BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION

Date: 4th October, 2020

To,

Shri. Sanoj Kumar Jha,
Secretary,
CENTRAL ELECTRICITY REGULATORY COMMISSION
Email ID- secy@cercind.gov.in and mmchaudhari@cercind.gov.in

Subject: Comments on the staff paper "Mechanism for Compensation on account of change in law for compliance with Revised Emission Standards notified by MoEF&CC in respect of Competitively Bid Thermal generating" by the Legal Initiative for Forest and the Environment (LIFE) and the Center for Research on Energy and Clean Air (CREA)

Dear Sir,

- 1. The Legal Initiative for Forest and the Environment ("LIFE") and the Center for Research on Energy and Clean Air ("CREA") hereby submit the following comments regarding the Central Electricity Regulatory Commission's ("CERC") Staff Paper on Compensation Mechanism for Emission Control System ("Staff Paper"). These comments are timely submitted by the 4th October 2020 deadline set forth in CERC's 5th September, 2020 Public Notice. ii
- 2. As explained below, LIFE and CREA generally agree that a mechanism to enable power plant owners to recover prudently incurred costs of installing and operating controls is appropriate. But certain modifications to the Compensation Mechanism proposed in the Staff Paper are needed to ensure that it does not subsidize the continued operation of certain coal plants that are ageing, uneconomic, and/or lack space to install controls. Modifications are also needed to ensure that the Compensation Mechanism does not improperly distort the ability of power markets to serve power at the most efficient cost. The following submission describes why the proposed Compensation Mechanism:
 - is an important step towards addressing widespread non-compliance;
 - should not be available to the 47 GWs of coal plants that the Central Electricity Authority has identified as retiring in its 2018 National Electricity Plan;
 - should be based on the industry standard assumed 25-year useful life of coal plants, rather than hypothetical and costly extension of such life to 35 or 40 years suggested by Staff; and
 - should limit any merit order dispatch subsidies for early compliance only until the last compliance deadline December 2022 after which the focus should shift to appropriately penalizing any plant that has still failed to comply with the emissions standards established in 2015.

Introduction: An Important Step Towards Addressing Widespread Non-Compliance

3. The Staff Paper proposes an important step towards addressing the almost complete failure of power plant operators in India to achieve compliance with the coal-fired power plant emission standards issued by the Ministry of Environment, Forest, and Climate Change ("MoEF&CC") that were issued on 7th December, 2015 (the "2015 Rule"). While the 2015 Rule set forth a 7th December, 2017 compliance deadline, almost no coal plant met, or even attempted to meet, that deadline. Since then, the Supreme Court has set a phased schedule for coal plants to finally satisfy the 2015 Rule over the 2019 through 2022 time frame. Almost all of the plants for which the Supreme Court established deadlines in 2019 and early- to mid-2020, however, have missed those deadlines. And the great majority of India's coal plants are on track to miss the remaining deadlines that have been set between now and the end of 2022, as shown in Figures 1A, 1B, and 2 below.ⁱⁱⁱ

Figure 1A. Unit-wise SO₂ Pollution Control Technology implementation status

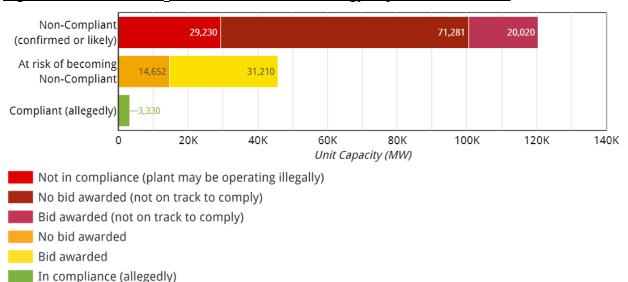
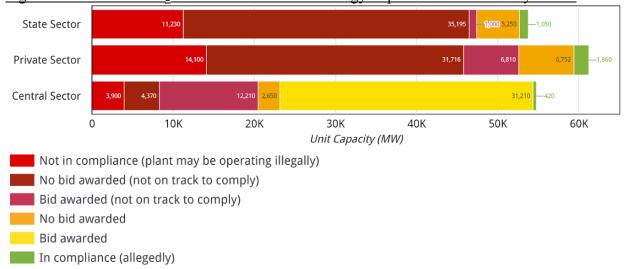


Figure 1B. Unit-wise SO₂ Pollution Control Technology implementation status by Sector



