



भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power

**REPORT ON FLY ASH GENERATION AT COAL / LIGNITE
BASED THERMAL POWER STATIONS AND ITS
UTILIZATION IN THE COUNTRY FOR THE YEAR 2020 - 21**

**CENTRAL ELECTRICITY AUTHORITY
THERMAL CIVIL DESIGN DIVISION
NEW DELHI**

AUGUST 2021

दिनेश चंद्रा
अध्यक्ष और पदेन सचिव
भारत सरकार

Dinesh Chandra
Chairperson & Ex-officio
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FOREWORD

Presently, the coal and lignite based generating stations contribute more than 75 % in the total electricity generation in the country. In near future also, the coal-based generation is likely to remain substantial. Indian coal has high ash content, of the order of 30–45 %, resulting in generation of a large quantity of fly ash in coal and lignite based Thermal Power Stations. At present, ash utilization is lower than its production on all India basis. As a result, there is a surplus ash stock, which has been increasing every year. The management of fly ash has been a matter of concern in view of requirement of large area of land for its storage and disposal as well as its potential to cause air and water pollution .

To address the above concerns, the Ministry of Environment & Forests and Climate Change (MoEF & CC) has issued various Notifications on fly ash utilization prescribing therein the targets for fly ash utilization for coal / lignite based Thermal Power Stations with an aim to achieve 100% utilization in a phased manner. Central Electricity Authority (CEA) has been monitoring the status of fly ash generation and its utilization in the country since 1996.

The utilization of fly ash has increased from about 7 Million Tonnes in 1996-97 to a level of 214.91 Million Tonnes in 2020-21. The percentage of fly ash utilization during 2020-21 was 92.41%. To materialize 100 % utilization of fly ash on all India basis, in line with MoEF & CC Notifications, extra efforts need to be put in by all Thermal Power Stations.

I wish to express my sincere thanks to all the Power Utilities and Thermal Power stations in the country for providing data/information on fly ash generation and its utilization to CEA for bringing out this report. I believe that this report would be useful for all the stakeholders and pave the way to achieve 100% utilisation of fly ash in the country.

A handwritten signature in blue ink, appearing to read "Dinesh Chandra".

(Dinesh Chandra)

New Delhi
August, 2021



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PREFACE

Management of fly ash at coal / lignite based Thermal Power Stations in the country is a challenging task in view of large quantity of ash being generated and target of achieving 100% utilization of fly ash in a time bound manner as prescribed in MoEF Notification of 14th September, 1999 and its subsequent amendments. The land for creating ash dykes for ash disposal facilities at thermal power plants is becoming difficult to be acquired. Fly ash, if not managed well, may pose environmental challenges.

Fly Ash Mission, a Technology Project in Mission Mode of Government of India, was commissioned during 1994 as a joint activity of Department of Science & Technology (DST), Ministry of Power (MoP) and Ministry of Environment & Forests (MoEF) with Department of Science & Technology as nodal agency. The Fly Ash Mission was set up to promote research in the area of fly ash utilization so that fly ash could be gainfully utilized instead of its disposal in ash ponds. Ministry of Environment & Forests and Climate Change, Government of India issued 1st Notification on Fly Ash Utilization in September 1999, which was subsequently amended in 2003, 2009 and 2016 stipulating targets for fly ash utilization for Thermal Power Stations and use of fly ash by construction agencies within a prescribed radius of any thermal power station.

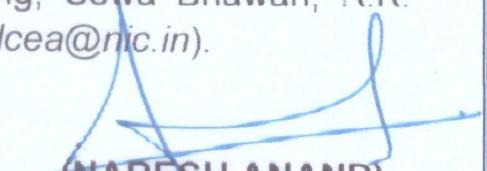
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These initiatives and policy decisions by Government of India have led to increased utilization of fly ash in various construction activities like making of fly ash based building products, manufacturing of Portland Pozzolana Cement, construction of roads / highways / flyovers, reclamation of low lying areas, backfilling and stowing of mines, wasteland development, construction of Roller Compacted concrete dams etc. Though in 2020 - 21, the ash utilization level has reached to about 92.41 % (214.91 Million Tonnes) as compared to less than 10% (6.64 MT) during the year 1996-97, a lot more needs to be done.

This report brings out the present status of fly ash generation at 202 coal / lignite based Thermal Power Stations and its utilization in the country. It also brings out the status of the level of fly ash utilization achieved by various thermal power stations in the country vis-à-vis targets prescribed in MoEF's Notification of 14th September 1999 and its subsequent amendments in 2003, 2009 & 2016. I am confident that the report will also be useful to all the stakeholders involved in fly ash management in the country for planning the utilization of fly ash and having necessary tie-up with the concerned thermal power station.

Data collection, its compilation, reconciliation & analysis is quite a vast task. Moreover, to provide a dependable / accurate data in desired formats is equally a major job. We acknowledge and express our gratitude to all Power Utilities and Thermal Power Stations for furnishing data in a timely manner. I would also like to place on record my appreciation of the efforts made by the officers and staff of Thermal Civil Design Division. We solicit suggestions from all concerned for further improving the presentation made in the report. All suggestions / views as well as intimations for any unintended errors observed in this document may kindly be sent to the Chief Engineer, Thermal Civil Design Division, Central Electricity Authority, 9th Floor, North Wing, Sewa Bhawan, R.K. Puram, New Delhi- 110066 (E-mail ID: tcdcea@nic.in).

New Delhi
August, 2021



(NARESH ANAND)
Member (Thermal)

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I express my sincere thanks to all the power utilities and the Thermal Power Stations for furnishing the data and information for bringing out this report on fly ash generation and its utilization in the country for the year 2020-21. Timely furnishing the required data and information by various Power Utilities and Thermal Power Stations to CEA is important for bringing out the report.

I am grateful to the Chairperson, CEA / Member (Thermal), CEA for the valuable suggestions and guidance in the preparation of this report.

I also express my thanks to the team comprising Shri Baleshwar Thakur, Director, Shri P.S. Mohan Kumar, Deputy Director, Shri Manoj Kumar Choudhary, Assistant Director-II and other officers of TCD Division, CEA in the preparation of this report.

New Delhi

August, 2021



(Jani Ram Boro)

Chief Engineer (TCD)

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REPORT

CENTRAL ELECTRICITY AUTHORITY

THERMAL CIVIL DESIGN DIVISION

FLY ASH GENERATION AT COAL / LIGNITE BASED THERMAL POWER STATIONS AND ITS UTILIZATION IN THE COUNTRY (FOR THE YEAR 2020 - 21)

1.0 BACKGROUND

Coal / Lignite based Thermal Power Generation has been the backbone of power capacity addition in the country. Indian coal is of low grade with ash content of the order of 30-45 % in comparison to imported coals which have a low ash content of the order of 2-15 %. A large quantity of ash is, thus being generated at Coal / Lignite based Thermal Power Stations in the country, which not only requires a large area of precious land for its disposal but is also one of the sources of pollution of both air and water.

