

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.115
ANSWERED ON 29.01.2026**

EMISSIONS FROM THERMAL POWER PLANTS IN NATIONAL CAPITAL REGION

115. SHRI PRADYUT BORDOLOI:

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

- (a) whether the Government has assessed the extent to which emissions from thermal power plants in neighbouring States contribute to Delhi's air pollution and if so, the details and findings thereof and if not, the reasons therefor;**
- (b) whether the Government has granted exemptions (in addition to extensions) to multiple coal-based power plants from installing pollution control equipment such as Flue Gas Desulphurisation (FGD) systems and if so, the details thereof including the number and details of such exempted units;**
- (c) whether the Government recognizes that such exemptions could lead to persistently high emissions in neighbouring regions and thus displace pollution burden and if so, the measures taken in this regard; and**
- (d) the steps being taken by the Ministry to enforce strict compliance with emission norms, ensure operational pollution control systems and prevent transfer of pollution burden from one State to another to create tangible impact?**

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : There is a total of 11 coal-based Thermal Power Plants (TPPs) with 35 units (13,555 MW) located within 300 km of Delhi-NCR region [i.e States of; Haryana- 05 TPPs (12 units), Punjab- 04 TPPs (13 units) and Uttar Pradesh-02 TPPs (10 units)].

As per The Energy and Resources Institute (TERI)-Automotive Research Association of India (ARAI) Source Apportionment study (2018), the contribution of Power Plants to PM_{2.5} and PM₁₀ levels in Delhi during winter 2016 was assessed at 6% and 5% respectively, while during summer 2016, the contribution was 7%. However, the Badarpur Thermal Power Plant was operational during the study period, which has been permanently shut down since October, 2018.

(b) to (c) : The Ministry of Environment, Forest and Climate Change (MoEF&CC) notified emission standards [including Sulphur Dioxide (SO₂)] for coal / lignite based Thermal Power Plants (TPPs) vide Notification dated 07.12.2015. Further, MoEF&CC vide Notification dated 31.03.2021 prescribed for categorization of TPPs into the following three categories for compliance of the emission standards:

Category A: Within 10 km radius of National Capital Region or cities having million plus population;

Category B: Within 10 km radius of Critically Polluted Areas or Non-attainment cities;

Category C: Other than those included in category A and B

The SO₂ emission standards prescribed in MoEF&CC Notification dated 07.12.2015 have been reviewed by the Central Government taking into consideration the various representations received regarding exemption or relaxation in timelines of these standards due to limited availability of technology providers, its techno-economic feasibility, negative impact of COVID-19 pandemic on supply chain, price escalation due to high demand and low supplies, low SO₂ concentration in ambient air and heavy burden on consumers due to increase in electricity price etc.

Besides, the scientific studies conducted by independent research institutions regarding effectiveness & rationale behind these standards and its role in overall ambient air pollution of the region were also considered to evaluate the need of universal applicability and enforcement of these standards.

Based on the above, MoEF&CC issued a Notification dated 11.07.2025 specifying the applicability and compliance timelines of SO₂ emission standards, as detailed below:

Category	Applicability of SO ₂ 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 SO ₂ 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	

The category wise applicability of SO₂ emission standards in TPPs have been decided based on detailed scientific studies and analysis of ambient SO₂ concentrations across the country, including areas near TPPs. This approach applies the precautionary principle for controlling and abating air pollution in densely populated and other air pollution sensitive areas, while also emphasizing on resource conservation by avoiding additional consumption of water, auxiliary power, and limestone, and avoiding the increase in carbon footprint/CO₂ emissions resulting from the operation of deployed control measures, as well as mining and transportation of limestone required for these measures.

Out of the 11 TPPs (35 units) located within 300 km of Delhi-NCR region, 14 units (5,350 MW) fall under Category-A, while the remaining 21 units (8,205 MW) fall under Category-C. The details of these Delhi-NCR plants along with SO₂ compliance status is given at Annexure.

(d) : The Thermal Power Plants are regulated through grant of Consent to Establish and/or Consent to Operate under the Water (Prevention And Control Of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 by concerned State Pollution Control Boards (SPCBs). These Acts also include penal provisions for non-compliance of environmental standards.