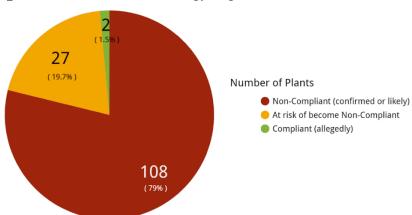


Figure 2. Plant-wise SO₂ Pollution Control Technology implementation status

- 4. Every day that such non-compliance drags on exacts a staggering economic and public health toll on India. As the Supreme Court has recognized, "[i]t is a matter of common knowledge that air pollution can cause serious health hazards apart from adverse health effects. As a result of these health hazards and adverse health effects, there is bound to be an economic loss so far as the affected persons are concerned and the entire country due to hospitalization and other attendant expenses including loss of man-hours of work. Economic activity and health are interlinked."
- 5. Coal plant operators have cited uncertainty regarding their ability to recover the costs of installing and operating the pollution controls needed to achieve compliance with the 2015 Rule as a primary reason for non-compliance. This claim is dubious at best, especially given that the Ministry of Power made clear in 2018 that power companies would be allowed to pass through pollution control costs because the 2015 Rule is considered a "change in law." Regardless, by setting forth a specific mechanism for ensuring cost recovery, the Staff Paper proposal would eliminate a primary excuse offered by industry for its failure to comply with emission standards that were established nearly five years ago.
- 6. Given the public health and economic imperative of greatly reducing harmful sulfur dioxide, nitrogen oxide, and particulate matter pollution from India's more than 200 GWs of coal plants, LIFE and CREA support the effort to provide certainty regarding how the costs of installing and operating pollution controls will be recovered. We respectfully urge CERC, however, to make the following modifications or clarifications to the Staff proposal in order to ensure that the Compensation Mechanism does not become a blank check that distorts the market in favor of ageing and uneconomic coal plants over lower cost and cleaner generation resources.

I. The Mechanism Should Not Encourage Plants Identified as Retiring to Install Controls

7. First, CERC should make clear that coal plants that have been identified as retiring due to economics, age, and/or lack of space for pollution controls should not be able to seek compensation to now install controls. Instead, those plants should be required to retire no later than the final December 31, 2022 compliance deadline for the 2015 Rule.

- 8. For one thing, many of the companies that own such plants used the promise of retirement as an excuse to not take any steps to comply with the 2015 Rule. Even if they were to change course today, they would fail to meet the extended 2019 to 2022 compliance deadlines that the Supreme Court has set. It would be patently unfair for a company to delay compliance for years because its plant was identified for retirement, and then to get paid to install controls years after the compliance deadline.
- 9. In addition, making energy customers pay the substantial costs for installing controls on these plants would not be economically prudent. All stakeholders recognize that it does not make sense to make significant capital investments in ageing plants. For example, comments submitted by the Association of Power Producers to the Central Electricity Authority in 2016^{vii} noted that:

Out of the 173 GW of installed coal based plants which will be impacted by these new norms, it is estimated that about 62 GW of these plants have been commissioned before 2003. Many of these plants would have a residual life of less than 10 years and for such plants, the time required to recover the cost of retro-fitting such emission control equipment would be quite less and would make the plants completely unviable. Further, the Government is already encouraging the gradual phasing out of ageing thermal plants In this scenario, it would not make sense to make significant capital investments in such ageing plants which will soon be replaced.

- The Central Electricity Authority ("CEA") echoed these sentiments in its 2018 National Electricity Plan, which found that "[a] significant percentage of generating plants in the country is well past their useful life. They also contribute significantly to environmental pollution." viii The CEA then identified approximately 48 GWs of coal capacity that it expected to be retired in the near future due to age, economics, and/or lack of space to install controls. ix These plants, which are listed in Annexures 5.5, 5.5(A), and 5.6 of the National Electricity Plan, include 16.7 GWs that would retire due to the 2015 Rule, 5.9 GWs that would retire by 2022, and 25.5 GWs that would retire between 2022 and 2027 because they would exceed the assumed 25 year useful life of coal plants in India. However, many of these plants still appear in CEA's monthly FGD implementation status updates, as highlighted in Annexure I to this submission. Given the conclusion that these plants should be retired expeditiously, it would be improper to make available to such plants a Compensation Mechanism that would pay them to install controls and continue operating even though that is not the reasonable and prudent outcome for ratepayers. As such, CERC should make clear that the retiring plants identified in the Annexures to the National Electricity Plan are not eligible for the Compensation Mechanism because it simply "would not make sense to make significant capital investment in" those plants.
- 11. While acknowledging that both CERC's tariff regulations and "recognized industry practice" assume a 25-year useful life for coal plants, the Staff suggest that a useful plant life of 35 to 40 years should be used in evaluating the annual depreciation cost and overall economics of installing pollution controls under the 2015 Rule. Staff Paper at pp. 17-19. In support, the Staff contend that the useful life of a coal plant can be extended by 10 to 15 years through Renovation and Modernization ("R&M") projects requiring only a "marginal expenditure." *Id.* at p. 17. But the possibility of such "renovation and modernization" on individual plants does not justify abandoning the widely accepted approach of making decisions regarding investments in coal plants based on an assumed 25-year useful life. For one thing, R&M projects are focused only on improving the performance of a coal plant. To extend the life of a coal plant beyond its design economic life of 25

