

WILL COAL-FIRED UTILITIES MEET THE DEADLINES FOR EMISSION NORMS?



NORMS IN NAME ALONE

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1. OVERVIEW

In December 2021, following the Ministry of Environment, Forest and Climate Change's (MoEFF&CC's) April 2021 notification, a list of coal plants under Categories A, B and C was announced. The notification gave a structure on how to categorize coal-based thermal power plants and implement the norms. According to the list, the deadlines for 78 per cent of the coal-based thermal power capacity to meet the emission norms were extended by another two to three years (i.e. to 2024). This is the third relaxation of deadlines by the government—stretching the implementation saga to almost a decade (see *Box: Chain of events*)—to coal-based thermal power stations, one of the most polluting sectors.

Coal-based thermal power plants are responsible for over half of the sulphur dioxide (SO₂), 30 per cent of the oxides of nitrogen (NO_x) and about 20 per cent of the particulate matter (PM) emitted by industries in the ambient air. The initial deadline for implementation of the emission norms was specified as 2017 vide the Ministry of Environment, Forest and Climate Change's (MoEF&CC's) 2015 notification. However, taking cognizance of the action plan later submitted by power stations, MoEF&CC extended the deadlines by five years, i.e. to 2022. Noting a status quo in implementation of the norm—attributable to insignificant on-ground progress—MoEF&CC, not able to take a unilateral stand, formulated a task force in April 2021 to decide on the extension of deadlines for individual plants. On December 13, 2021, CPCB disclosed the list disaggregating coal thermal power plants into three categories, with extended deadlines for all stations.

Approximately 11 per cent of the capacity were put in Categories A and B each. Seventy-eight per cent of the coal power capacity were placed in Category C. This means that 11 per cent of the coal power capacity has to comply with the norms by 2022, another 11 per cent by 2023 and the remaining 78 per cent by 2024.

The eight months that went into the Task Force engaging with state boards and power stations to accommodate them on the list recategorizing coal power stations allowed developers to stall progress on implementation of the norms as the deadlines were no longer clear.

Figure 1: India's 596 coal-based thermal power plant units under Categories A, B and C

78 per cent of coal power capacity is not liable to meet the emission norms for another two to three years



Source: Central Pollution Control Board Task Force, 2021

This report investigates:

- Whether the set new deadlines are implementable;
- Where the power stations stand in implementation of the emission norms:
- Which states are doing better; and
- Who benefits from the April 2021 notification.

CHAIN OF EVENTS

2015 In December 2015, the Ministry of Environment, Forest and Climate Change (MoEF&CC) framed stringent emissions limits for sulphur dioxide, nitrogen oxides, particulate matter, mercury and water usage of coal-based thermal power plants. These emission norms were to be complied with within two years, i.e. by 2017.

2017 As the 2017 deadline approached, the Union Ministry of Power in consultation with the thermal power plants submitted another phase-in plan to MoEF&CC and requested for an extension of seven years (till 2024) to meet the norms. After much deliberation in the Supreme Court, the power plants were granted a five-year extension (till December 2022) to meet the deadlines in a phased manner. The 11 plants in Delhi-NCR were to comply with the norms by 2019.

2018 In June 2018, water norms for units installed post January 2017 were diluted from 2.5 m³/MWh to 3 m^3 /MWh.

2019 In May 2019, NO_x norms for units installed in 2004–16 were diluted from 300 mg/Nm³ to 450 mg/ Nm³.

CSE 2020 publication *Coal-Based Power Norms: Where Do We Stand Today*? reported that by the end of 2019, 10 of the 11 plants in Delhi NCR failed to comply with the SO₂ norms, five did not meet PM norms, and eight plants did not comply with NO_x norms.

Table 1: Emission norms for coal thermal power plants

The norms have been relaxed for two of the five parameters for which they were formulated (and/ or revised)

Parameter	S0x	NOx	РМ	Water	Hg
Units	mg/Nm ³	mg/Nm ³	mg/Nm ³	m ³ /MWh	mg/Nm ³
Units installed before December 31, 2003	600 (<500MW) 200 (≥ 500 MW)	600	100	3.5	0.03 (≥ 500 MW)
Units installed in 2004–16	600 (< 500 MW) 200 (≥ 500 MW)	Initial: 300 Revised: 450	50	3.5	0.03
Units installed from January 1, 2017	100	100	30	Initial: 2.5 Revised: 3	0.03

Source: MoEF&CC (2015, 2018 and 2019)

2020 In February 2020, the Central Electricity Authority (CEA) submitted a paper urging that flue-gas desulphurization be installed only in plants where SO_2 concentration in the ambient air was over 40 microgram per normal cubic metre (μg /Nm³). It criticized MoEF&CC for framing uniform norms for all thermal power plants across India and advised different norms be set for each.

CSE in its factsheet Coal-Based Thermal Power Plants: Discounting the Effects of Sulphur Dioxide Emission on Air Quality noted, "The facts in the report are incomplete. Sulphur dioxide gas has the potential to form

sulphates and increase particulate matter in the environment—this potential has not been included in the CEA study."

2021 Disregarding the opinion of most of the experts in the domain, an already extended deadline to coal thermal power plants and previous orders of the Supreme Court mandating 2022 as the final deadline, MoEF&CC on April 1, 2021 issued a notification specifying new deadlines for compliance, with the norms based on the location of the coal thermal power plants.

Working of the task force

MoEF&CC's April 1, 2021 notification directed the Central Pollution Control Board (CPCB) to constitute a task force with representatives from MoEF&CC, Ministry of Power, Central Electricity Authority (CEA) and CPCB itself. The Task Force was assigned with the task of categorizing coal-based thermal power plants into three categories:

Table 2: Criteria for categorizing coal-based thermal power plants

Pollutants travel up to 200–300 km from coal power units. No reasoning was given for keeping a 10-km radius from designated areas as the criteria to categorize power plants.

Category	Criteria	Deadline for compliance
Category A	Within 10-km radius of the National Capital Region	2022
	(NCR) or cities with a population of a million-plus	
Category B	Within 10-km radius of critically polluted areas or	2023
	non-attainment cities	
Category C	Remaining plants	2024

Source: MoEFCC, 2021

On April 16, 2021, Central Pollution Control Board (CPCB) constituted a task force to disaggregate 595 coal thermal power plants based on the criteria detailed in *Table 2*. The stacks of thermal power plant unit were considered as the reference point to determine distance to the existing boundary of the relevant city and/or urban agglomeration with population of a million-plus, non-attainment city or critically polluted area (CPA) for the required categorization.

The draft list compiled by the task force was initially circulated to the power plants for further comments by September 10, 2021. On December 13, 2021, the Central for Pollution Control Board released the list to the public domain and for sharing with coal thermal power plants.

2. WILL THERMAL POWER PLANTS MEET THE NEW DEADLINE?

Coal-based thermal power stations are confident of meeting the norms for particulate matter and oxides of nitrogen. However there is no data on the compliance status of these two parameters in the public domain. The Central Electricity Authority (CEA) is the only government agency tracking the compliance status with the emission norms, particularly SOx norms in terms of installation of a sulphur removal technology, i.e. flue-gas desulphurization (FGD). The installation status can be traced under four progressive stages—feasibility study, tender floated, tender awarded and, finally, FGD commissioned.

CEA's analysis of the December 2021 compliance status shows that only 1 per cent of the capacity has so far complied with the emission norms; another 32 per cent has awarded bids but it is not clear if work has been initiated in these units. Also, 21 per cent of capacity either has no plan or it has not been reported by CEA and these plants therefore are not likely to have initiated the implementation process of flue-gas desulphurization so far. Another 16 per cent of capacity is at various stages of the feasibility study and 30 per cent has floated the tender but is still to award the bid.

It takes a minimum of two years from award of the bid to commissioning of fluegas desulphurization. On the basis of these stages and power stations in various categories with differentiated deadlines for compliance, the Centre for Science and Environment has analysed the probability of compliance within each category.

CATEGORY A

- Coal thermal power plants whose stack was within an aerial distance of a 10km radius of the National Capital Region (NCR) or cities with a million-plus population were included in Category A.
- Analysis showed that about 61 per cent capacity in Category A are likely to miss the 2022 deadline as it has not yet awarded the tender and is thus in no position to install FGD by December 2022.
- Of the 57 stations that will miss the 2022 deadline, 36 units are at various

Figure 2: Status of Category A power plants and capacity

61 per cent of capacity (or 57 of the 79 stations) of Category A power plants that have not yet awarded tenders are likely to miss the 2022 deadline.



Capacity—Category A: 22,950 MW

stages of compliance—in feasibility study, preparing tenders, or floating but still to award tenders. No information has been given for the remaining 21 power stations and it may therefore be inferred that most of these plants currently have no plan in place (see *Fig. 2: Status of Category A power plants and capacity*).

CATEGORY B

- Coal thermal power plants whose stack is within an aerial distance of 10-km radius of critically polluted areas or non-attainment cities were included in Category B. The boundaries of the critically polluted areas were provided by the State Pollution Control Boards.
- None of the plants in Category B has so far complied with the emission norms. Thirty per cent of the capacity have awarded tenders, 37 per cent have floated tenders and 14 per cent are at various stages of their feasibility study. For 19 per cent of the capacity, there is no plan to meet the norms as disclosed by CEA.
- The deadline for Category B plants is 2023. Capacity of 6,860 MW that have already awarded tenders are likely to meet the deadline as early as 2022.

Source: Central Electricity Authority, 2021

Another 8,540 MW that have floated tenders are likely to meet the deadline, but 33 per cent of the capacity is likely to miss the deadline.

Figure 3: Status of Category B power plants and capacity

A minimum of 33 per cent (or 26 of the total 68 units) of Category B Power plants are likely to miss the 2023 deadline.



Source: Central Electricity Authority, 2021

CATEGORY C

- All the plants that did not meet the criteria for Categories A and B were included in Category C.
- For Category C plants, 33 per cent of the capacity have already awarded tenders Tenders have been floated for 30 per cent of the capacity and 16 per cent are at the feasibility stage. The status is unknown for 21 per cent of the capacity.
- For Category C plants to meet the stipulated deadline, they are required to have finalized the tender specifications and be in the process of issuing the tender for commissioning flu-gas desulphurization. This effectively gives these plants three years to meet the 2024 deadline.
- Plants that have no plan—comprising 21 per cent of the capacity in Category C—are not likely to meet the deadline. Plants exploring the feasibility of

commissioning flue-gas desulphurization and those that have only conducted the feasibility study—11 per cent of the capacity in Category C—are also likely to miss the deadline. In other words, 32 per cent of the capacity under Category C are likely to miss the 2024 deadline.

Figure 4: Status of Category C power plants and capacity

Category C Power plants that have not yet finalized tender specifications for FGD installation are likely to miss the 2024 deadline.



Capacity—Category C: 163,456 MW

Source: Central Electricity Authority, 2021

NO MONITORING IN ONE-FIFTH OF CAPACITY

CEA monitors 439 units—168,192 MW—while the total installed coal and lignitebased plant capacity is 209,426 MW. Power stations not monitored include ILFS Cuddalore (1200MW), Tata Power Trombay (750 MW), Dahanu Thermal Power Station (500 MW) and JSW Ratnagiri (1,200 MW), which have installed flue-gas desulphurization units.

In June 2018, CEA reported in its Quarterly Review Report *Renovation and Modernisation of Thermal Power Stations Division* that 48 units that have circulating fluidized bed combustion (CFBC) boilers were excluded. CFBC-based boilers in the country, however, total only 5,524 MW, which leaves the status of 32,060 MW in question. According to CEA, CFBC boilers are meeting the parameters of the

December 2015 emission norms and are hence excluded. Experts, however, say that further fine tuning even in CFBC boilers is required to meet the norms. They have also said that 5,115 MW—or 23 stations—are already meeting the norms. But there is no evidence by way of auditing done to confirm this.

Table 3: Monitoring of status of flue-gas desuphurization by CEA

20 per cent of capacity is currently not being monitored for FGD installation by any regulatory authority.

