

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.4374
ANSWERED ON 19.03.2026**

INSTALLATION OF FGD SYSTEMS IN TPPS

†4374. **SHRI NEERAJ MAURYA:**

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

- (a) the current status of the installation of Flue Gas Desulfurization (FGD) systems in Thermal Power Plants (TPPs) across the country along with the number of plants where the said installation has been completed so far;
- (b) the timeline fixed for the installation of FGD systems to ensure compliance with the emission control standards under environmental regulations; and
- (c) the details of the financial, technical or other hurdles being faced in the installation of FGD systems along with the steps being taken by the Government to overcome the same?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a): The Ministry of Environment, Forest and Climate Change (MoEF&CC), vide Notification dated 31.03.2021, prescribed for categorization of Thermal Power Plants (TPPs) into three categories namely Category A, B and C for compliance of the emission standards. Accordingly, TPPs were classified as under:

Sl. No.	Category	Location/area	No. of TPPs	No. of Units	Capacity (MW)
1	Category-A	Within 10 km radius of National Capital Region or cities having million plus population	17	66	20,577
2	Category-B	Within 10 km radius of Critically Polluted Areas or Non-attainment cities	25	72	24,057
3	Category-C	Other than those included in category A and B	149	462	1,66,885.5
Total			191	600	2,11,519.5

Note: As per 2011 census of India

At present, out of these 600 TPP units, Flue Gas Desulphurisation (FGDs) systems have been installed in 72 units across the country (Category A – 19 units, Category B – 4 units and Category C – 49 units).

(b) : As per MoEF&CC Notification dated 11.07.2025, the applicability of SO₂ emission standards along with timelines for compliance is as follows:

Category	Applicability of SO₂ emission standards	Timelines for Compliance (Non- retiring units)	Last date for retirement of units for exemption from compliance
Category A	Mandatory	31.12.2027	31.12.2030
Category B	To be decided on a case-to-case basis by the Central Government based upon the recommendations of the Expert Appraisal Committee (Thermal Projects). In case any TPP is considered for exemption from SO₂ emission standards, such TPP shall ensure meeting of stack height as per notification no. G.S.R. 742 (E) dated 30.08.1990.	31.12.2028	
Category C	Not applicable subject to condition of meeting stack height as per notification no. G.S.R. 742 (E) dated 30.08.1990.	31.12.2029	

(c) : Major issues/challenges being faced in the implementation of FGD system by Thermal Power Plants are as follows:

- (i). There are limited vendors with limited capacity to supply and install FGD components. Vendors' capacity for FGD installation is about 16-20 GW (33 to 39 units) in the country and time taken for installation is about 44 to 48 months.**
- (ii). India had manufacturing capability of 70% FGD components which has now increased to 80% with the passage of time. However, it still depends on the imports from other countries.**
- (iii). The installation of FGD systems has also faced difficulties in terms of conceptualization, design challenges etc. Standardization could not be done as different sites have different requirements like space constraints, lay-out and orientation etc.**

To address the above issues, vendors have been encouraged to enhance their capacity and to maximize the indigenous production of all FGD parts in order to reduce the import dependence.

Further, in case of non-compliance beyond the prescribed timelines, the following Environmental Compensation will be levied on non-compliant TPPs:

Non-Compliant operation beyond the Timeline	Environmental Compensations (Rs. per unit electricity generated)
0-180 days	0.20
181-365 days	0.30
366 days and beyond	0.40