Central Electricity Authority (CEA) has been monitoring the fly ash generation and its utilization at coal / lignite based thermal power stations in the country since 1996. Data on fly ash generation and utilization including modes of utilization are obtained from thermal power stations on Half-Yearly as well as on Yearly basis. The data thus obtained is analyzed and a report, bringing out the status of fly ash generation and its utilization in the country, is prepared. It is uploaded on the web site of CEA for bringing out the information in the public domain so that users of fly ash can have access to the information on the availability of fly ash at different thermal power stations in the country, in order to facilitate and promote the utilization of fly ash.

In order to reduce the requirement of land, for the disposal of fly ash in the ash ponds, and to address the problem of pollution caused by fly ash, the Ministry of Environment, Forests (MoEF) has issued various Notifications on fly ash utilization. The First Notification was issued on 14th September 1999 which was subsequently amended in the years 2003, 2009 and 2016 vide Notifications dated 27th August 2003, 3rd November 2009 and 25th January 2016 respectively. The amendment Notification of year 2009 prescribes the targets of Fly Ash utilization in a phased manner for all Coal / Lignite based Thermal Power Stations in the country so as to achieve 100% utilization of fly ash.

The Thermal Power Stations in operation, before the date of the Notification (i.e. 3rd November 2009) are to achieve the target of fly ash utilization in successive 5 years; 50% in the first year ; 60% in the second year ; 75% in the third year ; 90% in the fourth year and 100% in the fifth year from the date of notification. The new Thermal Power Stations coming into operation after the MoEF's notification (i.e. 3rd November 2009) are to achieve the target of fly ash utilization as 50% in the first year, 70% in the second year, 90% in the third year and 100% in the fourth year from their date of commissioning. Ministry of Environment, Forest and Climate Change (MoEF&CC) has issued an amendment to the Notification on 25th January 2016 in order to widen the scope of fly ash utilization, besides engraining upon Power Utilities to bear the cost of the transportation.

The report on “Fly Ash Generation and its Utilization at Coal / Lignite based Thermal Power Stations” provides the information and the status of fly ash utilization in the country. It also facilitates to ascertain the level of fly ash utilization achieved by various power stations in relation to targets prescribed in MoEF’s amended notification of 3rd November, 2009 and to take corrective measures in the cases of Thermal Power Stations lagging behind in achieving the prescribed targets of fly ash utilization.

2.0 ASH GENERATION & UTILIZATION DURING THE YEAR 2020-21

2.1 A Brief Summary

Fly ash generation & utilization data for the Year 2020-21 (April 2020 to March 2021) has been received from 202 (Two Hundred and Two) coal / lignite based thermal power stations of various power utilities in the country. Data received has been analysed to derive conclusions on present status of fly ash generation and its utilization in the country as a whole. A Brief summary of status is given in Table-I below:

TABLE - I
SUMMARY OF FLY ASH GENERATION AND UTILIZATION DURING
THE YEAR 2020-21

Description	Year 2020-21
• No. of Thermal Power Stations from which data was received	: 202
• Installed capacity (MW)	: 209990.50
• Coal consumed (Million tonnes)	: 686.34
• Fly Ash Generation (Million tonnes)	: 232.56
• Fly Ash Utilization (Million tonnes)	: 214.91
• Percentage Utilization	: 92.41
• Percentage Average Ash Content (%)	: 33.88

Power Station wise fly ash generation & its utilization status including the modes of utilization for the year 2020-21 for all the 202 thermal power stations is given in the statement at Annex-I and State wise fly ash generation & its utilization status is given in Annex-II.

2.2 Data Provided by Thermal Power Units Commissioned during the Year 2020-21:

During the Year 2020-21, Four (4) Thermal power plants with a total installed capacity of 2620 MW as given in Table-II below were commissioned:

TABLE - II

DATA PROVIDED BY THERMAL POWER UNITS COMMISSIONED DURING THE YEAR 2020-21

Sl. No.	Name of Thermal Power Station	Name of Power Utility	Unit No.	Capacity (MW)	Date of Commissioning
(1)	(2)	(3)	(4)	(5)	(6)
1	LARA SUPER THERMAL POWER PROJECT	NTPC LTD. (Chhattisgarh)	2	800.00	7.11.2020
2	KHARGONE	N.T.P.C.LTD (Madhya Pradesh)	1	660.00	1.2.2021
3	NEYVELI NEW TPS	NLC INDIA LTD. (TAMIL NADU)	2	500.00	10.02.2021
4	TANDA TPS	NTPC LIMITED (UTTAR PRADESH)	6	660.00	31.3.2021
Total for 2020-21				2620.00	

2.3 Retirement of Thermal Power Units during the Year 2020-21:

During the Year 2020-21, the following units with installed capacity as given in Table-III below have been decommissioned:

TABLE-III
**THERMAL POWER UNITS RETIRED / DECOMMISSIONED DURING THE YEAR
 2020-21**

SI No.	Name of Thermal Power Station	Name of Power Utility	Unit Number	Capacity (MW)	Sub Total (MW)	Date of Retirement
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Simhapuri	Simhapuri Energy Ltd., Andhra Pradesh	1	600.00	600	26.6.2020
2	Neyveli - I	NLC India Ltd., Tamil Nadu	8, 2, 4, 3, 5 & 6	100, 50, 50, 50, 50 & 50	350	30.9.2020
3	Korba (East)	CSPGCL, Chhattisgarh	5 & 6	120, 120	240	31.12.2020
		Total for 2020-21			1190	

2.4 Power Utilitywise Status of Fly Ash Generation & its Utilization during the Year 2020-21:

The status of fly ash generation & utilization for the year 2020-21 for various power utilities in the country has been assessed based on the data received from Thermal Power Stations. There are some Power Utilities which have achieved Fly Ash Utilisation Level of more than 100 %. More than 100 % fly ash utilisation means utilisation of ash generated during the current year and utilisation of un-utilised accumulated ash before the current year. The Power utilitywise status of Fly Ash Generation and its Utilisation during the Year 2020-21 is given in Table – IV :

TABLE-IV

**POWER UTILITYWISE FLY ASH GENERATION AND UTILIZATION FOR THE
YEAR 2020-21**

Sl. No.	Name of Power Utility	No. of TPS	Installed Capacity (MW)	Fly Ash Generation (Million- tonne)	Fly Ash Utilization (Million- tonne)	Percentage Utilization (%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	AARTI STEELS LIMITED	1	90.00	0.1878	0.1868	99.46
2	ANDHRA PRADESH POWER GENERATION CORPORATION (APGENCO)	2	3410.00	3.6715	3.8848	105.81
3	Andhra Pradesh Power Development Company Limited	1	1600.00	1.1953	1.0961	91.70
4	ACB (INDIA) Ltd.	5	490.00	1.1593	1.2185	105.10
5	Aravali Power Corporation Pvt. Ltd.	1	1500.00	0.8522	1.9021	223.20
6	ADANI POWER (MUNDRA) LIMITED	1	4620.00	0.6792	0.7165	105.49
7	ADANI POWER MAHARASHTRA LTD.	1	3300.00	3.7800	4.5404	120.12
8	ADANI POWER RAJASTHAN LTD.	1	1320.00	1.4134	1.6122	114.06
9	Abhijeet MADC Nagpur Energy Pvt. Ltd.	1	246.00	0.0000	0.0000	-
10	ADANI ELECTRICITY MUMBAI LIMITED	1	500.00	0.3760	0.4210	111.97
11	ADHUNIK POWER & NATURAL RESOURCES LTD.	1	540.00	0.8716	0.8927	102.42
12	BEPL (UP)	5	450.00	0.2549	0.2542	99.72
13	BHARATIYA RAIL BIJLEE COMPANY LIMITED	1	750.00	1.2822	0.1928	15.04
14	BHARAT ALUMINIUM COMPANY LIMITED	2	1740.00	3.1446	3.2647	103.82
15	BHADRESHWAR VIDYUT PRIVATE LIMITED	1	300.00	0.0324	0.0330	101.58
16	C.E.S.C. Ltd. (West Bengal)	3	1125.00	1.0640	1.0640	100.00
17	Chhattisgarh State Power Generation Company Ltd. (C.S.P.G.C.L.)	4	3080.00	5.6133	2.8470	50.72
18	COASTAL ENERGEN PVT. LTD	1	1200.00	0.0632	0.0666	105.35
19	C.G.P.L (Gujarat)	1	4150.00	0.7600	0.6300	82.89
20	CHEMPLAST LIMITED	1	48.50	0.0184	0.0185	100.65