S. no.		MW	Monitoring
Α.	Status reported	168,192	Monitored by CEA
В.	FGD commissioned but not reported	3,650	No monitoring
C.	CFBC based	5,524	No monitoring
D.	Total capacity*	209,426	-
E.	Status unknown (D-A-B-C=E)	32,060	No monitoring

Source: Central Electricity Authority, 2018, *Central Pollution Control Board Task Force, 2021

3. WHICH STATES ARE AT THE TOP OF THE LADDER?

Seventeen states in the country have coal-based thermal power stations. A statewise comparison brings out the following highlights:

• Except for Assam, none of the 17 states is likely to comply 100 per cent with the stipulated deadlines (see *Fig. 5: State-wise percentage of total capacity likely to comply with emission norms*). Assam has a 750-MW power station that accounts for an insignificant percentage of total coal power capacity.

Figure 5: State-wise percentage of total capacity likely to comply with emission norms



Twelve of 17 large states have less than 80 per cent compliance

Source: Central Electricity Authority, 2021

• Over 80 per cent of the installed capacity on track to comply: Haryana, Karnataka and West Bengal are the only states where despite higher state ownership ratio, the capacity that will meet the deadline is higher than those that will miss it. The state sector seems to be more on track in these states as compared to other states. Over 80 per cent of the capacity installed in these states are on track to meet the deadline. In Punjab, though the compliance is over 80 per cent it is as a result of private stations being in line with the norms; the remaining 20 per cent that are non-compliant are state-run units.

- **60–80 per cent of the installed capacity on track to comply:** In Bihar, Jharkhand, Chhattisgarh, Uttar Pradesh and Gujarat, the capacity of plants that will meet the deadline surpasses the capacity that will miss it, with about 60–70 per cent of the total installed capacity meeting the norms. In these states, most of the capacity is either Centrally or privately owned.
- **50–60 per cent of the installed capacity on track to comply:** In Madhya Pradesh, Maharashtra, Odisha, Telangana and Rajasthan, coal thermal capacity that will meet the deadline is close to the capacity that will miss it. In most of these places—with the exception of Odisha, where the majority of plants are Centrally owned— the capacity is either privately or state owned.
- Less than 50 per cent of the installed capacity on track to comply: Andhra Pradesh and Tamil Nadu are the only two states where the ratio of coal power capacity missing the deadline is more than the capacity that will meet it. Data shows that in both states the capacity belonging to the state sector can be attributed to this skewed outcome. In Andhra Pradesh, 60 per cent of the total capacity in the state are likely to miss the deadline; similarly 65 per cent of the total capacity in Tamil Nadu are likely to miss the third revised deadline. Experts believe that the power supply costs will increase due to the added cost of penalties and upgradation of plants and this will eventually be passed on to consumers.
- The figure for percentage of compliance can be understating the impact of non-compliance if total capacity of non-compliance is not taken into picture. Nine of the 17 states will have the mammoth task of implementation as in each of these states over 5,000 MW capacity are non-complying. For instance, Maharashtra, which may seem better in the percentage analysis, looks the worst in terms of capacity of stationing the highest non-complying power station capacity in the country (see *Fig. 6: State-wise non-complying capacity*).
 - o Over 10,000 MW non-complying: Maharashtra currently has the largest capacity of non-complying thermal power stations.

- Eight other states: Tamil Nadu, Chhattisgarh, Madhya Pradesh, Andhra Pradesh, Uttar Pradesh, Odisha, Gujarat and Rajasthan will also have over 5,000 MW each non-complying capacity in their states.
- o Non-compliance in the long-run could be detrimental to these states as the cost of electricity to consumers can safely be assumed to increase in a few years owing to non-compliance.

14,000 J

Figure 6. State-wise non-complying capacity



Source: Central Electricity Authority, 2021

4. DEVELOPER-WISE SCENARIO

Most state-run units are non-compliant

The majority of coal thermal power capacity that is likely to meet the norms belongs to the Central sector, followed by the private sector. The Centre's largest power-generation company, NTPC, is taking the lead in compliance (see *Box: Compliance status of NTPC*).

- Most state plants have not framed any action plan so far. Only 6 per cent of the state-run capacity have awarded tenders and no plant has so far commissioned flue-gas desulphurization.
- Of the 21 companies in India that are state-owned (including partnership companies where the state has major stakes), all barring three are non-compliant. State-owned power plants MAHAGENCO, TSGENCO, TANDEDCO, APGENCO, OPPGCL, MPPGCL, UPRVUNL, PSPCL, CESC, GIPCL, RRVUNL and HPGCL are all likely to miss the deadline.





ONLY NTPC TO COMPLY WITH NORMS EARLY

In Bihar, Uttar Pradesh, Telangana, Tamil Nadu, Chhattisgarh, Odisha and Andhra Pradesh, 45–70 per cent of the power capacity that are likely to comply with the new emission norms as scheduled are run by NTPC.

NTPC and its subsidiaries account for 27 per cent of total power capacity. It is the highest coal power capacity owned by a single entity. Eighty-three per cent of NTPC coal thermal power capacity is likely to meet the deadline. It has already awarded bids for 75 per cent of the capacity owned by it and may meet the norms by 2022–23.

Table 4: Plants owned by NTPC (and subsidiaries)

Seventy-five per cent of the capacity run by NTPC are likely to meet the norms early

Category	Total capacity (MW)	Capacity that awarded tender (MW)				
A	7,320	6,480				
В	4,530	4,260				
С	43,100	31,460				

Source: Centre for Science and Environment, 2021

Who benefits from recategorization?

- Analysis shows that 177 coal-based thermal power units, accounting for 32 per cent of the total capacity, will benefit from the extension in deadline. This figure excludes plants that will not comply despite this extension.
- Of the 32 per cent capacity, 25 units belong to Category B and 153 units to category C. With regard to developers who would have missed the deadline if it were not for this extension, it is clear that Adani has benefitted the most, followed by the Jindal Group, RRUVNL (in Rajasthan), WBPDCL (in West Bengal), GSECL (in Gujarat), MAHAGENCO (in Maharashtra) and UPRVUNL (in Uttar Pradesh).
- Developers such as Sembcorp Energy, GMR, Jaypee Group, CSEB, MB Power and Singareni run comparatively smaller capacities and are likely to meet the revised deadline.

Figure 7: Coal thermal power developers who would have missed the 2022 deadline

Adani and the Jindal Group have the maximum share that benefit from the extension in deadline followed by some state-run power stations.



Source: Central Electricity Authority, 2021

The violators

- Our analysis showed that almost 80 per cent of the capacity that is more than 500 MW will be able to comply with the deadline. However, almost 50 per cent of the capacity that is less than 500 MW will miss the deadline.
- Units less than 500 MW are predominantly smaller units installed before 2003 most of which have completed their design life and are operating inefficiently, spurring pollution. These units have more relaxed norms than units installed post-2003 (see *Table 1: Emission norms for coal thermal power plants*).

Figure 8: Capacity-wise status of compliance with emission norms for coal thermal power plants

Almost half the capacity of power stations installed prior to 2003 are unlikely to meet the norms.



What non-compliance means for coal thermal power plants

Apart from revising the deadlines, the April 2021 notification also introduced a penalty mechanism or environmental compensation for plants that will not meet the respective deadlines. The environmental compensation to be levied is as follows:

Table 5: Environmental compensation in case of non-compliance

No cap on how long compensation will be collected. It is kept as an open-ended tax on defaulters

Non-compliant operation	Environmental compensation (Rs per unit electricity generated)						
beyond the timeline	Category A	Category B	Category C				
0–180 days	0.10	0.07	0.05				
181–365 days	0.15	0.10	0.075				
366 days or more	0.20	0.15	0.10				

Source: MoEF&CC

CSE in its <u>briefing note</u> in April 2021 reported, "TPPs enjoying three year extension (Category C) are liable to pay the least compensation, i.e. 5–10 paise a unit starting 2025, those with two year extension (Category B) have to pay 7–15 paise a unit starting 2024, and those stations that has to meet the norms by next year have to pay the highest penalty of 10–20 paise a unit starting 2023 on default."

Penalty: 5-20 paisa/unit of electricity

Cost of retrofitting pollution control equipment: 30-70 paisa/unit of electricity

The penalty imposed on non-compliant units will be more feasible to pay rather than bearing the levelized cost of retrofitting pollution control equipment to meet the new norms, particularly for old stations, which might be a reason for huge non-compliance among smaller units.

5. THE WAY FORWARD

Emission norms for coal-based thermal power plants were introduced in December 2015. Since then the norms have been diluted and deadlines missed and revised to accommodate coal thermal power plants.

The latest categorization of coal power stations pushed the deadline by another three to four years for 78 per cent of the capacity. Allocation of a minute 22 per cent capacity in Categories A (79 stations) and B (68 stations) and the remainder in Category C (449 stations) raises questions on the resolve of the Ministry of Environment, Forest and Climate Change (MoEF&CC) and the Central Pollution Control Board (CPCB) on implementation of the new emission norms as the most plants have been put in Category C with the latest deadline for compliance.

The foreseeable non-compliance by this large capacity of coal power is only indicative of the fact that there needs to be more effective monitoring and compliance mechanisms in place.

What more can push compliance?

1. **Merit order list:** The penalties to be levied on plants are too meagre to act as a deterrent for non-compliance. Even when the Central Pollution Control Board (CPCB) had levied a fine on stations flouting the 2019 deadline, power plants were successful in delaying payments and challenging them in higher courts.

Hence, CSE proposed the concept of first run in its report *First Run: An Incentive Mechanism to Make Coal-Based Power Plants Meet Emission Norms.*

First run, or preferential scheduling, categorizes plants under three codes: red for plants that have no plan to meet the norms, orange for plants unlikely to meet the norms and yellow for plants likely to comply with emission norms. This labelling needs to be updated by the State Pollution Control Boards (SPCBs) every six months on a rolling basis. The Pollution Boards should place limits on the number of days such polluting plants can run.

In accordance with Pollution Control Board notices, the respective state electricity commissions should allow no reimbursement of fixed cost for the red category and partial reimbursement (50 per cent) of fixed costs for the orange category. The state government along with the distribution companies should stand firm in not procuring power from the red category, and run orange category stations only on a need basis.

- 2. **MoEF&CC should shut down old and smaller units:** Units commissioned before 2003 are most likely not to meet the deadlines for norms. These are smaller units and generally considered to be more polluting than their larger counterparts. These stations also have more relaxed norms than newer plants. It is clear that MoEF&CC needs to take a tough call and close these units.
- 3. **Compliance status should be reported in the public domain:** The Central Electricity Authority (CEA) is currently the only regulatory agency that monitors the progress of installation of flue-gas desulphurization (FGD) devices for control of sulphur dioxide by coal-based thermal power plants. There are three issues with this reporting. First, CEA gives the status of only 439 stations and thus effectively leaves out the remaining 157 power units from the scope. There is no verified evidence in the public domain that suggests that these plants are meeting emission norms.

Second, the norms have been framed and/or revised for four parameters other than SOx (particulate matter, oxides of nitrogen, water and mercury). There is no confirmed status of the plants meeting these other norms in the public domain. Third, and last, the reported status of several plants remains the same suggesting that CEA is only compiling and reporting the status reported by the power plant as is, with no action initiated to ensure plant compliance.

