baseline. The emission factors for the last 6 years in tCO₂/MWh are mentioned below:

Emission Factors (tCO ₂ /MWh) (excl. Imports)	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Weighted Average Emission Rate	0.83	0.82	0.83	0.82	0.82	0.80*

*Tentative

The emission factor for 2020-21 would be compiled in 2021-22.

(d) : In order to ensure uninterrupted power supply position in the country, a phased implementation plan (upto December 2022) for installation of Flue Gas De-Sulphurization (FGD) for control of Sulphur Oxides (SO_x), adoption of suitable technology for control of Particulate matter (PM) and other parameters of emission control norms, had been prepared by Central Electricity Authority (CEA) in consultation with the stakeholders and submitted by Ministry of Power to Ministry of Environment, Forest & Climate Change (MoEF&CC) on 13.10.2017. Accordingly, Central Pollution Control Board (CPCB) has issued directions under section 5 of Environment (Protection) Act, 1986 to thermal power plants to comply with emission norms in a phased manner.