Sl. No.	Name of Power Utility	No. of TPS	Installed Capacity (MW)	Fly Ash Generation (Million-tonne)	Fly Ash Utilization (Million-tonne)	Percentage Utilization (%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
21	DB POWER LIMITED	1	1200.00	2.6457	2.6009	98.30
22	Damoadar Valley Corporation (D.V.C.)	7	6960.00	10.7931	9.2307	85.52
23	Dhariwal Infrastructure Ltd. (Maharashtra)	1	600.00	0.9310	0.9460	101.61
24	ESSAR POWER MP LTD.	1	1200.00	0.6950	0.2840	40.86
25	ESSAR POWER GUJARAT LTD	1	1200.00	0.2216	0.2216	100.00
26	Gujarat Industries Power Corporation Ltd. (G.I.P.C.L.)	1	500.00	0.4772	0.4772	100.00
27	Gujarat Mineral Development Corporation Ltd. (G.M.D.C.L.)	1	250.00	0.1556	0.2060	132.43
28	G.S.E.C.L. (Gujarat)	6	5160.00	3.6865	4.8700	132.10
29	GMR Warora Energy LTD. (Maharashtra)	1	600.00	0.8342	1.1202	134.28
30	GMR Kamalanga Energy LTD. (Odisha)	1	1050.00	2.0606	2.3822	115.61
31	Haryana Power Generation Cor. Ltd. (H.P.G.C.L.)	3	2510.00	1.5126	5.3363	352.79
32	HALDIA ENERGY LIMITTED (W.B.)	1	600.00	0.9580	0.9580	100.00
33	HINDUJA NATIONAL POWER CORPORATION LIMITED	1	1040.00	0.3245	0.3519	108.45
34	INDIA POWER CORPORATION LTD.	1	12.00	0.0161	0.0161	100.00
35	INDIAN METALS & FERRO ALLOYS LTD. (Odisha)	1	200.00	0.4873	0.4873	100.00
36	IL & FS TAMIL NADU POWER COMPANY LIMITED	1	1200.00	0.1260	0.1123	89.16
37	IDEAL ENERGY PROJECTS LIMITED	1	270.00	0.0000	0.0000	-
38	J.H.P.L (HR)	1	1320.00	1.0410	1.0410	100.00
39	J.P.L (Chhattisgarh)	2	3400.00	4.6456	0.8027	17.28
40	JAIPRAKSH POWER VENTURES LIMITED	2	1820.00	1.8715	1.8733	100.10
41	JSW Energy Ltd.	2	2060.00	0.3784	0.3787	100.09
42	JINDAL INDIA THERMAL POWER LIMITED	1	1200.00	1.7821	1.0347	58.06
43	JINDAL STEEL AND POWER LIMITED	3	1685.00	2.1868	1.7322	79.21

Sl. No.	Name of Power Utility	No. of TPS	Installed Capacity (MW)	Fly Ash Generation (Million- tonne)	Fly Ash Utilization (Million- tonne)	Percentage Utilization (%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
44	JSW ENERGY (BARMER) LIMITED (Formerly Raj Westpower Ltd.)	1	1080.00	0.8895	0.9154	102.91
45	JSW STEEL LIMITED	1	90.00	0.0107	0.0107	100.53
46	JHABUA POWER LIMITED	1	600.00	1.0334	0.7220	69.87
47	Karnataka Power Corporation Ltd.(K.P.C.L.)	1	1700.00	0.8029	0.9226	114.90
48	Kanti Bijlee Utpadan Nigam Limited	1	610.00	0.7110	0.7500	105.49
49	KSK MAHANADI POWER COMPANY LIMITED	1	1800.00	2.3567	2.9074	123.37
50	LANCO AMARKANTAK POWER LIMITED	1	600.00	1.1565	0.5159	44.61
51	LALITPUR POWER GENERATION COMPANY LIMITED	1	1980.00	1.4402	1.7430	121.03
52	LANCO ANPARA POWER LIMITED	1	1200.00	1.7493	0.2953	16.88
53	MAITHON POWER LIMITED	1	1050.00	1.6483	2.1879	132.74
54	MADHYA PRADESH POWER GENERATING COMPANY LIMITED	4	5400.00	5.1528	4.1242	80.04
55	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	7	9750.00	14.1680	16.1629	114.08
56	MARUTI CLEAN COAL AND POWER LIMITED	1	300.00	0.6303	0.6499	103.11
57	MSELDC, CAPTIVE CONSUMERS	1	540.00	0.3820	0.4110	107.59
58	MEENAKSHI ENERGY PRIVATE LIMITED	1	300.00	0.0074	0.0005	6.65
59	MB POWER (MADHYA PRADESH) LIMITED	1	1200.00	1.5410	1.7521	113.70
60	MEJA URJA NIGAM PRIVATE LIMITED	1	1320.00	1.0249	0.5722	55.83
61	Neyveli Lignite Corporation Ltd. (N.L.C.LTD)	6	4240.00	1.0345	2.1805	210.78
62	NLC TAMIL NADU POWER LIMITED	1	1000.00	1.1449	1.1449	100.00
63	NSPCL	4	814.00	1.7041	1.5719	92.24
64	NTECL (Tamil Nadu)	1	1500.00	1.2767	1.5680	122.82
65	N.T.P.C. LTD.	25	46760.00	63.5230	49.1866	77.43
66	NABHA POWER LIMITED	1	1400.00	1.4203	1.4270	100.47