Moreover, in case of non-compliance beyond the prescribed timelines, the following Environmental Compensation can also 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

ANNEXURE

ANNEXURE REFERRED IN REPLY TO PARTS (b) & (c) OF UNSTARRED QUESTION NO. 115 ANSWERED IN THE LOK SABHA ON 29.01.2026

Details of Delhi NCR units along with SO₂ compliance status

Sl. No.	State	Sector	Organisation	Name of Project	Category	Unit No.	Total Capacity (MW)	Date of Commissioning	FGD Installation Status
1	Haryana	Central	NTPC	INDIRA GANDHI STPP	A	1	500	31-10-2010	FGD installed
2	Haryana	Central	NTPC	INDIRA GANDHI STPP	A	2	500	05-11-2011	FGD installed
3	Haryana	Central	NTPC	INDIRA GANDHI STPP	A	3	500	07-11-2012	FGD installed
4	Haryana	Private	JhPL(HR)	MAHATMA GANDHI TPS	A	1	660	12-01-2012	FGD installed
5	Haryana	Private	JhPL(HR)	MAHATMA GANDHI TPS	A	2	660	11-04-2012	FGD installed
6	Haryana	State	HPGCL	PANIPAT TPS	A	6	210	31-03-2001	Bid opened
7	Haryana	State	HPGCL	PANIPAT TPS	A	7	250	28-09-2004	Bid opened
8	Haryana	State	HPGCL	PANIPAT TPS	A	8	250	28-01-2005	Bid opened
9	Haryana	State	HPGCL	RAJIV GANDHI TPS	C	1	600	31-03-2010	Category C units are exempted vide MoEF&CC Notification dated 11.07.2025
10	Haryana	State	HPGCL	RAJIV GANDHI TPS	C	2	600	01-10-2010	
11	Haryana	State	HPGCL	YAMUNA NAGAR TPS	C	1	300	01-11-2007	
12	Haryana	State	HPGCL	YAMUNA NAGAR TPS	C	2	300	29-03-2008	
13*	Punjab	Private	NPL	RAJPURA TPP	C	1	700	24-01-2014	
14*	Punjab	Private	NPL	RAJPURA TPP	C	2	700	06-07-2014	
15	Punjab	Private	TSPL	TALWANDI SABO TPP	C	1	660	17-06-2014	
16	Punjab	Private	TSPL	TALWANDI SABO TPP	C	2	660	25-10-2015	
17	Punjab	Private	TSPL	TALWANDI SABO TPP	C	3	660	29-03-2016	
18	Punjab	State	PSPCL	GH TPS (LEH.MOH.)	C	1	210	29-12-1997	
19	Punjab	State	PSPCL	GH TPS (LEH.MOH.)	C	2	210	16-10-1998	
20	Punjab	State	PSPCL	GH TPS (LEH.MOH.)	C	3	250	03-01-2008	
21	Punjab	State	PSPCL	GH TPS (LEH.MOH.)	C	4	250	31-07-2008	
22	Punjab	State	PSPCL	ROPAR TPS	C	3	210	31-03-1988	
23	Punjab	State	PSPCL	ROPAR TPS	C	4	210	29-01-1989	
24	Punjab	State	PSPCL	ROPAR TPS	C	5	210	29-03-1992	
25	Punjab	State	PSPCL	ROPAR TPS	C	6	210	30-03-1993	
26	Uttar Pradesh	Central	NTPC	DADRI (NCTPP)	A	1	210	21-12-1991	FGD installed
27	Uttar Pradesh	Central	NTPC	DADRI (NCTPP)	A	2	210	18-12-1992	FGD installed
28	Uttar Pradesh	Central	NTPC	DADRI (NCTPP)	A	3	210	23-03-1993	FGD installed
29	Uttar Pradesh	Central	NTPC	DADRI (NCTPP)	A	4	210	24-03-1994	FGD installed
30	Uttar Pradesh	Central	NTPC	DADRI (NCTPP)	A	5	490	25-01-2010	FGD installed
31	Uttar Pradesh	Central	NTPC	DADRI (NCTPP)	A	6	490	16-07-2010	FGD installed
32	Uttar Pradesh	State	UPRVUNL	HARDUAGANJ TPS	C	7	105	31-03-1978	Category C units are exempted vide MoEF&CC Notification dated 11.07.2025
33	Uttar Pradesh	State	UPRVUNL	HARDUAGANJ TPS	C	8	250	27-09-2011	
34	Uttar Pradesh	State	UPRVUNL	HARDUAGANJ TPS	C	9	250	25-05-2012	
35	Uttar Pradesh	State	UPRVUNL	HARDUAGANJ TPS	C	10	660	29-01-2022	FGD installed

* Installation of FGDs in Unit No. 1 and Unit No. 2 (2x700 MW) of Rajpura TPP, NPL have been completed and the FGD systems are "Ready for Testing and commissioning" since July 2023 and January 2024 respectively. However, the matter is sub-judice in Hon'ble Supreme Court.