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years, a company must also undertake Life Extension projects.^x As such, the costs of extending the life of a coal plant are likely to be significantly higher than the "marginal expenditure" mentioned in the Staff Paper. And these costs would, of course, be on top of the substantial expenses that would be incurred installing and operating pollution controls on such plant. In addition, even if the plant can operate from a technical standpoint for 35 to 40 years, there is little reason to believe that a coal plant will remain economically useful for that many decades. In fact, such plants are already experiencing a more-than-decade-long slide in plant load factors (from 77.5% in 2009-2010 to 48.46% in 2020 so far).^{xi} All that extending the assumed useful life of a coal plant by 10 to 15 years would do is escalate the risk of further increasing the substantial levels of stranded assets found in India's thermal power sector.^{xii} As such, the 25-year useful life assumption should be maintained.

II. The Mechanism Should Not Allow Long-term Subsidization

- 12. CERC should also ensure that the incentives being provided to encourage coal plants to comply with the 2015 Rule do not end up as long-term subsidies that distort the power markets in favor of coal over other generation resources. The purpose of the Compensation Mechanism is "to restore the affected party to the same economic position as if such Change in Law has not occurred." Staff Paper at p. 12. Doing so requires, of course, that when it is prudent to install pollution controls and continue operating a coal plant, the company fully recovers the actual costs that it incurs in installing and operating such controls. It is our understanding that CERC also believes that "restoring the affected party to the same economic position" requires allowing a plant that installs and operates pollution controls to exclude the variable costs of such operation from merit order dispatch decisions. Otherwise, a plant that installs and operates its controls would be at a competitive disadvantage to a plant that does not.
- 13. LIFE and CREA believe that it is appropriate to exclude the variable costs of operating pollution controls from merit order dispatching decisions until the December 31, 2022 deadline by which all coal plants in India are supposed to have achieved compliance with the 2015 Rule. By doing so, plants that act more quickly to achieve compliance would not be unfairly penalized in merit order dispatching in comparison to plants that drag their heels in complying. Once the 2022 deadline is passed, however, the calculus shifts. By then, all plants should have installed and be operating pollution controls and, therefore, the baseline assumption should be that all plants have come into compliance. As such, after December 2022, there is no longer a need to incentivize compliance. Instead, the focus must be on appropriately penalizing plants that have failed to comply. And one way to do so is to factor the actual variable operating costs of pollution controls into merit order dispatch decisions for plants that have achieved compliance, while adding a penalty of twice the average variable operating costs of pollution controls to the merit order dispatching of noncompliant plants. Such an approach would appropriately balance compliance incentives and noncompliance penalties, while avoiding market distortions that would result from long-term subsidization of coal plants.

Regards,

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Endnotes:

ⁱ Central Electricity Regulatory Commission, Staff Paper on Mechanism for Compensation for Competitively Bid Thermal Generating Stations for Change in Law on account of Compliance of the Revised Emission Standards of the Ministry of Environment, Forest and Climate Change, Government of India (MoEF&CC) (September, 2020), available at http://www.cercind.gov.in/2020/draft_reg/SPMC05092020.pdf.

- ii Central Energy Regulatory Commission, Public Notice No. EN-(01)/8/2020-CERC (5th September, 2020), available at http://www.cercind.gov.in/2020/draft_reg/Public%20Notice_Modified.pdf.
- iii Central Electricity Authority, Unit-wise FGD implementation status and the summary sheet for September 2020, available at http://cea.nic.in/reports/others/thermal/trm/summary_sept20.pdf. Assumptions: FGD takes at least two years to install from the approximate "bid award" date. If a unit does not have a bid awarded and its compliance deadline is in less than two years from now OR a unit had a bid awarded within less than two years of its upcoming compliance deadline, the unit is classified as "not on track to comply" (see legend) and the unit is marked as "Non-Compliant" in the chart. If a unit does not have a bid awarded but its compliance deadline is currently in more than two years OR a unit had a bid awarded more than two years from its upcoming compliance deadline, the unit classification does not indicate whether or not the unit is "on track" to comply and the unit is categorized as "At risk of becoming Non-Compliant." In Table 2, compliance information is summarized on a plant-level based on the status of the least compliant unit reported at the plant.
- ^{iv} M.C. Mehta versus Union of India & Ors., Supreme Court of India, Writ Petition (Civil) No. 13029 of 1985 (I.A. 127792/2017) (13th December, 2017).
- ^v Ganesh, V. Put off implementation of Flue Gas Desulphurisation emission norms: FICCI. The Hindu Business Line. Assessed on October 04, 2020. Available at, https://www.thehindubusinessline.com/news/ficci-requests-pmo-to-delay-implementation-of-flue-gas-desulphurisation-emission-norms/article32014910.ece
- vi Ministry of Power, Mechanism for Implementation of New Environmental Norms for Thermal Power Plants (TPPs) supplying power to distribution licensees under concluded long-term and medium term Power Purchase Agreements (PPAs) (30 May, 2018), available at https://powermin.nic.in/sites/default/files/webform/notices/Letter_dated_30th_May_2018_on_New_Environmental_Norms.pdf.
- vii Association of Power Producers, Ref: APP/DG/2015-16/580, Letter to Shri T.K. Barai, Member (Thermal, Central Electricity Authority (8th March, 2016), "Note on the new emission norms for coal based power plants notified by MoEF & CC," at pp. 9 to 10.
- viii Central Electricity Authority, National Electricity Plan (January 2018), at p. 15.3, available at www.cea.nic.in/reports/committee/nep/nep jan 2018.pdf.
- ix National Electricity Plan at p. 5.7 and Annexures 5.5, 5.5(A), and 5.6.
- ^x Central Electricity Authority, Quarterly Review Report: Renovation & Modernisation of Thermal Power Stations, Quarter April June 2020 (25th August, 2020), available at https://www.cea.nic.in/reports/quarterly/trm quarterly review/2020/trm qrr-06.pdf.
- xi Ministry of Power, Power Sector at a Glance All India, https://powermin.nic.in/en/content/power-sector-glance-all-india (Up to August 2020 Source: CEA).