Sl. No.	Name of Power Utility	No. of TPS	Installed Capacity (MW)	Fly Ash Generation (Million-tonne)	Fly Ash Utilization (Million-tonne)	Percentage Utilization (%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
67	NATIONAL ALUMINIUM COMPANY LIMITED	1	1200.00	2.8920	2.1888	75.69
68	ODISHA POWER GENERATION CORPORATION LIMITED	1	1740.00	3.2220	1.2156	37.73
69	OPG POWER GENERATION PRIVATE LIMITED	1	414.00	0.0841	0.0841	100.00
70	Punjab State Power Corporation Ltd. (P.S.P.C.L.).	4	2760.00	0.7369	2.5519	346.32
71	PRAYAGRAJ POWER GENERATION COMPANY LTD.	1	1980.00	2.0022	2.0079	100.29
72	R.K.M. POWERGEN PVT. LTD	1	1440.00	1.4066	1.4062	99.97
73	Rajasthan Rajya Vidyut Utpadan Nigam Ltd. (R.R.V.U.N.L.)	5	6260.00	5.4794	6.3730	116.31
74	RPSCL (UP)	1	1200.00	1.4061	5.0125	356.49
75	RATTANINDIA POWER LTD.	1	1350.00	0.5286	0.6035	114.17
76	RAICHUR POWER CORPORATION LIMITED	1	1600.00	0.4668	0.2742	58.73
77	RASHTRIYA ISPAT NIGAM LIMITED	1	315.00	0.6910	0.6201	89.74
78	RAIGARH ENERGY GENERATION LIMITED	1	600.00	0.8522	0.3058	35.88
79	RAIPUR ENERGEN LIMITED	1	1370.00	1.6015	1.6653	103.98
80	REILIANC EPOWER LIMITED	1	3960.00	5.0270	2.2176	44.11
81	SIMHPURI ENERGY LIMITED	1	600.00	0.0000	0.0000	-
82	SAI LILAGAR POWER GENERATION LIMITED	1	86.00	0.0000	0.0000	-
83	SEMCORP ENERGY INDIA LTD.	1	1320.00	1.3395	1.3897	103.75
84	SWASTIK POWER & MINERALS RESOURCES PVT. LTD.	1	25.00	0.0000	0.0000	-
85	SKS POWER GENERATION (CHHATTISGARH) LIMITED	1	600.00	0.5821	0.4007	68.83
86	THE DURGAPUR PROJECTS LIMITED	1	550.00	0.6335	0.5650	89.19

Sl. No.	Name of Power Utility	No. of TPS	Installed Capacity (MW)	Fly Ash Generation (Million- tonne)	Fly Ash Utilization (Million- tonne)	Percentage Utilization (%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
87	THE SINGARENI COLLIERIES COMPANY LIMITED	1	1200.00	1.5713	1.6865	107.33
88	TAQA NEYVELLY POWER CO.PVT. LTD.	1	250.00	0.0503	0.1139	226.24
89	THE TATA POWER COMPANY LIMITED	2	1297.50	0.8824	0.9705	109.98
90	TORRENT POWER LTD.	1	362.00	0.1904	0.1907	100.15
91	T.N.G & D Corporation (Tamil Nadu)	5	4320.00	4.2377	6.4804	152.92
92	TSGENCO (Telangana)	6	2962.50	3.7209	2.3927	64.30
93	TRN ENERGY PRIVATE LIMITED	1	600.00	0.6814	0.2013	29.55
94	TENUGHAT VIDHYUT NIGAM LIMITED	1	420.00	0.5194	0.4773	91.90
95	TALWANDI SABO POWER LTD.	1	1980.00	1.9360	1.1680	60.33
96	Uttar Pradesh Rajya Vidyut Utpadan Nigam Ltd.(U.P.R.V.U.N.L.)	5	5160.00	6.4133	3.4759	54.20
97	UPCL (Karnataka)	1	1200.00	0.0693	0.0695	100.25
98	VIDARBHA INDUSTRIES POWER LTD.	1	600.00	0.0000	0.0213	-
99	VS LIGNITE POWER PRIVATE LIMITED	1	135.00	0.2165	0.2165	100.00
100	VEDANTA LIMITED	2	3615.00	8.1236	10.0107	123.23
101	West Bengal Power Development Corporation Limited (W.B.P.D.C.L)	5	4745.00	5.8678	5.4591	93.04
102	ZUARI CEMENT LIMITED	1	43.00	0.0693	0.0693	100.00
	GRAND TOTAL	202	209990.50	232.5595	214.9125	92.41

It may be seen from the Table-IV above that: the data of fly ash generation and utilization for the year 2020-21 was received from 102 Power Utilities out of which 60 Power Utilities have achieved fly ash utilization level of 100% or more. Further, 9 Power Utilities have achieved fly ash utilization level in the range of 90% to less than 100%.

2.5 State wise Status of Fly Ash Generation & its Utilization during the Year 2020-21:

The state-wise status of fly ash generation & utilization in the country based on the data received from Thermal Power Stations / Power Utilities has also been assessed and the same is given in **Table-V** below:

TABLE-V
STATE WISE FLY ASH GENERATION AND ITS UTILIZATION DURING THE YEAR 2020-21

Sl. No.	Name of State	No. of TPS	Installed Capacity (MW)	Fly Ash Generation (Million-tonne)	Fly Ash Utilization (Million-tonne)	Percentage Utilization (%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	ANDHRA PRADESH	9	10585.00	9.6780	10.3680	107.13
2	ASSAM	1	750.00	0.5244	0.3290	62.73
3	BIHAR	6	6040.00	9.4215	8.0378	85.31
4	CHHATISGARH	31	25960.00	40.2526	28.2042	70.07
5	GUJARAT	13	16542.00	6.2029	7.3449	118.41
6	HARYANA	5	5330.00	3.4058	8.2794	243.10
7	JHARKHAND	7	4767.50	7.5468	9.1842	121.70
8	KARNATAKA	5	7760.00	2.4343	1.8272	75.06
9	MADHYA PRADESH	13	21200.00	25.8790	14.7990	57.19
10	MAHARASHTRA	20	23346.00	23.7703	27.4739	115.58
11	ODISHA	13	14285.00	29.6211	24.7430	83.53
12	PUNJAB	6	6140.00	4.0932	5.1469	125.74
13	RAJASTHAN	9	9045.00	8.0172	9.1355	113.95
14	TAMILNADU	18	14012.50	8.0281	11.7616	146.51
15	TELANGANA	9	6805.50	9.2185	8.4345	91.50
16	UTTAR PRADESH	20	23420.00	25.7889	23.4399	90.89
17	WEST BENGAL	17	14002.00	18.6768	16.4036	87.83
GRAND TOTAL		202	209990.50	232.5595	214.9125	92.41

It may be seen from Table-V above that:

- (i) 6 states namely Chhattisgarh, Madhya Pradesh, Maharashtra, Odisha, Uttar Pradesh and West Bengal have generated more than 10 Million-tonnes of fly ash each with Chhattisgarh highest 40.2526 Million Tonnes during the Year 2020-21.
- (ii) During the Year 2020-21, states of Andhra Pradesh, Gujarat, Haryana, Jharkhand, Maharashtra, Punjab, Rajasthan and Tamil Nadu have achieved fly ash utilization level of more than 100 %. Similarly, Telangana and Uttar Pradesh have achieved the fly ash utilization level of more than 90 % but less than 100 %.
- (iii) All States have utilized more than 50% of fly ash.

