

**GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.3204
ANSWERED ON 16.12.2021**

INSTALLATION OF FGD SYSTEM BY NTPC

3204. SHRI KRUPAL BALAJI TUMANE:

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

- (a) whether NTPC has been directed by the Ministry of Environment, Forests and Climate Change to install Flue Gas Desulphurisation (FGD) system to control pollution;**
- (b) if so, the details thereof;**
- (c) whether the NTPC has decided for lot system instead of individual project system for installation of FGD;**
- (d) if so, the details of all the lots awarded to various bidders, the status of civil progress, mechanical and Electrical/Instrumentation (Ele./Inst.) erection of FGD installation;**
- (e) whether the lot system resulted in loss, delays in completion and cost increase in the FGD installation cost; and**
- (f) if so, the details thereof and the reaction of the Government thereto?**

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b) : Ministry of Environment, Forest and Climate Change (MoEF&CC), vide notification dated 07.12.2015, issued the emission standards for Sulphur Dioxide (SO₂) for thermal power plants (TPPs). Accordingly, all TPPs are required to control the emission levels of Sulphur Dioxide (SO₂) within the prescribed standards. NTPC Power Plants were also covered under the said notification.

(c) & (d) : NTPC adopted the Lot system to minimize the tendering process time with a view to award and meet the timelines and accordingly, all units of NTPC were divided into various categories for implementation of Flue Gas Desulphurisation (FGD) and new units were tendered first followed by old units. Further, the projects which could not be awarded mainly due to higher cost with respect to cost estimates were retendered in subsequent lots. The details of the Award and Erection progress is placed at Annexure.

(e) & (f) : The contracts have been awarded by NTPC to the contractors who have emerged as the lowest (L1) Bidder project wise through competitive bidding after extensive Reverse Auction process and are within NTPC's cost estimate range. The tendering in lots system had no impact on the price evaluation process as price bid evaluation has been carried out separately for each project.

ANNEXURE REFERRED TO IN REPLY TO PARTS (c) & (d) OF UNSTARRED QUESTION NO.3204 ANSWERED IN THE LOK SABHA ON 16.12.2021

Installation of FGD in NTPC – Details of Award and Erection Progress

Sl. No.	Lot	Project/ Capacity	Agency*	Status of Civil Progress, Mechanical & Electrical Erection of FGD Installation
1	Lot-I A	Solapur (2X660 MW)	GE	Civil works in advanced stage of completion, Mechanical & Electrical works is in progress.
2	Lot-I A	Barh-I (3x660 MW)	BHEL	Engg. and ordering in progress. Geotech work completed. Piling work in progress. Erection work to start.
3	Lot-I A	BRBCL (4x250 MW)	BHEL	Engg. and ordering in progress. Geotech work completed. Piling and foundation civil work in progress. Erection work to start.
4	Lot-I A	NPGC (3X660 MW)	BHEL	Engg. and ordering in progress. Geotech work completed. Piling and foundation civil work in progress. Erection work to start.
5	Lot-I A	Kudgi (3X800 MW)	ISGEC	Civil works, Mechanical erection in progress. Electrical and C&I works commenced.
6	Lot-I A	Tanda-II (2X660 MW)	GE	Civil works, Mechanical erection in progress. Electrical and C&I works commenced.
7	Lot-I A	Meja (2X660 MW)	GE	Civil works, Mechanical erection in progress. Electrical and C&I works commenced.
8	Lot-I A	Darlipali (2X800 MW)	L&T	Civil works, Mechanical erection in progress. Electrical and C&I erection to start.
9	Lot-I A	Gadarwara (2X800 MW)	ISGEC	Civil works, Mechanical erection in progress. Electrical and C&I works commenced.
10	Lot-I A	Lara-I (2X800 MW)	L&T	Civil works, Mechanical erection in progress. Electrical and C&I works commenced.
11	Lot-I A	Mouda-II (2X660 MW)	MPI	Civil works, Mechanical erection in progress. Electrical and C&I works commenced.
12	Lot-I B	Vindhyachal-III, IV (4X500 MW)	L&T	Civil works, Mechanical erection in progress. Electrical and C&I erection to start.
13	Lot-I B	Rihand-II, III (4X500 MW)	MPI	Piling is in advanced stage of completion. Civil works, Mechanical erection in progress.
14	Lot-I B	Barh-II (2X660 MW)	BHEL	Engg. and ordering in progress. Geotech work completed. Piling work in progress. Erection work to start.
15	Lot-I B	Unchahar-IV (1x500 MW)	GE	Civil works, Mechanical erection in progress. Electrical and C&I works commenced.
16	Lot-I B	Mouda-I (2x500 MW)	BHEL	Civil works, Mechanical erection in progress. Electrical and C&I erection to start.
17	Lot-II	Bhilai (2x250 MW)	BHEL	Engg. and ordering in progress. Geotech work completed. Civil foundation work started.
18	Lot-II	Sipat-I (3X660 MW)	GE	Civil works, Mechanical erection in progress. Electrical and C&I erection to start.
19	Lot-II	Simhadri-I & II (4X500 MW)	GE	Civil works, Mechanical erection in progress. Electrical and C&I erection to start.
20	Lot-III	Korba-I, II, III (3x200 MW & 4x500 MW)	BHEL	Engg. and ordering in progress. Geotech work completed. Piling work in progress. Erection work to start.
21	Lot-III	Vindhyachal-I, II (6X210 MW & 2X500MW)	L&T	Civil works, Mechanical erection in progress. Electrical and C&I erection to start.
22	Lot-III	Ramagundam-I, II (3x200 MW), (3x500 MW)	BHEL	Engg. and ordering in progress. Geotech work completed. Civil work in progress. Erection work to start.
23	Lot-IV	Farakka-I/II & III (3x200 MW) & 3x500 MW)	MPI	Engg. and ordering in progress. Geotech work completed. Piling work commenced. Erection work to start.