Annexure I. Units in FGD Implementation Plan (Sept 2020) Defined as Retiring before 2027 in National Electricity Plan (2018)

Sr. No.	Developer	Power Plant	Sector	State	Unit No	MW	Date Commission ed	FGD Deadline	FGD Status: Summary	FGD Status: Detailed Overview	FGD Status in Sept 2020 CEA Report
Cons	Considered for retirement as per new environmental norms (37 units at 10 sites; 6,410 MW total)										
12	NTPC & Bihar	MUZAFFARPUR TPS	Central	Bihar	1	110	3/31/1985	31-Dec-20	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	NIT issued
13	NTPC & Bihar	MUZAFFARPUR TPS	Central	Bihar	2	110	3/17/1986	31-Dec-20	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	NIT issued
27	TenughatV N Ltd	TENUGHAT TPS	State	Jharkhand	1	210	4/14/1994	31-Dec-20	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasiblity Study Completed
28	TenughatV N Ltd	TENUGHAT TPS	State	Jharkhand	2	210	10/10/1996	31-Dec-20	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasiblity Study Completed
121	RRVUNL	KOTA TPS	State	Rajasthan	5	210	3/26/1994	31-Dec-22	At risk of becoming Non-Compliant	No bid awarded	Tender specification made
210	KPCL	RAICHUR TPS	State	Karnataka	1	210	3/29/1985	31-Mar-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Bid opened
211	KPCL	RAICHUR TPS	State	Karnataka	2	210	3/2/1986	30-Jun-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Bid opened
212	KPCL	RAICHUR TPS	State	Karnataka	3	210	3/30/1991	30-Sep-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Bid opened
213	KPCL	RAICHUR TPS	State	Karnataka	4	210	9/29/1994	31-Dec-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Bid opened
214	KPCL	RAICHUR TPS	State	Karnataka	5	210	1/31/1999	31-Mar-22	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Bid opened
215	KPCL	RAICHUR TPS	State	Karnataka	6	210	7/22/1999	30-Jun-22	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Bid opened
216	KPCL	RAICHUR TPS	State	Karnataka	7	210	12/11/2002	30-Sep-22	At risk of becoming Non-Compliant	No bid awarded	Bid opened
217	KPCL	RAICHUR TPS	State	Karnataka	8	250	6/26/2010	31-Dec-22	At risk of becoming Non-Compliant	No bid awarded	Bid opened
224	NEYVELI LIGNITE	NEYVELI (EXT) TPS	Central	Tamil Nadu	1	210	10/21/2002	30-Jun-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	NIT issued
225	NEYVELI LIGNITE	NEYVELI (EXT) TPS	Central	Tamil Nadu	2	210	7/22/2003	31-Dec-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	NIT issued
226	NEYVELI LIGNITE	NEYVELI TPS-II	Central	Tamil Nadu	1	210	1/17/1988	31-Dec-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Retendering to be done
227	NEYVELI LIGNITE	NEYVELI TPS-II	Central	Tamil Nadu	2	210	2/6/1987	30-Sep-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Retendering to be done
228	NEYVELI LIGNITE	NEYVELI TPS-II	Central	Tamil Nadu	3	210	3/29/1987	30-Jun-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Retendering to be done