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Annexure: Unit-wise complaince status

S. no.	State	Developer	Name of power plant	Unit no.	Capa- city (MW)	Cate- gory	Sector	Commi- ssioning year	Likely to comply or not (based on December 2021 status for FGD)
1	Andhra Pradesh	APGENCO	Dr N. Tata Rao TPS	1	210	А	State	1979	Unlikely to comply
2	Andhra Pradesh	APGENCO	Dr N. Tata Rao TPS	2	210	А	State	1980	Unlikely to comply
3	Andhra Pradesh	APGENCO	Dr N. Tata Rao TPS	3	210	А	State	1989	Unlikely to comply
4	Andhra Pradesh	APGENCO	Dr N. Tata Rao TPS	4	210	А	State	1990	Unlikely to comply
5	Andhra Pradesh	APGENCO	Dr N. Tata Rao TPS	5	210	А	State	1994	Unlikely to comply
6	Andhra Pradesh	APGENCO	Dr N. Tata Rao TPS	6	210	А	State	1994	Unlikely to comply
7	Andhra Pradesh	APGENCO	Dr N. Tata Rao TPS	7	500	А	State	2009	Unlikely to comply
8	Andhra Pradesh	Hinduja NPCL	Vizag TPP	1	520	А	Private	2015	Unlikely to comply
9	Andhra Pradesh	Hinduja NPCL	Vizag TPP	2	520	А	Private	2016	Unlikely to comply
10	Andhra Pradesh	NTPC	Simhadri TPS	1	500	А	Central	2002	Likely to comply
11	Andhra Pradesh	NTPC	Simhadri TPS	3	500	А	Central	2011	Likely to comply
12	Andhra Pradesh	NTPC	Simhadri TPS	4	500	А	Central	2012	Likely to comply
13	Chhattisgarh	NTPC and SAIL	Bhilai TPS	1	250	А	Central	2008	Likely to comply
14	Chhattisgarh	NTPC and SAIL	Bhilai TPS	2	250	А	Central	2009	Likely to comply
15	Gujarat	Torrent Power	Sabarmati AEC	1	120	А	Private	1978	Unlikely to comply
16	Gujarat	Torrent Power	Sabarmati AEC	2	121	А	Private	1984	Unlikely to comply
17	Gujarat	Torrent Power	Sabarmati AEC	3	121	А	Private	1988	Unlikely to comply
18	Haryana	NTPC	Indira Gandhi STPP	1	500	А	Central-state JV	2010	Likely to comply
19	Haryana	NTPC	Indira Gandhi STPP	2	500	А	Central-state JV	2010	Likely to comply
20	Haryana	NTPC	Indira Gandhi STPP	3	500	А	Central-state JV	2010	Likely to comply
21	Haryana	HPGCL	Panipat TPS	6	210	А	State	2001	Unlikely to comply
22	Haryana	HPGCL	Panipat TPS	7	250	А	State	2004	Unlikely to comply
23	Haryana	HPGCL	Panipat TPS	8	250	А	State	2005	Unlikely to comply
24	Haryana	CLP India Pvt. Ltd	Mahatma Gandhi TPS	1	660	А	Private	2012	Complying
25	Haryana	CLP India Pvt. Ltd	Mahatma Gandhi TPS	2	660	А	Private	2012	Complying
26	Jharkhand	Tata Power Co.	Jojobera TPS	2	120	А	Private	2001	Likely to comply
27	Jharkhand	Tata Power Co.	Jojobera TPS	3	120	А	Private	2002	Likely to comply
28	Jharkhand	Adhunik Power and Natural Resources Ltd	Mahadev Prasad STPP	1	270	А	Private	2012	Unlikely to comply
29	Jharkhand	Adhunik Power and Natural Resources Ltd	Mahadev Prasa STPP	2	270	А	Private	2013	Unlikely to comply
30	Maharashtra	Tata Power Co.	Tata Power Tombay TPS	5	500	А	Private	1984	Unlikely to comply
31	Maharashtra	Tata Power Co.	Tata Power Tombay TPS	8	250	А	Private	2009	Unlikely to comply
32	Maharashtra	MAHAGENCO	Koradi TPS	6	210	А	State	1982	Unlikely to comply

S. no.	State	Developer	Name of power plant	Unit	Capa-	Cate-	Sector	Commi-	Likely to comply or not
				no.	city	gory		ssioning	(based on December
					(MW)			year	2021 status for FGD)
33	Maharashtra	MAHAGENCO	Koradi TPS	7	210	A	State	1983	Unlikely to comply
34	Maharashtra	MAHAGENCO	Koradi TPS	8	660	A	State	2015	Unlikely to comply
35	Maharashtra	MAHAGENCO	Koradi TPS	9	660	A	State	2015	Unlikely to comply
36	Maharashtra	MAHAGENCO	Koradi TPS	10	660	A	State	2017	Unlikely to comply
37	Maharashtra	MAHAGENCO	Khaperkheda TPS	1	210	A	State	1989	Unlikely to comply
38	Maharashtra	MAHAGENCO	Khaperkheda TPS	2	210	А	State	1990	Unlikely to comply
39	Maharashtra	MAHAGENCO	Khaperkheda TPS	3	210	А	State	2000	Unlikely to comply
40	Maharashtra	MAHAGENCO	Khaperkheda TPS	4	210	А	State	2001	Unlikely to comply
41	Maharashtra	MAHAGENCO	Khaperkheda TPS	5	500	А	State	2011	Unlikely to comply
42	Maharashtra	MAHAGENCO	Nasik TPS, Mahagenco	3	210	А	State	1979	Unlikely to comply
43	Maharashtra	MAHAGENCO	Nasik TPS, Mahagenco	4	210	А	State	1980	Unlikely to comply
44	Maharashtra	MAHAGENCO	Nasik TPS, Mahagenco	5	210	А	State	1981	Unlikely to comply
45	Rajasthan	RRVUNL	Kota TPS	1	110	А	State	2001	Unlikely to comply
46	Rajasthan	RRVUNL	Kota TPS	2	110	А	State	2002	Unlikely to comply
47	Rajasthan	RRVUNL	Kota TPS	3	210	А	State	2003	Unlikely to comply
48	Rajasthan	RRVUNL	Kota TPS	4	210	А	State	2004	Unlikely to comply
49	Rajasthan	RRVUNL	Kota TPS	5	210	А	State	1994	Unlikely to comply
50	Rajasthan	RRVUNL	Kota TPS	6	195	А	State	2003	Unlikely to comply
51	Rajasthan	RRVUNL	Kota TPS	7	195	А	State	2009	Unlikely to comply
52	Tamil Nadu	NTECL	Vallur TPP	1	500	А	Central	2012	Likely to comply
53	Tamil Nadu	NTECL	Vallur TPP	2	500	А	Central	2013	Likely to comply
54	Tamil Nadu	NTECL	Vallur TPP	3	500	А	Central	2014	Likely to comply
55	Tamil Nadu	TANGEDCO	North Chennai TPS	1	210	А	State	1994	Unlikely to comply
56	Tamil Nadu	TANGEDCO	North Chennai TPS	2	210	А	State	1995	Unlikely to comply
57	Tamil Nadu	TANGEDCO	North Chennai TPS	3	210	А	State	1996	Unlikely to comply
58	Tamil Nadu	TANGEDCO	North Chennai Expansion. TPS	1	600	А	State	2014	Unlikely to comply
59	Tamil Nadu	TANGEDCO	North Chennai Expansion TPS	2	600	А	State	2014	Unlikely to comply
60	Uttar Pradesh	NTPC	Dadri (NCTPP)	1	210	А	Central	1991	Complying
61	Uttar Pradesh	NTPC	Dadri (NCTPP)	2	210	А	Central	1992	Complying
62	Uttar Pradesh	NTPC	Dadri NCTPP)	3	210	А	Central	1993	Complying
63	Uttar Pradesh	NTPC	Dadri (NCTPP)	4	210	А	Central	1994	Complying
64	Uttar Pradesh	NTPC	Dadri (NCTPP)	5	490	А	Central	2010	Likely to comply
65	Uttar Pradesh	NTPC	Dadri (NCTPP)	6	490	А	Central	2010	Likely to comply
66	West Bengal	CESC	Southern REPL TPS, CESC	1	68	А	State	1991	Unlikely to comply
67	West Bengal	CESC	Southern REPL TPS, CESC	2	68	A	State	1990	Unlikely to comply
68	West Bengal	CESC	Titagarh TPS	1	60	А	Private	1982	Unlikely to comply
69	West Bengal	CESC	Titagarh TPS	2	60	А	Private	1983	Unlikely to comply

S. no.	State	Developer	Name of power plant	Unit	Capa-	Cate-	Sector	Commi-	Likely to comply or not
				no.	city	gory		ssioning	(based on December
70		0500		2	(IMW)	•	D : 1	year	2021 status for FGD)
70	West Bengal	CESC	Titagarn TPS	3	60	A	Private	1984	Unlikely to comply
71	West Bengal	CESC	Titagarn TPS	4	60	A	Private	1985	Unlikely to comply
72	West Bengal	CESC	Budge Budge TPS	1	250	A	State	1997	Unlikely to comply
73	West Bengal	CESC	Budge Budge TPS	2	250	A	State	1999	Unlikely to comply
74	West Bengal	CESC	Budge Budge TPS	3	250	A	State	2009	Unlikely to comply
75	West Bengal	WBPDCL	Bandel TPS, WBPDCL	1	60	A	State	1965	Unlikely to comply
/6	West Bengal	WBPDCL	Bandel TPS, WBPDCL	2	60	A	State	1965	Unlikely to comply
77	West Bengal	WBPDCL	Bandel TPS, WBPDCL	5	210	A	State	1982	Unlikely to comply
78	West Bengal	DPSCLTD	DISHERGARH TPP	1	12	A	Private	2019	Unlikely to comply
79	Bihar	K.B.U.N.L (NTPC)	Muzaffarpur TPS, Kanti	1	110	В	Central-State JV	1985	Likely to comply
80	Bihar	K.B.U.N.L (NTPC)	Muzaffarpur TPS, Kanti	2	110	В	Central-state JV	1986	Likely to comply
81	Bihar	K.B.U.N.L (NTPC)	Muzaffarpur TPS, Kanti	3	195	В	Central-state JV	2015	Likely to comply
82	Bihar	K.B.U.N.L (NTPC)	Muzaffarpur TPS, Kanti	4	195	В	Central-state JV	2017	Likely to comply
83	Chhattisgarh	BALCO	BALCO TPS	1	300	В	Private	2015	Likely to comply
84	Chhattisgarh	BALCO	BALCO TPS	2	300	В	Private	2016	Likely to comply
85	Chhattisgarh	CSPGCL	DSPM	1	250	В	State	2007	Likely to comply
86	Chhattisgarh	CSPGCL	DSPM	2	250	В	State	2007	Likely to comply
87	Chhattisgarh	CSPGCL	Korba West TPS, Hasdeo	1	210	В	State	1983	Unlikely to comply
88	Chhattisgarh	CSPGCL	Korba West TPS, Hasdeo	2	210	В	State	1984	Unlikely to comply
89	Chhattisgarh	CSPGCL	Korba West TPS, Hasdeo	3	210	В	State	1985	Unlikely to comply
90	Chhattisgarh	CSPGCL	Korba West TPS, Hasdeo	4	210	В	State	1986	Unlikely to comply
91	Chhattisgarh	CSPGCL	Korba West Extn TPS, Hasdeo	5	500	В	State	2013	Likely to comply
92	Chhattisgarh	NTPC	Korba STPS, NTPC	1	200	В	Central	1983	Likely to comply
93	Chhattisgarh	NTPC	Korba STPS, NTPC	2	200	В	Central	1983	Likely to comply
94	Chhattisgarh	NTPC	Korba STPS, NTPC	3	200	В	Central	1984	Likely to comply
95	Chhattisgarh	NTPC	Korba STPS, NTPC	4	500	В	Central	1987	Likely to comply
96	Chhattisgarh	NTPC	Korba STPS, NTPC	5	500	В	Central	1988	Likely to comply
97	Chhattisgarh	NTPC	Korba STPS, NTPC	6	500	В	Central	1989	Likely to comply
98	Chhattisgarh	NTPC	Korba STPS, NTPC	7	500	В	Central	2010	Likely to comply
99	Maharashtra	MAHAGENCO	Chandrapur STPS	3	210	В	State	1985	Unlikely to comply
100	Maharashtra	MAHAGENCO	Chandrapur STPS	4	210	В	State	1986	Unlikely to comply
101	Maharashtra	MAHAGENCO	Chandrapur STPS	5	500	В	State	1991	Likely to comply
102	Maharashtra	MAHAGENCO	Chandrapur STPS	6	500	В	State	1992	Likely to comply
103	Maharashtra	MAHAGENCO	Chandrapur STPS	7	500	В	State	1997	Likely to comply
104	Maharashtra	MAHAGENCO	Chandrapur STPS	8	500	В	State	2015	Likely to comply