24	Lot-IV	Kahalgaoon- I, II (4x210 MW) & (3x500 MW)	BHEL	Engg. and ordering in progress. Geotech work completed. Civil and erection work to start.
25	Lot-IV	Singrauli-I&II (5x200 MW), (2X500 MW)	PES	Engg. and ordering in progress. Geotech work completed. Civil work in progress. Erection work to start.
26	Lot-IV	Unchahar-I/II/III (5x210 MW)	GE	Civil works, Mechanical erection in progress. Electrical and C&I erection to start.
27	Lot-V	Talcher -I&II (6X500 MW)	TPL	Civil works including chimney shell casting in progress. Mechanical erection started, Electrical and C&I erection to start.
28	Lot-V	Ramagundam-III (1x500 MW)	EPIL	Engg. and ordering in progress. Geotech work completed. Civil, Erection work to start.
29	Lot-V	Vallur (3x500 MW)	TPL	Engg. and ordering in progress. Geotech work completed. Civil work in progress. Erection work to start.
30	Lot-VI	Sipat-II (2X500MW)	BHEL	Recently awarded and work to be started.
31	Separate Package	Dadri-II (2x490 MW)	BHEL	Civil works done, finishing works in progress. Mechanical, Electrical, C&I erection and Commissioning in progress.
32	Separate Package	Jhajjar (3x500 MW)	GE	Civil works done, finishing works in progress. Mechanical, Electrical, C&I erection and Commissioning in progress.
33	Separate Package	NKSTPP (3x660 MW)	BHEL	Engineering and ordering in progress. Geotech work completed. Civil work in progress. Erection work to start.
34	Along with main package	Bongaigaon (3x250 MW)	BHEL	Civil works in advanced stage of completion, Mechanical & Electrical works is in progress.
35	Separate Package	Khargone (2x660 MW)	L&T	Mechanical, Electrical, C&I erection and Commissioning in progress.
36	Separate Package	Telangana (2x800 MW)	GE	Civil works, Mechanical, Electrical and C&I erection in progress
37	Along with main package	Patratu (3X800MW)	BHEL	Civil works in progress. Mechanical, Electrical and C&I erection to start.
38	Separate Package	Tanda-I U#1,2 (2x110 MW)	KC Cottrell	Civil works done. Erection done. Commissioning in progress.

Total FGD Commissioned: 1,340 MW

1. Vindhyachal U#13 (1X500 MW): Agency- GE, FGD commissioned.
2. Dadri-I U#1, 2, 3 & 4 (4X210 MW): Agency- Melco, commissioned.

***Agency Names:**

1. GE Power India Limited, Noida (GE)
2. Bharat Heavy Electricals Ltd, New Delhi (BHEL)
3. ISGEC Heavy Engineering Limited, Noida (ISGEC)
4. Larsen & Toubro Limited, Vadodara (L&T)
5. Mitsubishi Hitachi Power Systems India Pvt. Ltd., New Delhi (MPI)
6. PES Engineers Private Limited India (PES)
7. TATA Projects Limited, Secundrabad (Tata)
8. Engineering Projects India Ltd (EPIL)
9. KC Cottrell Korea (KC Cottrell)
10. Melco India (Melco) India