	NEYVELI								Non-Compliant	No bid awarded (not on	Retendering to be
229	LIGNITE	NEYVELI TPS-II	Central	Tamil Nadu	4	210	3/30/1991	31-Mar-22	(confirmed or likely)	track to comply)	done
230	NEYVELI LIGNITE	NEYVELI TPS-II	Central	Tamil Nadu	5	210	12/31/1991	30-Jun-22	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Retendering to be done
231	NEYVELI LIGNITE	NEYVELI TPS-II	Central	Tamil Nadu	6	210	10/30/1992	30-Sep-22	At risk of becoming Non-Compliant	No bid awarded	Retendering to be done
232	NEYVELI LIGNITE	NEYVELI TPS-II	Central	Tamil Nadu	7	210	6/19/1993	31-Dec-22	At risk of becoming Non-Compliant	No bid awarded	Retendering to be done
241	TANGEDC O	NORTH CHENNAI TPS & NORTH CHENNAI Ext. TP	State	Tamil Nadu	1	210	10/25/1994	31-Dec-22	At risk of becoming Non-Compliant	No bid awarded	Feasibility study completed
242	TANGEDC O	NORTH CHENNAI TPS & NORTH CHENNAI Ext. TP	State	Tamil Nadu	2	210	3/27/1995	30-Jun-22	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasibility study completed
243	TANGEDC O	NORTH CHENNAI TPS & NORTH CHENNAI Ext. TP	State	Tamil Nadu	3	210	2/24/1996	31-Mar-22	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasibility study completed
433	PSEB	ROPAR TPS	State	Punjab	6	210	3/30/1993	31-Dec-19	Non-Compliant (confirmed or likely)	Not in compliance (plant may be operating illegally)	NIT issued
434	PSEB	ROPAR TPS	State	Punjab	5	210	3/29/1992	31-Dec-19	Non-Compliant (confirmed or likely)	Not in compliance (plant may be operating illegally)	NIT issued
435	NTPC	TANDA TPS	Central	Uttar Pradesh	1	110	3/21/1988	31-Dec-20	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded
436	NTPC	TANDA TPS	Central	Uttar Pradesh	2	110	3/11/1989	1-Jan-21	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded
437	NTPC	TANDA TPS	Central	Uttar Pradesh	3	110	3/28/1990	1-Jan-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	NIT issued
438	NTPC	TANDA TPS	Central	Uttar Pradesh	4	110	2/20/1998	1-Jan-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	NIT issued
443	NTPC	TALCHER (OLD) TPS	Central	Odisha	1	60	12/17/1967	31-Dec-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	NIT issued
444	NTPC	TALCHER (OLD) TPS	Central	Odisha	2	60	3/28/1968	1-Jan-22	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	NIT issued
445	NTPC	TALCHER (OLD) TPS	Central	Odisha	3	60	7/11/1968	1-Jan-22	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	NIT issued

446	NTPC	TALCHER (OLD) TPS	Central	Odisha	4	60	4/11/1969	1-Jan-22	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	NIT issued		
447	NTPC	TALCHER (OLD) TPS	Central	Odisha	5	110	3/24/1982	1-Jan-22	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	NIT issued		
448	NTPC	TALCHER (OLD) TPS	Central	Odisha	6	110	3/24/1983	1-Jan-22	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	NIT issued		
Con	sidered for	retirement by Ma	rch 2022	as on Augus	st 201	7 (2 un	its at 1 site;	420 MW tot	al)				
431	PSEB	ROPAR TPS	State	Punjab	3	210	3/31/1988	31-Dec-19	Non-Compliant (confirmed or likely)	Not in compliance (plant may be operating illegally)	NIT issued		
432	PSEB	ROPAR TPS	State	Punjab	4	210	1/29/1989	31-Dec-19	Non-Compliant (confirmed or likely)	Not in compliance (plant may be operating illegally)	NIT issued		
Con	Considered for retirement during 2022-27 (99 units at 28 sites; 24,833 MW total) [incl. 4 units at 2 sites, or 840 MW total, allegedly in compliance]												
3	NTPC	KAHALGAON TPS	Central	Bihar	1	210	3/31/1992	31-Dec-22	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded		
4	NTPC	KAHALGAON TPS	Central	Bihar	2	210	3/17/1994	31-Dec-22	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded		
5	NTPC	KAHALGAON TPS	Central	Bihar	3	210	3/24/1995	31-Dec-22	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded		
6	NTPC	KAHALGAON TPS	Central	Bihar	4	210	3/18/1996	31-Dec-22	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded		
35	NTPC	TALCHER STPS	Central	Odisha	1	500	2/19/1995	31-Dec-21	Non-Compliant (confirmed or likely)	Bid awarded (not on track to comply)	Bid Awarded		
36	NTPC	TALCHER STPS	Central	Odisha	2	500	3/27/1996	31-Dec-21	Non-Compliant (confirmed or likely)	Bid awarded (not on track to comply)	Bid Awarded		
41	OPGCLtd	IB VALLEY TPS	State	Odisha	1	210	6/2/1994	30-Sep-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasibility study completed		
42	OPGCLtd	IB VALLEY TPS	State	Odisha	2	210	10/22/1995	30-Sep-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasibility study completed		
47	C.E.S.C. Pvt.	SOUTHERN REPL. TPS	Private	West Bengal	1	68	4/10/1991	31-Mar-22	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasibility Study completed		
48	C.E.S.C. Pvt.	SOUTHERN REPL. TPS	Private	West Bengal	2	68	8/12/1990	31-Dec-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasibility Study completed		
53	D.V.C	MEJIA TPS	Central	West Bengal	1	210	3/1/1996	31-Dec-22	At risk of becoming Non-Compliant	No bid awarded	NIT issued		
54	D.V.C	MEJIA TPS	Central	West Bengal	2	210	3/24/1997	31-Dec-22	At risk of becoming Non-Compliant	No bid awarded	NIT issued		
66	NTPC	FARAKKA STPS	Central	West Bengal	1	200	1/1/1986	31-Dec-22	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded		