S. no.	State	Developer	Name of power plant	Unit	Capa-	Cate-	Sector	Commi-	Likely to comply or not
				no.	city	gory		ssioning	(based on December
105	Mahawaahtwa	MAUACENCO	Chandwanuu STDS	0		D	State	year	2021 status for FGD)
105	Maharashtra	MAHAGENCU	Chandrapur STPS	9	200	В	State	2016	Likely to comply
106	Manarashtra	Ltd	Dhariwai TPP	1	300	В	Private	2014	Списти состру
107	Maharashtra	Dhariwal Infra. Ltd	Dhariwal TPP	2	300	В	Private	2014	Likely to comply
108	Maharashtra	NTPC	Solapur NTPC	1	660	В	Central	2017	Likely to comply
109	Maharashtra	NTPC	Solapur NTPC	2	660	В	Central	2019	Unlikely to comply
110	Odisha	GMR	Kamalanga TPS	1	350	В	Private	2013	Likely to comply
111	Odisha	GMR	Kamalanga TPS	2	350	В	Private	2013	Likely to comply
112	Odisha	GMR	Kamalanga TPS	3	350	В	Private	2014	Likely to comply
113	Tamil Nadu	NTPL	Tuticorin (JV) TPP	1	500	В	Central	2015	Likely to comply
114	Tamil Nadu	NTPL	Tuticorin (JV) TPP	2	500	В	Central	2015	Likely to comply
115	Tamil Nadu	TANGEDCO	Mettur TPS Extn	1	600	В	State	2014	Unlikely to comply
116	Tamil Nadu	TANGEDCO	Mettur TPS	1	210	В	State	1987	Unlikely to comply
117	Tamil Nadu	TANGEDCO	Mettur TPS	2	210	В	State	1987	Unlikely to comply
118	Tamil Nadu	TANGEDCO	Mettur TPS	3	210	В	State	1989	Unlikely to comply
119	Tamil Nadu	TANGEDCO	Mettur TPS	4	210	В	State	1990	Unlikely to comply
120	Tamil Nadu	TANGEDCO	Tuticorin TPS	1	210	В	State	1982	Unlikely to comply
121	Tamil Nadu	TANGEDCO	Tuticorin TPS	2	210	В	State	1979	Unlikely to comply
122	Tamil Nadu	TANGEDCO	Tuticorin TPS	3	210	В	State	1980	Unlikely to comply
123	Tamil Nadu	TANGEDCO	Tuticorin TPS	4	210	В	State	1992	Unlikely to comply
124	Tamil Nadu	TANGEDCO	Tuticorin TPS	5	210	В	State	1991	Unlikely to comply
125	Tamil Nadu	Coastal Energen Pvt. Ltd	Muthiara TPP	1	600	В	Private	2014	Unlikely to comply
126	Tamil Nadu	Coastal Energen Pvt. Ltd	Muthiara TPP	2	600	В	Private	2016	Unlikely to comply
127	Tamil Nadu	Ind Barath	Tuticorin (P) TPP	1	150	В	Private	2013	Unlikely to comply
128	Tamil Nadu	Ind Barath	Tuticorin (P) TPP	2	150	В	Private	2013	Unlikely to comply
129	Uttar Pradesh	UPRVUNL	Anpara TPS, UPRVUNL	1	210	В	State	1987	Likely to comply
130	Uttar Pradesh	UPRVUNL	Anpara TPS, UPRVUNL	2	210	В	State	1987	Likely to comply
131	Uttar Pradesh	UPRVUNL	Anpara TPS, UPRVUNL	3	210	В	State	1988	Likely to comply
132	Uttar Pradesh	UPRVUNL	Anpara TPS, UPRVUNL	4	500	В	State	1994	Likely to comply
133	Uttar Pradesh	UPRVUNL	Anpara TPS, UPRVUNL	5	500	В	State	1994	Likely to comply
134	Uttar Pradesh	UPRVUNL	Anpara TPS, UPRVUNL	6	500	В	State	2011	Likely to comply
135	Uttar Pradesh	UPRVUNL	Anpara TPS, UPRVUNL	7	500	В	State	2012	Likely to comply
136	Uttar Pradesh	Lanco Power	Anpara C TPS	1	600	В	Private	2011	Unlikely to comply
137	Uttar Pradesh	Lanco Power	Anpara C TPS	2	600	В	Private	2011	Unlikely to comply
138	West Bengal	DVC	Durgapur Steel TPS	1	500	В	Central-state JV	2011	Likely to comply

S. no.	State	Developer	Name of power plant	Unit	Capa-	Cate-	Sector	Commi-	Likely to comply or not
				no.	city	gory		ssioning	(based on December
						_		year	2021 status for FGD)
139	West Bengal	DVC	Durgapur Steel TPS	2	500	В	Central-state JV	2012	Likely to comply
140	West Bengal	DVC	Durgapur TPS	4	210	В	Central	1982	Unlikely to comply
141	West Bengal	Durgapur Projects Ltd.	D.P.L. TPS	7	300	В	Central	2007	Likely to comply
142	West Bengal	Durgapur Projects Ltd.	D.P.L. Exn. TPS	8	250	В	Central	2014	Likely to comply
143	West Bengal	HMEL	Hiranmaye Energy Ltd (India Power Haldia)	1	150	В	Private	2017	Unlikely to comply
144	West Bengal	HMEL	Hiranmaye Energy Ltd (India Power Haldia)	2	150	В	Private	2017	Unlikely to comply
145	West Bengal	Haldia Energy Ltd	Haldia TPP	1	300	В	Private	2015	Likely to comply
146	West Bengal	Haldia Energy Ltd	Haldia TPP	2	300	В	Private	2015	Likely to comply
147	Andhra Pradesh	APPDCL	Damodaram Sanjeevaiah TPS	1	800	С	State	2014	Unlikely to comply
148	Andhra Pradesh	APPDCL	Damodaram Sanjeevaiah TPS	2	800	С	State	2015	Unlikely to comply
149	Andhra Pradesh	Thermal Power Tech Corp. Ltd	Painampuram TPP	1	660	С	Private	2015	Likely to comply
150	Andhra Pradesh	Thermal Power Tech Corp. Ltd	Painampuram TPP	2	660	С	Private	2015	Likely to comply
151	Andhra Pradesh	APGENCO	Rayalaseema TPS	1	210	С	State	1994	Unlikely to comply
152	Andhra Pradesh	APGENCO	Rayalaseema TPS	2	210	С	State	1995	Unlikely to comply
153	Andhra Pradesh	APGENCO	Rayalaseema TPS	3	210	С	State	2007	Unlikely to comply
154	Andhra Pradesh	APGENCO	Rayalaseema TPS	4	210	С	State	2007	Unlikely to comply
155	Andhra Pradesh	APGENCO	Rayalaseema TPS	5	210	С	State	2010	Unlikely to comply
156	Andhra Pradesh	APGENCO	Rayalaseema TPS	6	600	С	State	2018	Unlikely to comply
157	Andhra Pradesh	Sembcorp Gayatri Pvt. Ltd	Sembcorp Gayatri Pvt. Ltd	1	660	с	Private	2016	Likely to comply
158	Andhra Pradesh	Sembcorp Gayatri Pvt. Ltd	Sembcorp Gayatri Pvt. Ltd	2	660	С	Private	2017	Likely to comply
159	Andhra Pradesh	Simhapuri Energy Pvt. Ltd.	Simhapuri TPS	1	150	С	Private	2012	Unlikely to comply
160	Andhra Pradesh	Simhapuri Energy Pvt. Ltd.	Simhapuri TPS	2	150	С	Private	2012	Unlikely to comply
161	Andhra Pradesh	Simhapuri Energy Pvt. Ltd.	Simhapuri TPS	3	150	С	Private	2012	Unlikely to comply
162	Andhra Pradesh	Simhapuri Energy Pvt. Ltd.	Simhapuri TPS	4	150	С	Private	2012	Unlikely to comply
163	Andhra Pradesh	Minakshi Energy Pvt. Ltd.	Thamminapatnam TPS	1	150	с	Private	2012	Unlikely to comply
164	Andhra Pradesh	Minakshi Energy Pvt. Ltd.	Thamminapatnam TPS	2	150	с	Private	2013	Unlikely to comply
165	Assam	NTPC	Bongaigaon TPP	1	250	С	Central	2016	Likely to comply
166	Assam	NTPC	Bongaigaon TPP	2	250	С	Central	2017	Likely to comply
167	Assam	NTPC	Bongaigaon TPP	3	250	С	Central	2019	Likely to comply
168	Bihar	NTPC	Barauni TPS	6	105	С	Central	1983	Unlikely to comply

S. no.	State	Developer	Name of power plant	Unit	Capa-	Cate-	Sector	Commi-	Likely to comply or not
				no.	city	gory		ssioning	(based on December
					(MW)			year	2021 status for FGD)
169	Bihar	NTPC	Barauni TPS	7	105	С	Central	1985	Unlikely to comply
170	Bihar	NTPC	Barauni TPS	8	250	С	Central	2018	Likely to comply
171	Bihar	NTPC	Barauni TPS	9	250	С	Central	2018	Likely to comply
172	Bihar	NTPC	Barh II TPS	4	660	С	Central	2013	Likely to comply
173	Bihar	NTPC	Barh II TPS	5	660	С	Central	2015	Likely to comply
174	Bihar	NTPC	Kahalgaon TPS	1	210	С	Central	1992	Likely to comply
175	Bihar	NTPC	Kahalgaon TPS	2	210	С	Central	1994	Likely to comply
176	Bihar	NTPC	Kahalgaon TPS	3	210	С	Central	1995	Likely to comply
177	Bihar	NTPC	Kahalgaon TPS	4	210	С	Central	1996	Likely to comply
178	Bihar	NTPC	Kahalgaon TPS	5	500	С	Central	2007	Likely to comply
179	Bihar	NTPC	Kahalgaon TPS	6	500	С	Central	2008	Likely to comply
180	Bihar	NTPC	Kahalgaon TPS	7	500	С	Central	2009	Likely to comply
181	Bihar	NTPC	Nabi Nagar STPP	1	660	С	Central	2019	Unlikely to comply
182	Bihar	NTPC	Nabi Nagar STPP	2	660	С	Central	20	Unlikely to comply
183	Bihar	NTPC	Nabi Nagar TPP	1	250	С	Central	2016	Likely to comply
184	Bihar	NTPC	Nabi Nagar TPP	2	250	С	Central	2017	Likely to comply
185	Bihar	NTPC	Nabi Nagar TPP	3	250	С	Central	2019	Unlikely to comply
186	Chhattisgarh	KSK Mahanadi	Akaltara TPS	1	600	С	Private	2014	Unlikely to comply
		Power Co Ltd							
187	Chhattisgarh	KSK Mahanadi Power Co Ltd	Akaltara TPS	2	600	С	Private	2018	Unlikely to comply
188	Chhattisgarh	KSK Mahanadi Power Co Ltd	Akaltara TPS	3	600	С	Private	2013	Likely to comply
189	Chhattisgarh	Korba-West TPS Pvt. Ltd	Avantha Bhandar	1	600	С	Private	2014	Likely to comply
190	Chhattisgarh	Maruti Power Limited	Bandakhar TPP	1	300	С	Private	2015	Unlikely to comply
191	Chhattisgarh	DB Power	Baradarha TPS	1	600	С	Private	2014	Likely to comply
192	Chhattisgarh	DB Power	Baradarha TPS	2	600	С	Private	2015	Likely to comply
193	Chhattisgarh	SKS Power Gen. (CG Ltd)	Binjkote TPP	1	300	С	Private	2017	Likely to comply
194	Chhattisgarh	SKS Power Gen. (CG Ltd)	Binjkote TPP	2	300	С	Private	2018	Likely to comply
195	Chhattisgarh	ACB (INDIA) Ltd	Chakabura TPP	2	30	С	Private	0	Unlikely to comply
196	Chhattisgarh	ACB (INDIA) Ltd	Kasaipalli TPP	1	135	С	Private	2011	Unlikely to comply
197	Chhattisgarh	ACB (INDIA) Ltd	Kasaipalli TPP	2	135	С	Private	2012	Unlikely to comply
198	Chhattisgarh	Vandana Vidyut	Katghora TPP	1	35	С	Private	2014	Unlikely to comply
199	Chhattisgarh	NTPC	Lara TPP	1	800	С	Central	2018	Likely to comply
200	Chhattisgarh	NTPC	Lara TPP	2	800	С	Central	2020	Unlikely to comply
201	Chhattisgarh	CSEB	Marwa TPS	1	500	С	State	2014	Likely to comply
202	Chhattisgarh	CSEB	Marwa TPS	2	500	С	State	2016	Likely to comply
203	Chhattisgarh	TRN Energy Private Ltd	Nawapara TPP	1	300	С	Private	2016	Unlikely to comply