3.0 TARGETS FOR FLY ASH UTILIZATION AS PER MoEF'S NOTIFICATION OF 3rd NOVEMBER, 2009:

The notification set the target for the thermal power stations which were in operation before the date of notification i.e. 3.11.2009 as well as the new thermal power stations to be commissioned after the notification i.e. 3.11.2009. The same has been brought out below:

3.1 Thermal Power Station in Operation as on 3rd November, 2009:

All Coal / Lignite based Thermal Power Stations / Expansion units in operation before the date of MoEF's notification i.e. 03.11.2009 were to achieve the target of fly ash utilization as per the Table-VI given below:

TABLE-VI

TARGETS FOR FLY ASH UTILIZATION FOR THERMAL POWER STATIONS IN OPERATION BEFORE 3rd NOVEMBER 2009

Sl. No.	Target of Fly Ash Utilization (In Percentage)	Target Date
(1)	(2)	(3)
1	At least 50% of Fly Ash generation	One year from the date of issue of notification
2	At least 60% of Fly Ash generation	Two years from the date of issue of notification
3	At least 75% of Fly Ash generation	Three years from the date of issue of notification
4	At least 90% of Fly Ash generation	Four years from the date of issue of notification
5	100% of Fly Ash generation	Five years from the date of issue of notification

The unutilized fly ash, if any, in relation to the target during a year would be required to be utilized within next two years in addition to the targets stipulated for those years and the balance unutilized fly ash accumulated during the first five years (the difference between the generation and the utilization target) would be required to be utilized progressively over the next five years in addition to 100% utilization of current generation of fly ash.

3.2 Thermal Power Station Commissioned after 3rd November, 2009:

New Coal / Lignite based Thermal Power Stations / Expansion Units commissioned after the issue of MoEF's notification of 3rd November 2009 are to achieve the target of fly ash utilization as per **Table-VII** given below:

TABLE-VII

TARGETS FOR FLY ASH UTILIZATION FOR THERMAL POWER STATION COMMISSIONED AFTER 3rd NOVEMBER, 2009

SI No.	Fly Ash Utilization Level	Target Date
(1)	(2)	(3)
1	At least 50% of fly ash generation	One year from the date of Commissioning
2	At least 70% of fly ash generation	Two years from the date of Commissioning
3	At least 90% of fly ash generation	Three years from the date of Commissioning
4	At least 100% of fly ash generation	Four years from the date of commissioning

The unutilized fly ash, if any, in relation to the target during a year would be required to be utilized within the next two years in addition to the targets stipulated for these years and the balance unutilized fly ash accumulated during the first four years (the difference between the generation and utilization target) would be required to be utilized progressively over next five years in addition to 100% utilization of current generation of fly ash.

4.0 TARGET OF FLY ASH UTILIZATION DURING 2020-21 AS PER MoEF's NOTIFICATION OF 3rd NOVEMBER 2009:

Fly ash generation and utilization data received from Thermal Power Stations/Power Utilities in the country for the year 2020-21 has been broadly analyzed

to ascertain the power stations which have achieved the targets of fly ash utilization as prescribed in MoEF's notification of 3rd November 2009.

During the Year 2020-21, all those thermal power stations which were in operation on the date of issue of MoEF's notification (i.e. 3rd November 2009) should have achieved the target of fly ash utilization of 100% within five years from the date of notification i.e. by 3rd November 2014. All those thermal power stations which have come in operation after the date of issue of MoEF's notification (i.e. 3rd November 2009) should have achieved the target of fly ash utilization in four years from the date of Commissioning as specified in **Table-VII** above.

4.1 Status during the Year 2020-21:

Based on the target indicated under Para 4.0 above, the status of achievement of fly ash utilization for the Year 2020-21 has been assessed and the same is given in **Table - VIII** below.

TABLE-VIII

STATUS OF UTILIZATION OF FLY ASH AS PER MOEF'S NOTIFICATION DATED 3rd NOVEMBER 2009 FOR THE YEAR 2020-21

Sl. No.	Description	No. of TPS
(1)	(2)	(3)
1	No. of TPS which have achieved the Target of fly ash utilization as per MoEF's Notification of 3 rd November, 2009 (Refer Table XVI)	118
2	No. of TPS which have not been able to achieve the target of fly ash utilization as per MoEF's Notification of 3 rd November, 2009 (Refer Table- XVII)	74
3	No. of TPS which have not generated any significant fly ash or any fly ash (Refer Table- XV)	10
	Total	202

It may be seen from **Table-VIII** above that during the Year 2020-21, out of 202 (Two Hundred and Two) thermal power stations for which data was received, 118 (One Hundred and Eighteen) power stations have achieved the targets of fly ash utilization as stipulated in MoEF's Notification of 3rd November 2009.

4.2 Range of Fly Ash Utilization during the Year 2020-21

Based on the fly ash utilization data received from Thermal Power Stations / Power Utilities, the Thermal Power Stations have been grouped into 6 (Six) categories as noted below depending upon the range of utilization of fly ash by the stations:

TABLE-IX

RANGE OF PERCENTAGE FLY ASH UTILIZATION DURING THE YEAR 2020-21

Sl. No.	Level of Fly Ash utilization	No. of Power Stations
(1)	(2)	(3)
1	100 % and more than 100 % (Refer Table- X)	114
2	90 % to less than 100 % (Refer Table- XI)	13
3	70 % to less than 90 % (Refer Table- XII)	18
4	50 % to less than 70 % (Refer Table- XIII)	21
5	Less than 50 % (Refer Table- XIV)	26
6	No. of TPS which have not generated any significant fly ash or any fly ash (Refer Table- XV)	10
	Total	202

4.3 Thermal Power Stations that have achieved Fly Ash utilization level of 100% or more during the Year 2020-21:

The Thermal Power Stations with fly ash utilization in the range of 100% or more during the year 2020-21 is given in **Table-X** below:

TABLE-X
**THERMAL POWER STATIONS WITH FLY ASH UTILIZATION LEVEL OF 100%
 OR MORE DURING THE YEAR 2020 – 21**

Sl. No.	Name of TPS	Power Utility	Installed Capacity	Fly ash Generation	Fly ash Utilization	Percentage Utilization
			(MW)	(Million Tonnes)	(Million Tonnes)	(%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Dr. N.T.R TPS	Andhra Pradesh Power Generation Corporation	1760.00	2.9414	2.9634	100.75
2	RAYALSEEMA	Andhra Pradesh Power Generation Corporation	1650.00	0.7301	0.9215	126.21
3	KASAIPALI	ACB (INDIA) Ltd.	270.00	0.5964	0.6556	109.92
4	CHAKABURA TPP	ACB (INDIA) Ltd.	30.00	0.07737	0.07737	100.00
5	CHAKABURA TPP (EXTN)	ACB (INDIA) Ltd.	30.00	0.15239	0.15239	100.00
6	RATIJA TPS	ACB (INDIA) Ltd.	100.00	0.33316	0.33316	100.00
7	INDIRA GANDHI	Aravali Power Corporation Pvt. Ltd.	1500.00	0.85220	1.90210	223.20
8	MUNDRA TPS	ADANI POWER (MUNDRA) LIMITED	4620.00	0.67923	0.71650	105.49
9	TIRODA	ADANI POWER MAHARASHTRA LTD.	3300.00	3.78000	4.54039	120.12
10	KAWAI	ADANI POWER RAJASTHAN LTD.	1320.00	1.41344	1.61218	114.06
11	ADANI DAHANU	ADANI ELECTRICITY MUMBAI LIMITED	500.00	0.37600	0.42100	111.97
12	ADHUNIK PNR LTD.	ADHUNIK POWER & NATURAL RESOURCES LTD.	540.00	0.87162	0.89272	102.42
13	UTRAULA	Bajaj Energy Private Limited	90.00	0.06248	0.06248	100.00
14	BALCO CPP	BHARAT ALUMINIUM COMPANY LIMITED	540.00	0.92998	0.95795	103.01
15	BALCO TPP	BHARAT ALUMINIUM COMPANY LIMITED	1200.00	2.21466	2.30672	104.16
16	BHADRESHWAR VIDYUT PRIVATE LTD TPS	BHADRESHWAR VIDYUT PRIVATE LIMITED	300.00	0.03245	0.03296	101.58
17	Budge Budge Generating Station	Calcutta Electric Supply Corporation Limited	750.00	1.0430	1.0430	100.00
18	Southern Generating Station	Calcutta Electric Supply Corporation Limited	135.00	0.0210	0.0210	100.00
19	MUTIARA	COASTAL ENERGEN PVT. LTD	1200.00	0.0632	0.0666	105.35
20	CHEMPLAST LIMITED TPS	CHEMPLAST LIMITED	48.50	0.0184	0.0185	100.65
21	BOKARO	Damodar Valley Corporation	710.00	0.7973	1.0243	128.47
22	CHANDRAPURA	Damodar Valley Corporation	500.00	0.9086	1.2997	143.05