67	NTPC	FARAKKA STPS	Central	West Bengal	2	200	12/24/1986	31-Dec-22	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded
68	NTPC	FARAKKA STPS	Central	West Bengal	3	200	8/6/1987	31-Dec-22	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded
69	NTPC	FARAKKA STPS	Central	West Bengal	4	500	9/25/1992	31-Dec-21	Non-Compliant (confirmed or likely)	Bid awarded (not on track to comply)	Bid Awarded
70	NTPC	FARAKKA STPS	Central	West Bengal	5	500	2/16/1994	31-Dec-21	Non-Compliant (confirmed or likely)	Bid awarded (not on track to comply)	Bid Awarded
72	WBPDC	KOLAGHAT TPS	State	West Bengal	1	210	1/16/1993	30-Jun-22	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasibility study completed
73	WBPDC	KOLAGHAT TPS	State	West Bengal	2	210	8/13/1990	31-Mar-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasibility study completed
74	WBPDC	KOLAGHAT TPS	State	West Bengal	3	210	12/16/1985	30-Sep-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasibility study completed
75	WBPDC	KOLAGHAT TPS	State	West Bengal	4	210	1/24/1984	31-Mar-22	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasibility study completed
76	WBPDC	KOLAGHAT TPS	State	West Bengal	5	210	12/28/1993	30-Jun-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasibility study completed
77	WBPDC	KOLAGHAT TPS	State	West Bengal	6	210	3/17/1991	31-Dec-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasibility study completed
135	NTPC	DADRI (NCTPP)	Central	Uttar Pradesh	1	210	12/21/1991	31-Dec-19	Compliant (allegedly)	In compliance (allegedly)	FGD commissioned
136	NTPC	DADRI (NCTPP)	Central	Uttar Pradesh	2	210	12/18/1992	31-Dec-19	Compliant (allegedly)	In compliance (allegedly)	FGD commissioned
137	NTPC	DADRI (NCTPP)	Central	Uttar Pradesh	3	210	3/23/1993	31-Dec-19	Non-Compliant (confirmed or likely)	Not in compliance (plant may be operating illegally)	Bid Awarded
138	NTPC	DADRI (NCTPP)	Central	Uttar Pradesh	4	210	3/24/1994	31-Dec-19	Non-Compliant (confirmed or likely)	Not in compliance (plant may be operating illegally)	Bid Awarded
141	NTPC	RIHAND STPS	Central	Uttar Pradesh	1	500	3/31/1988	31-Dec-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	NIT issued
142	NTPC	RIHAND STPS	Central	Uttar Pradesh	2	500	7/5/1989	31-Dec-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	NIT issued
147	NTPC	SINGRAULI STPS	Central	Uttar Pradesh	1	200	2/14/1982	31-Dec-21	Non-Compliant (confirmed or likely)	Bid awarded (not on track to comply)	Bid Awarded
148	NTPC	SINGRAULI STPS	Central	Uttar Pradesh	2	200	11/25/1982	31-Dec-21	Non-Compliant (confirmed or likely)	Bid awarded (not on track to comply)	Bid Awarded
149	NTPC	SINGRAULI STPS	Central	Uttar Pradesh	3	200	3/28/1983	31-Aug-21	Non-Compliant (confirmed or likely)	Bid awarded (not on track to comply)	Bid Awarded
150	NTPC	SINGRAULI STPS	Central	Uttar Pradesh	4	200	11/2/1983	31-Aug-21	Non-Compliant (confirmed or likely)	Bid awarded (not on track to comply)	Bid Awarded
151	NTPC	SINGRAULI STPS	Central	Uttar Pradesh	5	200	2/26/1984	30-Apr-21	Non-Compliant (confirmed or likely)	Bid awarded (not on track to comply)	Bid Awarded