S. no.	State	Developer	Name of power plant	Unit no.	Capa- city (MW)	Cate- gory	Sector	Commi- ssioning year	Likely to comply or not (based on December 2021 status for FGD)
204	Chhattisgarh	TRN Energy Private Ltd	Nawapara TPP	2	300	С	Private	2017	Unlikely to comply
205	Chhattisgarh	M/s 0.P. Jindal	OP Jindal TPS	1	250	С	Private	2007	Likely to comply
206	Chhattisgarh	M/s 0.P. Jindal	OP Jindal TPS	2	250	С	Private	2008	Likely to comply
207	Chhattisgarh	M/s 0.P. Jindal	OP Jindal TPS	3	250	С	Private	2008	Likely to comply
208	Chhattisgarh	M/s 0.P. Jindal	OP Jindal TPS	4	250	С	Private	2008	Likely to comply
209	Chhattisgarh	M/s Lanco Amarkantak Ltd	Pathadi TPP	1	300	С	Private	2009	Likely to comply
210	Chhattisgarh	M/s Lanco Amarkantak Ltd	Pathadi TPP	2	300	с	Private	2010	Likely to comply
211	Chhattisgarh	Adani Power Ltd. / GMR	Raikheda TPP	1	685	С	Private	2016	Unlikely to comply
212	Chhattisgarh	Adani Power Ltd. / GMR	Raikheda TPP	2	685	С	Private	2015	Unlikely to comply
213	Chhattisgarh	Spectrum Coal & Power Ltd	Ratija TPS	1	50	С	Private	2016	Unlikely to comply
214	Chhattisgarh	Spectrum Coal & Power Ltd	Ratija TPS	2	50	С	Private	2013	Unlikely to comply
215	Chhattisgarh	NTPC	Sipat STPS	1	660	С	Central	2011	Likely to comply
216	Chhattisgarh	NTPC	Sipat STPS	2	660	С	Central	2011	Likely to comply
217	Chhattisgarh	NTPC	Sipat STPS	3	660	С	Central	2012	Likely to comply
218	Chhattisgarh	NTPC	Sipat STPS	4	500	С	Central	2007	Likely to comply
219	Chhattisgarh	NTPC	Sipat STPS	5	500	С	Central	2008	Likely to comply
220	Chhattisgarh	S V Power Ltd	SVPL TPP	1	63	С	Private	2012	Unlikely to comply
221	Chhattisgarh	ACB (INDIA) LTD	Swastik Korba TPP	1	25	С	Private	2012	Unlikely to comply
222	Chhattisgarh	M/s 0.P. Jindal	Tamnar TPP	1	600	С	Private	2014	Likely to comply
223	Chhattisgarh	M/s 0.P. Jindal	Tamnar TPP	2	600	С	Private	2014	Likely to comply
224	Chhattisgarh	M/s 0.P. Jindal	Tamnar TPP	3	600	С	Private	2015	Likely to comply
225	Chhattisgarh	M/s 0.P. Jindal	Tamnar TPP	4	600	С	Private	2015	Likely to comply
226	Chhattisgarh	RKM Powergen Private Ltd	Uchpinda TPP	1	360	с	Private	2015	Unlikely to comply
227	Chhattisgarh	RKM Powergen Private Ltd	Uchpinda TPP	2	360	С	Private	2016	Unlikely to comply
228	Chhattisgarh	RKM Powergen Private Ltd	Uchpinda TPP	3	360	С	Private	2016	Unlikely to comply
229	Chhattisgarh	RKM Powergen Private Ltd	UCHPINDA TPP	4	360	С	Private	2019	Unlikely to comply
230	Chhattisgarh	VVL	SALORA TPP	1	135	С	Private	2014	Unlikely to comply
231	Gujarat	GMD Corpn.	AKRIMOTA LIG TPS	1	125	С	State	2005	Unlikely to comply
232	Gujarat	GMD Corpn.	AKRIMOTA LIG TPS	2	125	С	State	2005	Unlikely to comply
233	Gujarat	Bhavnagar Energy Company Ltd (GSECL)	Bhavnagar Lignite TPP	1	250	С	State	2016	Unlikely to comply
234	Gujarat	Bhavnagar Energy Company Ltd (GSECL)	Bhavnagar Lignite TPP	2	250	С	State	2017	Unlikely to comply

S. no.	State	Developer	Name of power plant	Unit	Capa-	Cate-	Sector	Commi-	Likely to comply or not
				no.	(MW)	gory		ssioning	(based on December 2021 status for FGD)
235	Guiarat	GSECI	Gandhi Nagar TPS	3	210	C	State	1990	Likely to comply
236	Gujarat	GSECI	Gandhi Nagar TPS	4	210	C	State	1991	Likely to comply
237	Gujarat	GSECI	Gandhi Nagar TPS	5	210	C	State	1998	Likely to comply
238	Gujarat	GSECI	Kutch Lig TPS	3	75	C	State	1990	Likely to comply
239	Gujarat	GSECL	Kutch Lig. TPS	4	75	c	State	1991	Unlikely to comply
240	Gujarat	Adani Power I td	Mundra TPS	1	330	C	Private	2009	Likely to comply
241	Gujarat	Adani Power Ltd	Mundra TPS	2	330	c	Private	2010	Likely to comply
242	Gujarat	Adani Power Ltd	Mundra TPS	3	330	c	Private	2010	Likely to comply
243	Gujarat	Adani Power Ltd	Mundra TPS	4	330	C	Private	2010	Likely to comply
244	Gujarat	Adani Power Ltd	Mundra TPS	5	660	c	Private	2011	Likely to comply
245	Gujarat	Adani Power Ltd	Mundra TPS	6	660	c	Private	2011	Likely to comply
245	Gujarat	Adani Power Ltd	Mundra TPS	7	660	C	Private	2012	Linkely to comply
240	Gujarat	Adani Power Ltd	Mundra TPS	/ 8	660	C	Private	2012	Unlikely to comply
247	Gujarat	Adani Power Ltd	Mundra TPS	0	660	C	Privato	2012	
240	Gujarat	Tata Power Ltu	Mundra HMTPP	7	800	C	Privato	2012	
249	Gujarat	(CGPL)			800		Frivate	2015	Likely to comply
250	Gujarat	Tata Power	Mundra UMTPP	2	800	С	Private	2013	Likely to comply
0.53		(CGPL)					.	0010	
251	Gujarat	Tata Power (CGPL)	Mundra UMTPP	3	800	C	Private	2013	Likely to comply
252	Gujarat	Tata Power (CGPL)	Mundra UMTPP	4	800	С	Private	2013	Likely to comply
253	Gujarat	Tata Power (CGPL)	Mundra UMTPP	5	800	С	Private	2013	Likely to comply
254	Gujarat	Essar Gujarat	Salaya TPP	1	600	С	Private	2012	Likely to comply
255	Gujarat	Essar Gujarat	Salaya TPP	2	600	С	Private	2012	Likely to comply
256	Gujarat	GSECL	Sikka Rep. TPS	3	250	С	State	2015	Likely to comply
257	Gujarat	GSECL	Sikka Rep. TPS	4	250	С	State	2015	Likely to comply
258	Gujarat	GIPCL	Surat Lig. TPS	1	125	С	State	2000	Unlikely to comply
259	Gujarat	GIPCL	Surat Lig. TPS	2	125	С	State	1999	Unlikely to comply
260	Gujarat	GIPCL	Surat Lig. TPS	3	125	С	State	2010	Unlikely to comply
261	Gujarat	GIPCL	Surat Lig. TPS	4	125	С	State	2010	Unlikely to comply
262	Gujarat	GSECL	UKAI TPS	3	200	С	State	1979	Likely to comply
263	Gujarat	GSECL	UKAI TPS	4	200	С	State	1979	Likely to comply
264	Gujarat	GSECL	UKAI TPS	5	210	С	State	1985	Likely to comply
265	Gujarat	GSECL	UKAI TPS	6	500	С	State	2013	Likely to comply
266	Gujarat	GSECL	Wanakbori TPS	1	210	С	State	1982	Likely to comply
267	Gujarat	GSECL	Wanakbori TPS	2	210	С	State	1983	Likely to comply
268	Gujarat	GSECL	Wanakbori TPS	3	210	С	State	1984	Likely to comply
269	Gujarat	GSECL	Wanakbori TPS	4	210	С	State	1986	Likely to comply
270	Gujarat	GSECL	Wanakbori TPS	5	210	С	State	1986	Likely to comply
271	Gujarat	GSECL	Wanakbori TPS	6	210	С	State	1987	Likely to comply
272	Gujarat	GSECL	Wanakbori TPS	7	210	С	State	1998	Unlikely to comply
273	Gujarat	GSECL	WANAKBORI TPS	8	800	С	State	2019	Unlikely to comply

S. no.	State	Developer	Name of power plant	Unit	Capa-	Cate-	Sector	Commi-	Likely to comply or not
				no.	city	gory		ssioning	(based on December
				_	(MW)			year	2021 status for FGD)
274	Haryana	HGP Corpn	RAJIV GANDHI TPS	1	600	С	State	2010	Likely to comply
275	Haryana	HGP Corpn	RAJIV GANDHI TPS	2	600	С	State	2010	Likely to comply
276	Haryana	HGP Corpn	YAMUNA NAGAR TPS	1	300	С	State	2007	Likely to comply
277	Haryana	HGP Corpn	YAMUNA NAGAR TPS	2	300	С	State	2008	Likely to comply
278	Jharkhand	D.V.C.	BOKARO 'A' TPS	1	500	С	Central	2016	Likely to comply
279	Jharkhand	D.V.C.	CHANDRAPURA(DVC)	7	250	С	Central	2009	Likely to comply
280	Jharkhand	D.V.C.	CHANDRAPURA(DVC)	8	250	С	Central	2010	Likely to comply
281	Jharkhand	D.V.C.	KODARMA TPP	1	500	С	Central-state JV	2011	Likely to comply
282	Jharkhand	D.V.C.	KODARMA TPP	2	500	С	Central-state JV	2013	Likely to comply
283	Jharkhand	TATA Power Co. MPL	MAITHON RB TPP	1	525	с	Private	2011	Likely to comply
284	Jharkhand	TATA Power Co. MPL	MAITHON RB TPP	2	525	С	Private	2012	Likely to comply
285	Jharkhand	Tenughat VN Ltd.	TENUGHAT TPS	1	210	С	State	1994	Unlikely to comply
286	Jharkhand	Tenughat VN Ltd	TENUGHAT TPS	2	210	С	State	1996	Unlikely to comply
287	Karnataka	KPCL	Bellary TPS	1	500	С	State	2007	Likely to comply
288	Karnataka	KPCL	Bellary TPS	2	500	С	State	2012	Likely to comply
289	Karnataka	KPCL	Bellary TPS	3	700	С	State	2016	Likely to comply
290	Karnataka	NTPC	KUDGI	1	800	С	Central	2016	Likely to comply
291	Karnataka	NTPC	KUDGI	2	800	С	Central	2017	Likely to comply
292	Karnataka	NTPC	KUDGI	3	800	С	Central	2018	Likely to comply
293	Karnataka	KPCL	Raichur TPS	1	210	С	State	1985	Likely to comply
294	Karnataka	KPCL	Raichur TPS	2	210	С	State	1986	Likely to comply
295	Karnataka	KPCL	Raichur TPS	3	210	С	State	1991	Likely to comply
296	Karnataka	KPCL	Raichur TPS	4	210	С	State	1994	Likely to comply
297	Karnataka	KPCL	Raichur TPS	5	210	С	State	1999	Likely to comply
298	Karnataka	KPCL	Raichur TPS	6	210	С	State	1999	Likely to comply
299	Karnataka	KPCL	Raichur TPS	7	210	С	State	2002	Likely to comply
300	Karnataka	KPCL	Raichur TPS	8	250	С	State	2010	Likely to comply
301	Karnataka	Jindal (Pvt Co.)	Torangallu TPS	1	130	С	Private	1999	Unlikely to comply
302	Karnataka	Jindal (Pvt Co.)	Torangallu TPS	2	130	С	Private	1999	Unlikely to comply
303	Karnataka	Jindal (Pvt Co.)	Torangallu TPS	1	300	С	Private	2009	Unlikely to comply
304	Karnataka	Jindal (Pvt Co.)	Torangallu TPS	2	300	С	Private	2009	Unlikely to comply
305	Karnataka	Adani Power Ltd	Udupi TPP	1	600	С	Private	2010	Likely to comply
306	Karnataka	Adani Power Ltd	Udupi TPP	2	600	с	Private	2011	Likely to comply
307	Karnataka	KPCL	Yermarus TPP	1	800	С	State	2016	Likely to comply
308	Karnataka	KPCL	Yermarus TPP	2	800	с	State	2017	Likely to comply
309	Madhya Pradesh	MPPGCI	Amarkantak FXT TPS	5	210	C	State	2008	Unlikely to comply
310	Madhya Pradesh	MB Power	Anuppur TPP	1	600	c	Private	2014	Likely to comply
311	Madhya Pradesh	MB Power		2	600	c	Private	2014	Likely to comply
312	Madhya Pradoch		Bina TPS	1	250	C	Private	2012	Linlikely to comply
217	inaunya Frauesti	SAIL)		1	2.50		Trivate	2012	