Sl. No.	Name of TPS	Power Utility	Installed Capacity	Fly ash Generation	Fly ash Utilization	Percentage Utilization
			(MW)	(Million Tonnes)	(Million Tonnes)	(%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
23	DURGAPUR	Damodar Valley Corporation	210.00	0.0536	0.1067	199.04
24	KODERMA	Damodar Valley Corporation	1000.00	1.9608	2.3739	121.07
25	DHARIWAL INFRASTRUCTURE Ltd.	DHARIWAL INFRASTRUCTURE LIMITED	600.00	0.9310	0.9460	101.61
26	SALAYA TPS	ESSAR POWER GUJARAT LTD.	1200.00	0.2216	0.2216	100.00
27	SURAT LIGNITE	Gujarat Industries Power Company Limited	500.00	0.4772	0.4772	100.00
28	AKRIMOTA	Gujarat Mineral Development Corporation Limited	250.00	0.1556	0.2060	132.43
29	GANDHINAGAR	Gujarat State Electricity Corporation Limited	630.00	0.3550	1.1160	314.37
30	KUTCH LIGNITE	Gujarat State Electricity Corporation Limited	150.00	0.2740	0.2740	100.00
31	SIKKA	Gujarat State Electricity Corporation Limited	500.00	0.0780	0.2980	382.05
32	WANAKBORI	Gujarat State Electricity Corporation Limited	2270.00	1.6380	1.8490	112.88
33	BHAVNAGAR LIGNITE	Gujarat State Electricity Corporation Limited	500.00	0.1425	0.1550	108.77
34	GMR WARORA ENERGY LTD.	GMR WARORA ENERGY LTD.	600.00	0.8342	1.1202	134.28
35	GMR KAMALANGA TPP	GMR KAMALANGA ENERGY LTD.	1050.00	2.0606	2.3822	115.61
36	RAJIV GANDHI TPP, Hissar	Haryana Power Generation Corporation Limited	1200.00	0.4464	0.6941	155.50
37	Deen Bandhu Chhotu Ram TPS, YAMUNANAGAR	Haryana Power Generation Corporation Limited	600.00	0.7424	1.4068	189.50
38	PANIPAT	Haryana Power Generation Corporation Limited	710.00	0.3238	3.2353	999.17
39	HALDIA ENERGY LIMITED	HALDIA ENERGY LIMITED	600.00	0.9580	0.9580	100.00
40	HINDUJA NATIONAL POWER CORPORATION LIMITED	HINDUJA NATIONAL POWER CORPORATION LIMITED	1040.00	0.3245	0.3519	108.45
41	DISHERGARH POWER STATION	INDIA POWER CORPORATION LTD.	12.00	0.0161	0.0161	100.00
42	INDIAN METALS & FERRO ALLOYS LTD.	INDIAN METALS & FERRO ALLOYS LTD.	200.00	0.4873	0.4873	100.00
43	MAHATMA GANDHI TPP	JHAJJAR POWER LIMITED	1320.00	1.0410	1.0410	100.00
44	JAYPEE BINA TPP	JAIPRAKSH POWER VENTURES LIMITED	500.00	0.4316	0.4328	100.28
45	JAYPEE NIGRIE SUPER TPP	JAIPRAKSH POWER VENTURES LIMITED	1320.00	1.4399	1.4405	100.04

Sl. No.	Name of TPS	Power Utility	Installed Capacity	Fly ash Generation	Fly ash Utilization	Percentage Utilization
			(MW)	(Million Tonnes)	(Million Tonnes)	(%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
46	RATNAGIRI	JSW ENERGY LIMITED	1200.00	0.2647	0.2650	100.13
47	VIJAYANAGAR	JSW ENERGY LIMITED	860.00	0.1137	0.1137	100.00
48	DONGAMAHUA CAPTIVE POWER PLANT	JINDAL STEEL AND POWER LIMITED	576.00	0.9095	0.9099	100.04
49	JSW ENERGY (BARMER) LIMITED	JSW ENERGY (BARMER) LIMITED (Formerly Raj Westpower Ltd.)	1080.00	0.8895	0.9154	102.91
50	JSW STEEL LIMITED CPP-II	JSW STEEL LIMITED	90.00	0.0107	0.0107	100.53
51	JINDAL STEEL AND POWER LIMITED	JINDAL STEEL AND POWER LIMITED	299.00	0.2912	0.2912	100.00
52	BALLARI	KARNATAKA POWER CORPORATION LIMITED	1700.00	0.8029	0.9226	114.90
53	KANTI BIJLEE UTPADAN NIGAM LIMITED	KANTI BIJLEE UTPADAN NIGAM LIMITED	610.00	0.7110	0.7500	105.49
54	KMPCL - NARIYARA	KSK MAHANADI POWER COMPANY LIMITED	1800.00	2.3567	2.9074	123.37
55	LALITPUR	LALITPUR POWER GENERATION COMPANY LIMITED	1980.00	1.4402	1.7430	121.03
56	MAITHON RIGHT BANK TPP	MAITHON POWER LIMITED	1050.00	1.6483	2.1879	132.74
57	SANJAY GANDHI	MADHYA PRADESH POWER GENERATING COMPANY LIMITED	1340.00	2.0463	2.0484	100.10
58	BHUSA WAL	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	1210.00	1.4450	1.5299	105.87
59	NASHIK	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	630.00	0.2494	4.1892	1679.92
60	PARLI	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	750.00	0.7121	4.3348	608.75
61	MCCPL BANDHAKHAR	MARUTI CLEAN COAL AND POWER LIMITED	300.00	0.6303	0.6499	103.11
62	SAI WARDHA POWER Ltd., WARORA	MSELDC, CAPTIVE CONSUMERS	540.00	0.3820	0.4110	107.59
63	ANUPPUR TPS	MB POWER (MADHYA PRADESH) LIMITED	1200.00	1.5410	1.7521	113.70
64	NEYVELI - I EXPN	NLC INDIA LIMITED	420.00	0.1767	0.1767	100.00
65	NEYVELI - II	NLC INDIA LIMITED	1470.00	0.4557	1.6129	353.96
66	NEYVELI - II EXPN	NLC INDIA LIMITED	500.00	0.1356	0.1356	100.00
67	NEYVELI NEW THERMAL POWER STATION	NLC INDIA LIMITED	1000.00	0.2089	0.2089	100.00