		SINGRAULI		Uttar					Non-Compliant	Bid awarded (not on	
152	NTPC	STPS	Central	Pradesh	6	500	12/23/1986	28-Feb-21	(confirmed or likely)	track to comply)	Bid Awarded
153	NTPC	SINGRAULI STPS	Central	Uttar Pradesh	7	500	11/24/1987	31-Dec-20	Non-Compliant (confirmed or likely)	Bid awarded (not on track to comply)	Bid Awarded
154	NTPC	UNCHAHAR TPS	Central	Uttar Pradesh	1	210	11/21/1988	31-Dec-22	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded
155	NTPC	UNCHAHAR TPS	Central	Uttar Pradesh	2	210	3/22/1989	31-Dec-22	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded
167	UPRVUNL	ANPARA TPS	State	Uttar Pradesh	1	210	3/24/1986	31-Oct-22	At risk of becoming Non-Compliant	No bid awarded	Bid Opened
168	UPRVUNL	ANPARA TPS	State	Uttar Pradesh	2	210	2/28/1987	31-Aug-22	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Bid Opened
169	UPRVUNL	ANPARA TPS	State	Uttar Pradesh	3	210	3/12/1988	30-Jun-22	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Bid Opened
170	UPRVUNL	ANPARA TPS	State	Uttar Pradesh	4	500	7/19/1993	31-Dec-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Bid Opened
171	UPRVUNL	ANPARA TPS	State	Uttar Pradesh	5	500	7/4/1994	31-Dec-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Bid Opened
176	UPRVUNL	OBRA TPS	State	Uttar Pradesh	9	200	10/26/1980	31-Aug-22	At risk of becoming Non-Compliant	No bid awarded	Feasibility study completed
177	UPRVUNL	OBRA TPS	State	Uttar Pradesh	10	200	1/14/1979	31-Oct-22	At risk of becoming Non-Compliant	No bid awarded	Feasibility study completed
178	UPRVUNL	OBRA TPS	State	Uttar Pradesh	11	200	12/31/1977	31-Dec-22	At risk of becoming Non-Compliant	No bid awarded	Feasibility study completed
179	UPRVUNL	OBRA TPS	State	Uttar Pradesh	12	200	3/28/1981	30-Jun-22	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasibility study completed
180	UPRVUNL	OBRA TPS	State	Uttar Pradesh	13	200	7/21/1982	30-Apr-22	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasibility study completed
186	APGENCO	RAYALASEEMA TPS	State	Andhra Pradesh	1	210	3/31/1994	31-Dec-21	Compliant (allegedly)	In compliance (allegedly)	Complies with new Norms a
187	APGENCO	RAYALASEEMA TPS	State	Andhra Pradesh	2	210	2/25/1995	30-Sep-21	Compliant (allegedly)	In compliance (allegedly)	Complies with new Norms a
244	NTPC	RAMAGUNDEM STPS	Central	Telangana	1	200	10/27/1983	31-Mar-22	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded
245	NTPC	RAMAGUNDEM STPS	Central	Telangana	2	200	5/29/1984	31-Mar-22	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded
246	NTPC	RAMAGUNDEM STPS	Central	Telangana	3	200	12/13/1984	30-Jun-22	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded
247	NTPC	RAMAGUNDEM STPS	Central	Telangana	4	500	6/26/1988	30-Jun-22	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded
248	NTPC	RAMAGUNDEM STPS	Central	Telangana	5	500	3/26/1989	30-Sep-22	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded
249	NTPC	RAMAGUNDEM STPS	Central	Telangana	6	500	10/16/1989	30-Sep-22	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded

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280	NTPC	KORBA STPS	Central	Chhattisgarh	1	200	2/28/1983	31-Dec-22	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded
281	NTPC	KORBA STPS	Central	Chhattisgarh	2	200	10/31/1983	31-Dec-22	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded
282	NTPC	KORBA STPS	Central	Chhattisgarh	3	200	3/17/1984	31-Dec-22	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded
283	NTPC	KORBA STPS	Central	Chhattisgarh	4	500	5/31/1987	31-Dec-21	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded
284	NTPC	KORBA STPS	Central	Chhattisgarh	5	500	3/25/1988	31-Dec-21	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded
285	NTPC	KORBA STPS	Central	Chhattisgarh	6	500	2/26/1989	31-Dec-21	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded
306	GSECL	GANDHI NAGAR TPS	State	Gujarat	3	210	3/20/1990	31-Dec-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	LoI Placed
307	GSECL	GANDHI NAGAR TPS	State	Gujarat	4	210	7/20/1991	31-Dec-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	LoI Placed
309	GSECL	KUTCH LIG. TPS	State	Gujarat	1	70	3/29/1990	31-Dec-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	LoI Placed
310	GSECL	KUTCH LIG. TPS	State	Gujarat	2	70	3/25/1991	31-Dec-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	LoI Placed
311	GSECL	KUTCH LIG. TPS	State	Gujarat	3	75	3/31/1997	31-Dec-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	LoI Placed
314	GSECL	UKAI TPS	State	Gujarat	3	200	1/21/1979	31-Dec-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	LoI Placed
315	GSECL	UKAI TPS	State	Gujarat	4	200	3/28/1979	31-Dec-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	LoI Placed
316	GSECL	UKAI TPS	State	Gujarat	5	210	1/30/1985	31-Dec-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	LoI Placed
318	GSECL	WANAKBORI TPS	State	Gujarat	1	210	3/23/1982	31-Dec-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	LoI Placed
319	GSECL	WANAKBORI TPS	State	Gujarat	2	210	1/15/1983	31-Dec-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	LoI Placed
320	GSECL	WANAKBORI TPS	State	Gujarat	3	210	3/15/1984	31-Dec-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	LoI Placed
321	GSECL	WANAKBORI TPS	State	Gujarat	4	210	3/9/1986	31-Dec-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	LoI Placed
322	GSECL	WANAKBORI TPS	State	Gujarat	5	210	9/23/1986	31-Dec-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	LoI Placed
323	GSECL	WANAKBORI TPS	State	Gujarat	6	210	11/18/1987	31-Dec-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	LoI Placed
330	Torrent Power Gen	SABARMATI	Private	Gujarat	1	120	10/12/1978	31-Dec-22	At risk of becoming Non-Compliant	No bid awarded	NIT issued
331	Torrent Power Gen	SABARMATI	Private	Gujarat	2	121	12/31/1984	31-Dec-22	At risk of becoming Non-Compliant	No bid awarded	NIT issued

332	Torrent Power Gen	SABARMATI	Private	Gujarat	3	121	9/28/1988	31-Dec-22	At risk of becoming Non-Compliant	No bid awarded	NIT issued
340	MPPGCL	SANJAY GANDHI TPS	State	Madhya Pradesh	1	210	3/26/1993	31-Mar-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasibility Study completed
341	MPPGCL	SANJAY GANDHI TPS	State	Madhya Pradesh	2	210	3/27/1993	31-Mar-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasibility Study completed
351	NTPC	VINDHYACHAL STPS	Central	Madhya Pradesh	1	210	10/10/1987	31-Dec-22	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded
352	NTPC	VINDHYACHAL STPS	Central	Madhya Pradesh	2	210	7/23/1988	31-Dec-22	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded
353	NTPC	VINDHYACHAL STPS	Central	Madhya Pradesh	3	210	2/3/1989	31-Dec-22	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded
354	NTPC	VINDHYACHAL STPS	Central	Madhya Pradesh	4	210	12/26/1989	31-Dec-22	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded
355	NTPC	VINDHYACHAL STPS	Central	Madhya Pradesh	5	210	3/31/1990	31-Dec-22	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded
356	NTPC	VINDHYACHAL STPS	Central	Madhya Pradesh	6	210	2/1/1991	31-Dec-22	At risk of becoming Non-Compliant	Bid awarded	Bid Awarded
378	MAHAGE NCO	BHUSAWAL TPS	State	Maharashtra	3	210	9/18/1982	31-Mar-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasibility Study Carried Out
381	MAHAGE NCO	CHANDRAPUR STPS	State	Maharashtra	3	210	5/3/1985	31-Mar-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasibility Study Carried Out
382	MAHAGE NCO	CHANDRAPUR STPS	State	Maharashtra	4	210	3/8/1986	31-Mar-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasibility Study Carried Out
383	MAHAGE NCO	CHANDRAPUR STPS	State	Maharashtra	5	500	3/22/1991	31-Mar-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasibility Study Carried Out
384	MAHAGE NCO	CHANDRAPUR STPS	State	Maharashtra	6	500	3/11/1992	31-Mar-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasibility Study Carried Out
388	MAHAGE NCO	KHAPARKHEDA TPS	State	Maharashtra	1	210	3/26/1989	31-Mar-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasibility Study Carried Out
389	MAHAGE NCO	KHAPARKHEDA TPS	State	Maharashtra	2	210	1/8/1990	31-Mar-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasibility Study Carried Ou
393	MAHAGE NCO	KORADI TPS	State	Maharashtra	6	210	3/30/1982	31-Mar-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasibility Study Carried Out
394	MAHAGE NCO	KORADI TPS	State	Maharashtra	7	210	1/13/1983	31-Mar-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasibility Study Carried Out
398	MAHAGE NCO	NASIK TPS	State	Maharashtra	3	210	4/26/1979	31-Mar-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasibility Study Carried Out
399	MAHAGE NCO	NASIK TPS	State	Maharashtra	4	210	7/10/1980	31-Mar-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasibility Study Carried Out
400	MAHAGE NCO	NASIK TPS	State	Maharashtra	5	210	1/30/1981	31-Mar-21	Non-Compliant (confirmed or likely)	No bid awarded (not on track to comply)	Feasibility Study Carried Out