S. no.	State	Developer	Name of power plant	Unit	Capa-	Cate-	Sector	Commi-	Likely to comply or not
				no.	city	gory		ssioning	(based on December
212	Madhua Duadaah		Dine TDC	2		0	Duiunta	year	2021 status for FGD)
616	Madnya Pradesh	SAIL)	Bina IPS	2	250		Private	2013	Unlikely to comply
314	Madhya Pradesh	NTPC	Gadarwara TPP	1	800	С	Central	2019	Unlikely to comply
315	Madhya Pradesh	NTPC	Gadarwara TPP	2	800	С	Central	0	Unlikely to comply
316	Madhya Pradesh	NTPC	Khargone STPP	1	660	С	Central	2019	Likely to comply
317	Madhya Pradesh	NTPC	Khargone STPP	2	660	С	central	0	Unlikely to comply
318	Madhya Pradesh	ESSAR power	Mahan TPP	1	600	С	Private	2013	Unlikely to comply
319	Madhya Pradesh	ESSAR power	Mahan TPP	2	600	С	Private	2018	Unlikely to comply
320	Madhya Pradesh	Jaipraksh Power Venture Ltd	Nigri TPP	1	660	С	Private	2014	Likely to comply
321	Madhya Pradesh	Jaipraksh Power Venture Ltd	Nigri TPP	2	660	С	Private	2015	Likely to comply
322	Madhya Pradesh	BLA Pvt Limited	Niwari TPP	1	45	С	Private	2013	Unlikely to comply
323	Madhya Pradesh	BLA Pvt Limited	Niwari TPP	2	45	С	Private	2019	Unlikely to comply
324	Madhya Pradesh	MPPGCL	Sanjay Gandhi TPS	1	210	С	State	1993	Unlikely to comply
325	Madhya Pradesh	MPPGCL	Sanjay Gandhi TPS	2	210	С	State	1993	Unlikely to comply
326	Madhya Pradesh	MPPGCL	Sanjay Gandhi TPS	3	210	С	State	1999	Unlikely to comply
327	Madhya Pradesh	MPPGCL	Sanjay Gandhi TPS	4	210	С	State	1999	Unlikely to comply
328	Madhya Pradesh	MPPGCL	Sanjay Gandhi TPS	5	500	С	State	2007	Unlikely to comply
329	Madhya Pradesh	Reliance Power Ltd	Sasan UMTPP	1	660	С	Private	2013	Likely to comply
330	Madhya Pradesh	Reliance Power Ltd	Sasan UMTPP	2	660	С	Private	2013	Likely to comply
331	Madhya Pradesh	Reliance Power Ltd	Sasan UMTPP	3	660	С	Private	2014	Likely to comply
332	Madhya Pradesh	Reliance Power Ltd	Sasan UMTPP	4	660	С	Private	2014	Likely to comply
333	Madhya Pradesh	Reliance Power Ltd	Sasan UMTPP	5	660	С	Private	2014	Likely to comply
334	Madhya Pradesh	Reliance Power Ltd	Sasan UMTPP	6	660	С	Private	2015	Likely to comply
335	Madhya Pradesh	MPPGCL	Satpura TPS	6	200	С	State	1979	Unlikely to comply
336	Madhya Pradesh	MPPGCL	Satpura TPS	7	210	С	State	1980	Unlikely to comply
337	Madhya Pradesh	MPPGCL	Satpura TPS	8	210	С	State	1983	Unlikely to comply
338	Madhya Pradesh	MPPGCL	Satpura TPS	9	210	С	State	1984	Unlikely to comply
339	Madhya Pradesh	MPPGCL	Satpura TPS	10	250	С	State	2013	Unlikely to comply
340	Madhya Pradesh	MPPGCL	Satpura TPS	11	250	С	State	2014	Unlikely to comply
341	Madhya Pradesh	Jhabua Power Ltd.	Seioni TPP	1	600	С	Private	2016	Unlikely to comply
342	Madhya Pradesh	MPPGCL	Shri Singhaji TPP	1	600	С	State	2013	Likely to comply
343	Madhya Pradesh	MPPGCL	Shri Singhaji TPP	2	600	С	State	2014	Likely to comply
344	Madhya Pradesh	MPPGCL	Shri Singhaji TPP	3	660	С	State	2018	Likely to comply
345	Madhya Pradesh	MPPGCL	Shri Singhaji TPP	4	660	С	State	2019	Likely to comply
346	Madhya Pradesh	NTPC	Vindhyachal STPS	1	210	С	Central	1987	Likely to comply
347	Madhya Pradesh	NTPC	Vindhyachal STPS	2	210	С	Central	1988	Likely to comply

S. no.	State	Developer	Name of power plant	Unit no.	Capa- city	Cate- gory	Sector	Commi- ssioning	Likely to comply or not (based on December
					(MW)			year	2021 status for FGD)
348	Madhya Pradesh	NTPC	Vindhyachal STPS	3	210	С	Central	1989	Likely to comply
349	Madhya Pradesh	NTPC	Vindhyachal STPS	4	210	С	Central	1989	Likely to comply
350	Madhya Pradesh	NTPC	Vindhyachal STPS	5	210	С	Central	1990	Likely to comply
351	Madhya Pradesh	NTPC	Vindhyachal STPS	6	210	С	Central	1991	Likely to comply
352	Madhya Pradesh	NTPC	Vindhyachal STPS	7	500	С	Central	1999	Likely to comply
353	Madhya Pradesh	NTPC	Vindhyachal STPS	8	500	С	Central	2000	Likely to comply
354	Madhya Pradesh	NTPC	Vindhyachal STPS	9	500	С	Central	2006	Likely to comply
355	Madhya Pradesh	NTPC	Vindhyachal STPS	10	500	С	Central	2007	Likely to comply
356	Madhya Pradesh	NTPC	Vindhyachal STPS	11	500	С	Central	2012	Likely to comply
357	Madhya Pradesh	NTPC	Vindhyachal STPS	12	500	С	Central	2013	Likely to comply
358	Madhya Pradesh	NTPC	Vindhyachal STPS	13	500	С	Central	2015	Unlikely to comply
359	Maharashtra	Ratan Power	Amaravati TPS	1	270	С	Private	2013	Unlikely to comply
360	Maharashtra	Ratan Power	Amaravati TPS	2	270	С	Private	2014	Unlikely to comply
361	Maharashtra	Ratan Power	Amaravati TPS	3	270	С	Private	2015	Unlikely to comply
362	Maharashtra	Ratan Power	Amaravati TPS	4	270	С	Private	2015	Unlikely to comply
363	Maharashtra	Ratan Power	Amaravati TPS	5	270	С	Private	2015	Unlikely to comply
364	Maharashtra	Ideal Energy Projects Ltd.	BELA TPS	1	270	С	Private	2013	Unlikely to comply
365	Maharashtra	MAHAGENCO	Bhusawal TPS	3	210	С	State	1982	Unlikely to comply
366	Maharashtra	MAHAGENCO	Bhusawal TPS	4	500	С	State	2012	Likely to comply
367	Maharashtra	MAHAGENCO	Bhusawal TPS	5	500	С	State	2014	Likely to comply
368	Maharashtra	Vidarbha Industries Ltd	Butibori TPP	1	300	С	Private	2012	Likely to comply
369	Maharashtra	Vidarbha Industries Ltd	Butibori TPP	2	300	С	Private	2013	Likely to comply
370	Maharashtra	BSES Pvt. Ltd	Dahanu TPS	1	250	С	Private	1995	Unlikely to comply
371	Maharashtra	BSES Pvt. Ltd	Dahanu TPS	2	250	С	Private	1996	Unlikely to comply
372	Maharashtra	GMR Emco Energy Ltd	EMCO WARORA TPS	1	300	С	Private	2013	Likely to comply
373	Maharashtra	GMR Emco Energy Ltd	EMCO WARORA TPS	2	300	с	Private	2013	Likely to comply
374	Maharashtra	Gupta Energy P L	GEPL TPP Ph-I	1	60	С	Private	2012	Unlikely to comply
375	Maharashtra	Gupta Energy P L	GEPL TPP Ph-I	2	60	С	Private	2012	Unlikely to comply
376	Maharashtra	JSW Energy (Ratnagiri)	JSW Ratnagiri TPP	1	300	с	Private	2010	Unlikely to comply
377	Maharashtra	JSW Energy (Ratnagiri)	JSW Ratnagiri TPP	2	300	С	Private	2010	Unlikely to comply
378	Maharashtra	JSW Energy (Ratnagiri)	JSW Ratnagiri TPP	3	300	С	Private	2011	Unlikely to comply
379	Maharashtra	JSW Energy (Ratnagiri)	JSW Ratnagiri TPP	4	300	С	Private	2011	Unlikely to comply
380	Maharashtra	Abhijeetb MADC Nagpur Enery P L	Mihan TPS	1	246	С	Private	0	Unlikely to comply
381	Maharashtra	NTPC	Mouda TPS	1	500	С	Central	2013	Unlikely to comply
382	Maharashtra	NTPC	Mouda TPS	2	500	С	Central	2013	Unlikely to comply

S. no.	State	Developer	Name of power plant	Unit	Capa-	Cate-	Sector	Commi-	Likely to comply or not
				no.	city	gory		ssioning	(based on December
					(MW)			year	2021 status for FGD)
383	Maharashtra	NTPC	Mouda TPS	3	660	С	Central	2016	Unlikely to comply
384	Maharashtra	NTPC	Mouda TPS	4	660	C	Central	2017	Unlikely to comply
385	Maharashtra	Ratan Power	Nasik (P) TPS	1	270	С	Private	2014	Unlikely to comply
386	Maharashtra	Ratan Power	Nasik (P) TPS	2	270	С	Private	2017	Unlikely to comply
387	Maharashtra	Ratan Power	Nasik (P) TPS	3	270	С	Private	2017	Unlikely to comply
388	Maharashtra	Ratan Power	Nasik (P) TPS	4	270	С	Private	2017	Unlikely to comply
389	Maharashtra	Ratan Power	Nasik (P) TPS	5	270	С	Private	2017	Unlikely to comply
390	Maharashtra	MAHAGENCO	Paras TPS	3	250	С	State	2008	Unlikely to comply
391	Maharashtra	MAHAGENCO	Paras TPS	4	250	С	State	2010	Unlikely to comply
392	Maharashtra	MAHAGENCO	Parli TPS	6	250	С	State	2007	Unlikely to comply
393	Maharashtra	MAHAGENCO	Parli TPS	7	250	С	State	2010	Unlikely to comply
394	Maharashtra	MAHAGENCO	Parli TPS	8	250	С	State	2016	Unlikely to comply
395	Maharashtra	SPPL	Shirpur TPP	1	150	С	Private	2017	Unlikely to comply
396	Maharashtra	Adani Power Maharashtra Ltd	Tirora TPS	1	660	С	Private	2012	Likely to comply
397	Maharashtra	Adani Power Maharashtra Ltd	Tirora TPS	2	660	С	Private	2013	Likely to comply
398	Maharashtra	Adani Power Maharashtra Ltd	Tirora TPS	3	660	С	Private	2013	Likely to comply
399	Maharashtra	Adani Power Maharashtra Ltd	Tirora TPS	4	660	с	Private	2014	Likely to comply
400	Maharashtra	Adani Power Maharashtra Ltd	Tirora TPS	5	660	С	Private	2014	Likely to comply
401	Maharashtra	Wardha PCPL	Wardha Warora TPP	1	135	С	Private	2010	Likely to comply
402	Maharashtra	Wardha PCPL	Wardha Warora TPP	2	135	С	Private	2010	Likely to comply
403	Maharashtra	Wardha PCPL	Wardha Warora TPP	3	135	С	Private	2011	Likely to comply
404	Maharashtra	Wardha PCPL	Wardha Warora TPP	4	135	С	Private	2011	Likely to comply
405	Odisha	NTPC	Darlipali STPS	1	800	С	Central	2019	Unlikely to comply
406	Odisha	NTPC	Darlipali STPS	2	800	С	Central	0	Unlikely to comply
407	Odisha	JIPL	Derang TPP	1	600	С	Private	2014	Likely to comply
408	Odisha	JIPL	Derang TPP	2	600	С	Private	2015	Likely to comply
409	Odisha	OPGC	IB Valley TPS	1	210	с	State	1994	Unlikely to comply
410	Odisha	OPGC	IB Valley TPS	2	210	С	State	1995	Unlikely to comply
411	Odisha	OPGC	IB Valley TPS	3	660	с	State	2019	Unlikely to comply
412	Odisha	OPGC	IB Valley TPS	4	660	с	State	2019	Unlikely to comply
413	Odisha	Ind barath	Ind Barath TPP	1	350	с	Private	2016	Unlikely to comply
414	Odisha	Sterlite Energy Ltd	Sterlite TPP	1	600	С	Private	2010	Unlikely to comply
415	Odisha	Sterlite Energy Ltd	Sterlite TPP	2	600	С	Private	2010	Unlikely to comply
416	Odisha	NTPC	Talcher STPS	1	500	С	Central	1995	Likely to comply
417	Odisha	NTPC	Talcher STPS	2	500	С	Central	1996	Likely to comply
418	Odisha	NTPC	Talcher STPS	3	500	С	Central	2003	Likely to comply
419	Odisha	NTPC	Talcher STPS	4	500	С	Central	2003	Likely to comply