Sl. No.	Name of TPS	Power Utility	Installed Capacity	Fly ash Generation	Fly ash Utilization	Percentage Utilization
			(MW)	(Million Tonnes)	(Million Tonnes)	(%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
68	BARSINGSAR LIGNITE	NLC INDIA LIMITED	250.00	0.0184	0.0184	100.00
69	NLC TAMILNADU POWER Ltd	NLC TAMIL NADU POWER LIMITED	1000.00	1.1449	1.1449	100.00
70	DURGAPUR CPP	NTPC - SAIL POWER COMPANY LIMITED	120.00	0.1615	0.1925	119.20
71	ROURKELA CPP	NTPC - SAIL POWER COMPANY LIMITED	120.00	0.3594	0.6551	182.28
72	VALLUR	NTPC TAMILNADU ENERGY COMPANY LTD (NTECL)	1500.00	1.2767	1.5680	122.82
73	DADRI	NTPC LTD.	1820.00	0.9405	0.9413	100.08
74	FEROZE GANDHI UNCHAHAR	NTPC LTD.	1550.00	1.9772	3.2903	166.41
75	TANDA	NTPC LTD.	1760.00	1.6742	2.8103	167.85
76	RAMAGUNDAM	NTPC LTD.	2600.00	3.8570	4.2860	111.12
77	SIMHADRI	NTPC LTD.	2000.00	2.4488	3.0249	123.52
78	FARAKKA	NTPC LTD.	2100.00	2.8496	3.6162	126.90
79	KAHALGAON	NTPC LTD.	2340.00	4.0150	4.1540	103.46
80	BARH SUPER TPS	NTPC LTD.	1320.00	2.0397	2.2042	108.07
81	TALCHER TPS	NTPC LTD.	460.00	1.1892	1.1892	100.00
82	MOUDA TPS	NTPC LTD.	2320.00	1.7062	2.1969	128.76
83	RAJPURA TPS	NABHA POWER LIMITED	1400.00	1.4203	1.4270	100.47
84	OPG POWER GENERATION PRIVATE LIMITED	OPG POWER GENERATION PRIVATE LIMITED	414.00	0.0841	0.0841	100.00
85	GURU HARGOBIND TPP, LEHRA MOHABAT	PUNJAB STATE POWER CORPORATION LIMITED	920.00	0.2314	0.2442	105.50
86	GURU GOBIND SINGH TPP, ROPAR	PUNJAB STATE POWER CORPORATION LIMITED	840.00	0.2170	1.7212	793.34
87	PRAYAGRAJ TPS	PRAYAGRAJ POWER GENERATION COMPANY LTD.	1980.00	2.0022	2.0079	100.29
88	SURATGARH	RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED	1500.00	0.2360	1.4143	599.38
89	KALISINDH	RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED	1200.00	1.0907	1.3248	121.46
90	KOTA SUPER THERMAL POWER STATION	RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED	1240.00	1.3766	1.7664	128.32

Sl. No.	Name of TPS	Power Utility	Installed Capacity	Fly ash Generation	Fly ash Utilization	Percentage Utilization
			(MW)	(Million Tonnes)	(Million Tonnes)	(%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
91	ROSA TPP	ROSA POWER SUPPLY COMPANY LIMITED	1200.00	1.4061	5.0125	356.49
92	AMARAVATI TPS	RATTANINDIA POWER LTD.	1350.00	0.5286	0.6035	114.17
93	RAIPUR TPP	RAIPUR ENERGEN LIMITED	1370.00	1.6015	1.6653	103.98
94	SEMCORP ENERGY INDIA LTD.	SEMCORP ENERGY INDIA LTD.	1320.00	1.3395	1.3897	103.75
95	SINGARENI TPP	THE SINGARENI COLLIERIES COMPANY LIMITED	1200.00	1.5713	1.6865	107.33
96	CUDDALORE - TAQA	TAQA NEYVELLY POWER CO.PVT. LTD.	250.00	0.0503	0.1139	226.24
97	JOJOBERA	THE TATA POWER COMPANY LIMITED	547.50	0.8408	0.9283	110.41
98	TROMBAY	THE TATA POWER COMPANY LIMITED	750.00	0.0416	0.0422	101.44
99	SABARMATI	TORRENT POWER LTD.	362.00	0.1904	0.1907	100.15
100	METTUR-I	TAMIL NADU GENERATION AND DISTRIBUTION LIMITED	840.00	0.9026	1.3459	149.11
101	METTUR-II	TAMIL NADU GENERATION AND DISTRIBUTION LIMITED	600.00	0.2904	0.2904	100.00
102	NORTH CHENNAI-I	TAMIL NADU GENERATION AND DISTRIBUTION LIMITED	630.00	0.9085	2.3328	256.79
103	NORTH CHENNAI-II	TAMIL NADU GENERATION AND DISTRIBUTION LIMITED	1200.00	1.0838	1.7759	163.86
104	RAMAGUNDAM 'B'	TELANGANA STATE POWER GENERATION CORPORATION LIMITED	62.50	0.0890	0.1015	114.09
105	HARDUAGANJ	UTTAR PRADESH RAJYA VIDYUT UTPADAN NIGAM LIMITED	610.00	0.5590	1.3909	248.83
106	PARICHHA	UTTAR PRADESH RAJYA VIDYUT UTPADAN NIGAM LIMITED	920.00	1.0844	1.0852	100.08
107	UDUPI	UDUPI POWER CORPORATION LIMITED	1200.00	0.0693	0.0695	100.25
108	VS LIGNITE POWER PRIVATE LTD	VS LIGNITE POWER PRIVATE LIMITED	135.00	0.2165	0.2165	100.00
109	VEDANTA LTD TPP	VEDANTA LIMITED	2400.00	4.8731	5.9989	123.10
110	VEDANTA LTD CPP	VEDANTA LIMITED	1215.00	3.2504	4.0119	123.43
111	KOLAGHAT	WEST BENGAL POWER DEVELOPMENT	1260.00	0.5921	0.9542	161.15

Sl. No.	Name of TPS	Power Utility	Installed Capacity	Fly ash Generation	Fly ash Utilization	Percentage Utilization
			(MW)	(Million Tonnes)	(Million Tonnes)	(%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
		CORPORATION LIMITED				
112	BANDEL	WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED	335.00	0.3250	0.3299	101.50
113	SANTALDIH	WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED	500.00	1.0423	1.2079	115.89
114	SITAPURAM TPS	ZUARI CEMENT LIMITED	43.00	0.0693	0.0693	100.00

It may be seen from the Table - X above that during the Year 2020-21, 114 Thermal Power Stations have achieved a fly ash utilization of 100% or more.