S. no.	State	Developer	Name of power plant	Unit no.	Capa- city	Cate- gory	Sector	Commi- ssioning	Likely to comply or not (based on December
400		NERO	7.1.1.0700	-	(IVIVV)			year	2021 status for FGD)
420	Odisha	NTPC	Talcher STPS	5	500	C	Central	2004	Likely to comply
421	Odisha	NTPC	Talcher STPS	6	500	C	Central	2005	Likely to comply
422	Punjab	PSEB	GH TPS (LEH. MOH.)	1	210	С	State	1997	Unlikely to comply
423	Punjab	PSEB	GH TPS (LEH. MOH.)	2	210	С	State	1998	Unlikely to comply
424	Punjab	PSEB	GH TPS (LEH. MOH.)	3	250	С	State	2008	Unlikely to comply
425	Punjab	PSEB	GH TPS (LEH. MOH.)	4	250	С	State	2008	Unlikely to comply
426	Punjab	PSEB	Ropar TPS	3	210	С	State	1988	Likely to comply
427	Punjab	PSEB	Ropar TPS	4	210	С	State	1989	Likely to comply
428	Punjab	PSEB	Ropar TPS	5	210	С	State	1992	Likely to comply
429	Punjab	PSEB	Ropar TPS	6	210	С	State	1993	Likely to comply
430	Punjab	GVK Power Ltd.	Goindwal Sahib	1	270	С	Private	2016	Likely to comply
431	Punjab	GVK Power Ltd.	Goindwal Sahib	2	270	С	Private	2016	Likely to comply
432	Punjab	L&T Power Development Ltd (Nabha)	Nabha TPP (Rajpura TPP)	1	700	С	Private	2014	Likely to comply
433	Punjab	L&T Power Development Ltd (Nabha)	Nabha TPP (Rajpura TPP)	2	700	С	Private	2014	Likely to comply
434	Punjab	Talwandi Sabo Power Limited	TALWANDI SABO TPP	1	660	С	Private	2014	Likely to comply
435	Punjab	Talwandi Sabo Power Limited	TALWANDI SABO TPP	2	660	С	Private	2015	Likely to comply
436	Punjab	Talwandi Sabo Power Limited	TALWANDI SABO TPP	3	660	С	Private	2016	Likely to comply
437	Rajasthan	Neyveli Lignite	BARSINGSAR LIGNITE	1	125	с	Private	2011	Unlikely to comply
438	Rajasthan	Neyveli Lignite	BARSINGSAR LIGNITE	2	125	С	Private	2011	Unlikely to comply
439	Rajasthan	RRVUNL	Chhabra TPP	1	250	С	State	2009	Likely to comply
440	Rajasthan	RRVUNL	Chhabra TPP	2	250	С	State	2010	Likely to comply
441	Rajasthan	RRVUNL	Chhabra TPP	3	250	С	State	2013	Likely to comply
442	Rajasthan	RRVUNL	Chhabra TPP	4	250	С	State	2014	Likely to comply
443	Rajasthan	RRVUNL	Chhabra TPP	5	660	С	State	2017	Likely to comply
444	Rajasthan	RRVUNL	Chhabra TPP	6	660	С	State	2019	Unlikely to comply
445	Rajasthan	RRVUNL	Giral TPS	1	125	С	State	2007	Unlikely to comply
446	Rajasthan	RRVUNL	Giral TPS	2	125	С	State	2010	Unlikely to comply
447	Rajasthan	JSW Rajwest Power Ltd	Jalipa Kapurdi TPP	1	135	С	Private	2009	Unlikely to comply
448	Rajasthan	JSW Rajwest Power Ltd	Jalipa Kapurdi TPP	2	135	С	Private	2009	Unlikely to comply
449	Rajasthan	JSW Rajwest Power Ltd	Jalipa Kapurdi TPP	3	135	С	Private	2009	Unlikely to comply
450	Rajasthan	JSW Rajwest Power Ltd	Jalipa Kapurdi TPP	4	135	С	Private	2009	Unlikely to comply
451	Rajasthan	JSW Rajwest Power Ltd	Jalipa Kapurdi TPP	5	135	С	Private	2009	Unlikely to comply

S. no.	State	Developer	Name of power plant	Unit no.	Capa- city (MW)	Cate- gory	Sector	Commi- ssioning year	Likely to comply or not (based on December 2021 status for FGD)
452	Rajasthan	JSW Rajwest Power Ltd	Jalipa Kapurdi TPP	6	135	С	Private	2009	Unlikely to comply
453	Rajasthan	JSW Rajwest Power Ltd	Jalipa Kapurdi TPP	7	135	С	Private	2009	Unlikely to comply
454	Rajasthan	JSW Rajwest Power Ltd	Jalipa Kapurdi TPP	8	135	С	Private	2009	Unlikely to comply
455	Rajasthan	RRVUNL	Kalisindh TPS	1	600	С	State	2014	Likely to comply
456	Rajasthan	RRVUNL	Kalisindh TPS	2	600	С	State	2015	Likely to comply
457	Rajasthan	Adani Power Ltd	Kawai TPS	1	660	С	Private	2013	Likely to comply
458	Rajasthan	Adani Power Ltd	Kawai TPS	2	660	С	Private	2013	Likely to comply
459	Rajasthan	RRVUNL	Suratgarh TPS	1	250	С	State	1998	Likely to comply
460	Rajasthan	RRVUNL	Suratgarh TPS	2	250	С	State	2000	Likely to comply
461	Rajasthan	RRVUNL	Suratgarh TPS	3	250	С	State	2001	Likely to comply
462	Rajasthan	RRVUNL	Suratgarh TPS	4	250	С	State	2002	Likely to comply
463	Rajasthan	RRVUNL	Suratgarh TPS	5	250	С	State	2003	Likely to comply
464	Rajasthan	RRVUNL	Suratgarh TPS	6	250	С	State	2009	Likely to comply
465	Rajasthan	RRVUNL	Suratgarh TPS	7	660	С	State	2020	Unlikely to comply
466	Tamil Nadu	M/s IL & FS Tamil Nadu Power Company Ltd	ITPCL TPP	1	600	С	Private	2016	Unlikely to comply
467	Tamil Nadu	M/s IL&FS Tamil Nadu Power Company Ltd	ITPCL TPP	2	600	С	Private	2016	Unlikely to comply
468	Tamil Nadu	Neyveli Lignite	Neyveli (Ext.) TPS	1	210	С	Central	2002	Likely to comply
469	Tamil Nadu	Neyveli Lignite	Neyveli (Ext.) TPS	2	210	С	Central	2003	Likely to comply
470	Tamil Nadu	Neyveli Lignite	Neyveli New	1	500	С	Central	2019	Unlikely to comply
471	Tamil Nadu	Neyveli Lignite	Neyveli New	2	500	С	Central	2021	Unlikely to comply
472	Tamil Nadu	Neyveli Lignite	Neyveli TPS-II	1	210	С	Central	1988	Likely to comply
473	Tamil Nadu	Neyveli Lignite	Neyveli TPS-II	2	210	С	Central	1987	Likely to comply
474	Tamil Nadu	Neyveli Lignite	Neyveli TPS-II	3	210	С	Central	1987	Likely to comply
475	Tamil Nadu	Neyveli Lignite	Neyveli TPS-II	4	210	С	Central	1991	Likely to comply
476	Tamil Nadu	Neyveli Lignite	Neyveli TPS-II	5	210	С	Central	1991	Likely to comply
477	Tamil Nadu	Neyveli Lignite	Neyveli TPS-II	6	210	С	Central	1992	Likely to comply
478	Tamil Nadu	Neyveli Lignite	Neyveli TPS-II	7	210	С	Central	1993	Likely to comply
479	Tamil Nadu	Neyveli Lignite	Neyveli TPS-II EXP	1	250	С	Central	2012	Unlikely to comply
480	Tamil Nadu	Neyveli Lignite	Neyveli TPS-II EXP	2	250	С	Central	2015	Unlikely to comply
481	Tamil Nadu	ST-CMSECP	TAQA Neyveli	2	250	С	Private	2002	Likely to comply
482	Telangana	TSGENCO	Bhadradri TPP	1	270	С	State	2020	Unlikely to comply
483	Telangana	TSGENCO	Bhadradri TPP	2	270	С	State	2020	Unlikely to comply
484	Telangana	TSGENCO	Bhadradri TPP	3	270	С	State	2021	Unlikely to comply
485	Telangana	TSGENCO	Kakatiya TPS	1	500	С	State	2010	Unlikely to comply
486	Telangana	TSGENCO	Kakatiya TPS	2	600	С	State	2015	Unlikely to comply
487	Telangana	TSGENCO	Kothagudem TPS (New)	9	250	С	State	1995	Unlikely to comply

S. no.	State	Developer	Name of power plant	Unit no.	Capa- city (MW)	Cate- gory	Sector	Commi- ssioning year	Likely to comply or not (based on December 2021 status for FGD)
488	Telangana	TSGENCO	Kothagudem TPS (NEW)	10	250	с	State	1997	Unlikely to comply
489	Telangana	TSGENCO	Kothagudem TPS (NEW)	11	500	С	State	2011	Unlikely to comply
490	Telangana	TSGENCO	Kothagudem TPS (Stage VII)	12	800	С	State	2018	Unlikely to comply
491	Telangana	TSGENCO	Ramagundem-B TPS	1	63	С	State	1971	Unlikely to comply
492	Telangana	NTPC	Ramagundem STPS	1	200	С	Central	1983	Likely to comply
493	Telangana	NTPC	Ramagundem STPS	2	200	С	Central	1984	Likely to comply
494	Telangana	NTPC	Ramagundem STPS	3	200	С	Central	1984	Likely to comply
495	Telangana	NTPC	Ramagundem STPS	4	500	С	Central	1988	Likely to comply
496	Telangana	NTPC	Ramagundem STPS	5	500	С	Central	1989	Likely to comply
497	Telangana	NTPC	Ramagundem STPS	6	500	С	Central	1989	Likely to comply
498	Telangana	NTPC	Ramagundem STPS	7	500	С	Central	2004	Likely to comply
499	Telangana	Singareni Colleries Co. Ltd	Singareni TPP	1	600	С	State	2016	Likely to comply
500	Telangana	Singareni Colleries Co. Ltd	Singareni TPP	2	600	С	State	2016	Likely to comply
501	Uttar Pradesh	NTPC	Meja STPP	1	660	С	Central	2018	Likely to comply
502	Uttar Pradesh	NTPC	Meja STPP	2	660	С	Central	2021	Unlikely to comply
503	Uttar Pradesh	NTPC	Rihand STPS	1	500	С	Central	1988	Likely to comply
504	Uttar Pradesh	NTPC	Rihand STPS	2	500	С	Central	1989	Likely to comply
505p	Uttar Pradesh	NTPC	Rihand STPS	3	500	С	Central	2005	Likely to comply
506	Uttar Pradesh	NTPC	Rihand STPS	4	500	С	Central	2005	Likely to comply
507	Uttar Pradesh	NTPC	Rihand STPS	5	500	С	Central	2012	Likely to comply
508	Uttar Pradesh	NTPC	Rihand STPS	6	500	С	Central	2013	Likely to comply
509	Uttar Pradesh	NTPC	Singrauli STPS	1	200	С	Central	1982	Likely to comply
510	Uttar Pradesh	NTPC	Singrauli STPS	2	200	С	Central	1982	Likely to comply
511	Uttar Pradesh	NTPC	Singrauli STPS	3	200	С	Central	1983	Likely to comply
512	Uttar Pradesh	NTPC	Singrauli STPS	4	200	С	Central	1983	Likely to comply
513	Uttar Pradesh	NTPC	Singrauli STPS	5	200	С	Central	1984	Likely to comply
514	Uttar Pradesh	NTPC	Singrauli STPS	6	500	С	Central	1986	Likely to comply
515	Uttar Pradesh	NTPC	Singrauli STPS	7	500	С	Central	1987	Likely to comply
516	Uttar Pradesh	NTPC	Tanda TPS	1	110	С	Central	1988	Likely to comply
517	Uttar Pradesh	NTPC	Tanda TPS	2	110	С	Central	1989	Likely to comply
518	Uttar Pradesh	NTPC	Tanda TPS	3	110	С	Central	1990	Likely to comply
519	Uttar Pradesh	NTPC	Tanda TPS	4	110	С	Central	1998	Likely to comply
520	Uttar Pradesh	NTPC	Tanda TPS	5	660	С	Central	2019	Unlikely to comply
521	Uttar Pradesh	NTPC	Tanda TPS	6	660	С	Central	2021	Unlikely to comply
522	Uttar Pradesh	NTPC	Unchahar TPS	1	210	С	Central	1988	Likely to comply
523	Uttar Pradesh	NTPC	Unchahar TPS	2	210	С	Central	1989	Likely to comply
524	Uttar Pradesh	NTPC	Unchahar TPS	3	210	С	Central	1999	Likely to comply
525	Uttar Pradesh	NTPC	Unchahar TPS	4	210	С	Central	1999	Likely to comply
526	Uttar Pradesh	NTPC	Unchahar TPS	5	210	С	Central	2006	Likely to comply

S. no.	State	Developer	Name of power plant	Unit	Capa-	Cate-	Sector	Commi-	Likely to comply or not
				no.	city (MW)	gory		ssioning	(based on December 2021 status for EGD)
527	littar Pradesh	NTPC	Unchahar TPS	6	500	C	Central	2017	Likely to comply
528	Uttar Pradesh	Pravagrai Power	Pravagrai TPP	1	660	c	Private	2016	Likely to comply
520		Generation Company Ltd		-				2010	
529	Uttar Pradesh	Prayagraj Power Generation Company Ltd	Prayagraj TPP	2	660	С	Private	2015	Likely to comply
530	Uttar Pradesh	Prayagraj Power Generation Company Ltd	Prayagraj TPP	3	660	С	Private	2017	Likely to comply
531	Uttar Pradesh	Rosa Power Supply Co	Rosa TPP Ph-I	1	300	С	Private	2010	Likely to comply
532	Uttar Pradesh	Rosa Power Supply Co	Rosa TPP Ph-I	2	300	С	Private	2010	Likely to comply
533	Uttar Pradesh	Rosa Power Supply Co	Rosa TPP Ph-I	3	300	с	Private	2011	Likely to comply
534	Uttar Pradesh	Rosa Power Supply Co	Rosa TPP Ph-I	4	300	С	Private	2012	Likely to comply
535	Uttar Pradesh	Bajaj Power Co	Utraula TPS	1	45	С	Private	2012	Unlikely to comply
536	Uttar Pradesh	Bajaj Power Co	Utraula TPS	2	45	С	Private	2012	Unlikely to comply
537	Uttar Pradesh	Bajaj Power Co	Barkhera TPS	1	45	С	Private	2012	Unlikely to comply
538	Uttar Pradesh	Bajaj Power Co	Barkhera TPS	2	45	С	Private	2012	Unlikely to comply
539	Uttar Pradesh	Bajaj Power Co	Khambarkhera TPS	1	45	С	Private	2012	Unlikely to comply
540	Uttar Pradesh	Bajaj Power Co	Khambarkhera TPS	2	45	С	Private	2012	Unlikely to comply
541	Uttar Pradesh	Bajaj Power Co	Kundarki TPS	1	45	С	Private	2012	Unlikely to comply
542	Uttar Pradesh	Bajaj Power Co	Kundarki TPS	2	45	С	Private	2012	Unlikely to comply
543	Uttar Pradesh	Bajaj Power Co	Maqsoodpur TPS	1	45	С	Private	2012	Unlikely to comply
544	Uttar Pradesh	Bajaj Power Co	Maqsoodpur TPS	2	45	С	Private	2012	Unlikely to comply
545	Uttar Pradesh	Lalitpur Power Gen. Co.	Lalitpur TPS	1	660	С	Private	2016	Likely to comply
546	Uttar Pradesh	Lalitpur Power Gen. Co	Lalitpur TPS	2	660	с	Private	2016	Likely to comply
547	Uttar Pradesh	Lalitpur Power Gen. Co	Lalitpur TPS	3	660	С	Private	2016	Likely to comply
548	Uttar Pradesh	UPRVUNL	Harduaganj TPS	7	105	С	State	1978	Unlikely to comply
549	Uttar Pradesh	UPRVUNL	Harduaganj TPS	8	250	С	State	2011	Likely to comply
550	Uttar Pradesh	UPRVUNL	Harduaganj TPS	9	250	С	State	2012	Likely to comply
551	Uttar Pradesh	UPRVUNL	Obra TPS	7	94	С	State	1974	Unlikely to comply
552	Uttar Pradesh	UPRVUNL	Obra TPS	9	200	С	State	1980	Unlikely to comply
553	Uttar Pradesh	UPRVUNL	Obra TPS	10	200	С	State	1979	Unlikely to comply
554	Uttar Pradesh	UPRVUNL	Obra TPS	11	200	С	State	1977	Unlikely to comply
555	Uttar Pradesh	UPRVUNL	Obra TPS	12	200	С	State	1981	Unlikely to comply
556	Uttar Pradesh	UPRVUNL	OBRA TPS	13	200	С	State	1982	Unlikely to comply
557	Uttar Pradesh	UPRVUNL	Paricha TPS	1	110	С	State	1984	Unlikely to comply
558	Uttar Pradesh	UPRVUNL	Paricha TPS	2	110	С	State	1985	Unlikely to comply

S. no.	State	Developer	Name of power plant	Unit	Capa-	Cate-	Sector	Commi-	Likely to comply or not
				no.	City (MW)	gory		ssioning	(based on December 2021 status for FGD)
559	Uttar Pradesh	UPRVUNL	Paricha TPS	3	210	С	State	2006	Likely to comply
560	Uttar Pradesh	UPRVUNI	Paricha TPS	4	210	c	State	2006	Likely to comply
561	Uttar Pradesh	UPRVUNL	Paricha TPS	5	250	c	State	2012	Likely to comply
562	Uttar Pradesh	UPRVUNL	Paricha TPS	6	250	c	State	2013	Likely to comply
563	West Bengal	NTPC	Farakka STPS	1	200	С	Central	1986	Likely to comply
564	West Bengal	NTPC	Farakka STPS	2	200	С	Central	1986	Likely to comply
565	West Bengal	NTPC	Farakka STPS	3	200	С	Central	1987	Likely to comply
566	West Bengal	NTPC	Farakka STPS	4	500	с	Central	1992	Likely to comply
567	West Bengal	NTPC	Farakka STPS	5	500	С	Central	1994	Likely to comply
568	West Bengal	NTPC	Farakka STPS	6	500	С	Central	2012	Likely to comply
569	West Bengal	D.V.C.	Mejia TPS	1	210	С	Central-state JV	1996	Likely to comply
570	West Bengal	D.V.C.	Mejia TPS	2	210	С	Central–state JV	1997	Likely to comply
571	West Bengal	D.V.C.	Mejia TPS	3	210	С	Central-state JV	1998	Likely to comply
572	West Bengal	D.V.C.	Mejia TPS	4	210	С	Centra-state JV	2004	Likely to comply
573	West Bengal	D.V.C	Mejia TPS	5	250	С	Central–state JV	2007	Likely to comply
574	West Bengal	D.V.C.	Mejia TPS	6	250	С	Central–state JV	2007	Likely to comply
575	West Bengal	D.V.C.	Mejia TPS	7	500	С	Central-state JV	2012	Likely to comply
576	West Bengal	D.V.C.	Mejia TPS	8	500	С	Central-state JV	2012	Likely to comply
577	West Bengal	D.V.C.	Raghunathpur TPP	1	600	С	Central-state JV	2014	Likely to comply
578	West Bengal	D.V.C.	Raghunathpur TPP	2	600	С	Central-state JV	2016	Likely to comply
579	West Bengal	WBPDCL	Bakreswar TPS	1	210	С	State	2000	Likely to comply
580	West Bengal	WBPDCL	Bakreswar TPS	2	210	С	State	2000	Likely to comply
581	West Bengal	WBPDCL	Bakreswar TPS	3	210	С	State	2000	Likely to comply
582	West Bengal	WBPDCL	Bakreswar TPS	4	210	С	State	2000	Likely to comply
583	West Bengal	WBPDCL	Bakreswar TPS	5	210	С	State	2000	Likely to comply
584	West Bengal	WBPDCL	Kolaghat TPS	1	210	С	State	1993	Unlikely to comply
585	West Bengal	WBPDCL	Kolaghat TPS	2	210	С	State	1990	Unlikely to comply
586	West Bengal	WBPDCL	Kolaghat TPS	3	210	С	State	1985	Likely to comply
587	West Bengal	WBPDCL	Kolaghat TPS	4	210	С	State	1984	Likely to comply
588	West Bengal	WBPDCL	Kolaghat TPS	5	210	С	State	1993	Likely to comply
589	West Bengal	WBPDCL	Kolaghat TPS	6	210	С	State	1991	Likely to comply
590	West Bengal	WBPDCL	Sagardighi TPS	1	300	С	State	2008	Likely to comply
591	West Bengal	WBPDCL	Sagardighi TPS	2	300	С	State	2007	Likely to comply
592	West Bengal	WBPDCL	Sagardighi TPS	3	500	С	State	2016	Likely to comply
593	West Bengal	WBPDCL	Sagardighi TPS	4	500	С	State	2016	Likely to comply
594	West Bengal	WBPDCL	Santaldih TPS	5	250	С	State	2007	Likely to comply
595	West Bengal	WBPDCL	Santaldih TPS	6	250	С	State	2011	Likely to comply
596	Andhra Pradesh	NTPC	Simhadri TPS	2	500	А	Central	2002	Likely to comply

Category A: Likely to meet the deadline if tender awarded by December 2021 Category B: Likely to meet the deadline if tender floated or awarded by December 2021 Category C: Likely to meet the deadline if tender specification made, tender floated or tender awarded by December 2021

In December 2021, the Central Pollution Control Board (CPCB) issued a list placing coal-based thermal power plants in three categories, with differentiated deadlines to comply with the emission standards. These emission standards were first formulated by the Ministry of Environment, Forest and Climate Change (MoEF&CC) in December 2015.

Analysis of these differentiated deadlines and reported stages of compliance by coal-based thermal power plants show that despite extensions in deadlines and dilution of norms, compliance by a huge capacity of coal power is still far from attainable and penalties to be levied on violation too meagre to drive compliance.

Coal-based thermal power plants are responsible for over half of the sulphur dioxide (SO_2) , 30 per cent of oxides of nitrogen (NOx) and about 20 per cent particulate matter (PM) emitted by industries in the ambient air. There is an imminent need to act on retiring inefficient old units, incentivize plants that comply and timely intervention by regulators on delay in work progress to meet emission norms.



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