4.4 Thermal Power Stations with Fly Ash Utilization in the Range of 90 % to less than 100 % during the Year 2020-21:

The Thermal Power Stations with fly ash utilization in the range of 90% to less than 100% during the year 2020-21 are given in Table - XI below:

TABLE - XI
THERMAL POWER STATIONS WITH FLY ASH UTILIZATION IN THE RANGE OF 90% TO LESS THAN 100% DURING THE YEAR 2020 – 21

Sl No.	Name of TPS	Power Utility	Installed Capacity	Fly ash Generation	Fly ash Utilization	Percentage Utilization
			(MW)	(MT)	(MT)	(%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Aarti Steels Limited	Aarti Steels Limited	90.00	0.1878	0.1868	99.46
2	SRI DAMODARAM SANJEEVAIAH	Andhra Pradesh Power Development Company Limited	1600.00	1.1953	1.0961	91.70
3	BARKHERA	Bajaj Energy Private Limited	90.00	0.0459	0.0458	99.61
4	KHAMBHAR KHERA	Bajaj Energy Private Limited	90.00	0.0435	0.0434	99.72
5	KUNDARKI	Bajaj Energy Private Limited	90.00	0.0582	0.0579	99.55
6	MAQSOODAPUR	Bajaj Energy Private Limited	90.00	0.0448	0.0446	99.67
7	DB POWER	DB POWER LIMITED	1200.00	2.6457	2.6009	98.30

Sl No.	Name of TPS (2)	Power Utility (3)	Installed Capacity	Fly ash Generation	Fly ash Utilization	Percentage Utilization
			(MW) (4)	(MT) (5)	(MT) (6)	(%) (7)
8	UKAI	Gujarat State Electricity Corporation Limited	1110.00	1.1990	1.1780	98.25
9	SATPURA	MADHYA PRADESH POWER GENERATING COMPANY LIMITED	1330.00	1.2890	1.2142	94.20
10	PARAS	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	500.00	1.0146	1.0064	99.19
11	SOLAPUR	NTPC LTD.	1320.00	0.7581	0.7436	98.08
12	UCHPINDA	R.K.M. POWERGEN PVT. LTD	1440.00	1.4066	1.4062	99.97
13	TENUGHAT TPS	TENUGHAT VIDHYUT NIGAM LIMITED	420.00	0.5194	0.4773	91.90

It may be seen from the **Table-XI** above that 13 thermal power stations, during the year 2020-21, have achieved a fly ash utilization level in the range of 90% to less than 100%.

4.5 Thermal Power Stations with Fly Ash Utilization in the Range of 70% to less than 90% during the Year 2020-21

The Thermal Power Stations with fly ash utilization in the range of 70% to less than 90% during the year 2020-21 are given in **Table-XII** below:

TABLE - XII
Thermal Power Stations with Fly Ash Utilization in the Range of 70% to Less than 90% During the Year 2020 – 21

Sl. No.	Name of TPS (2)	Power Utility (3)	Installed Capacity	Fly ash Generation	Fly ash Utilization	Percentage Utilization
			(Mega Watts) (4)	(Million Tonnes) (5)	(Million Tonnes) (6)	(%) (7)
1	MUNDRA UMPP	Coastal Gujarat Power Limited	4150.00	0.7600	0.6300	82.89
2	DURGAPUR STEEL	Damodar Valley Corporation	1000.00	1.7248	1.5073	87.39
3	IL & FS TAMIL NADU POWER COMPANY LTD.	IL & FS TAMIL NADU POWER COMPANY LIMITED	1200.00	0.1260	0.1123	89.16
4	KORADI	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	2400.00	2.8115	2.2762	80.96
5	NEYVELI - I	NLC INDIA LIMITED	600.00	0.0392	0.0280	71.35
6	BHILAI PP-II	NTPC - SAIL POWER	74.00	0.1352	0.1067	78.95

Sl. No.	Name of TPS (1)	Power Utility (2)	Installed Capacity (Mega Watts) (4)	Fly ash Generation (Million Tonnes) (5)	Fly ash Utilization (Million Tonnes) (6)	Percentage Utilization (%) (7)
				(Million Tonnes)	(Million Tonnes)	(%)
		COMPANY LIMITED				
7	KORBA	NTPC LTD.	2600.00	4.7930	3.4610	72.21
8	TALCHER - KANIHA	NTPC LTD.	3000.00	6.8412	4.8070	70.27
9	LARA SUPER THERMAL POWER PROJECT	NTPC LTD.	1600.00	1.3522	1.0056	74.37
10	NALCO, CPP ANGUL	NATIONAL ALUMINIUM COMPANY LIMITED	1200.00	2.8920	2.1888	75.69
11	GVK POWER (GOINDWALSAH IB) LTD.	PUNJAB STATE POWER CORPORATION LIMITED	540.00	0.2885	0.2455	85.09
12	CHHABRA	RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED	1000.00	1.2910	1.1260	87.22
13	RINL CAPTIVE TPP	RASHTRIYA ISPAT NIGAM LIMITED	315.00	0.6910	0.6201	89.74
14	THE DURGAPUR POWER PROJECTS STATION	THE DURGAPUR PROJECTS LIMITED	550.00	0.6335	0.5650	89.19
15	KOTHAGUDEM-VI	TELANGANA STATE POWER GENERATION CORPORATION LIMITED	500.00	0.6846	0.5083	74.25
16	KAKATIYA (Stage-I)	TELANGANA STATE POWER GENERATION CORPORATION LIMITED	500.00	0.4539	0.3590	79.08
17	KAKATIYA (Stage-II)	TELANGANA STATE POWER GENERATION CORPORATION LIMITED	600.00	0.6741	0.5247	77.83
18	BAKRESWAR	WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED	1050.00	1.7501	1.4685	83.90

It may be seen from the Table - XII above, that 18 thermal power stations, during the year 2020-21, have achieved a fly ash utilization level in the range of 70 % to less than 90%.

4.6 Thermal Power Stations with Fly Ash Utilization in the range 50% to less than 70% during the Year 2020-21:

The Thermal Power Stations with fly ash utilization in the range of 50% to less than 70% during the year 2020-21 are given in Table-XIII:

TABLE-XIII
**THERMAL POWER STATIONS WITH FLY ASH UTILIZATION IN THE RANGE OF
50% TO LESS THAN 70% DURING THE YEAR 2020-21**

SI. No.	Name of TPS	Power Utility	Installed Capacity	Fly ash Generation	Fly ash Utilization	Percentage Utilization
			(Mega Watts)	(Million Tonnes)	(Million Tonnes)	(%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Atal Bihari Vajpayee TPP	Chhattisgarh State Power Generation Company Ltd.	1000.00	1.4703	1.0003	68.04
2	MEJIA	Damodar Valley Corporation	2340.00	3.9548	2.7253	68.91
3	DERANG TPP	JINDAL INDIA THERMAL POWER LIMITED	1200.00	1.7821	1.0347	58.06
4	ANGUL CAPTIVE POWER PLANT	JINDAL STEEL AND POWER LIMITED	810.00	0.9860	0.531	53.85
5	JHABUA POWER LIMITED	JHABUA POWER LIMITED	600.00	1.0334	0.7220	69.87
6	AMARKANTAK	MADHYA PRADESH POWER GENERATING COMPANY LIMITED	210.00	0.3360	0.2160	64.29
7	KHAPARKHEDA	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	1340.00	2.8737	1.9686	68.51
8	MEJA TPP	MEJA URJA NIGAM PRIVATE LIMITED	1320.00	1.0249	0.5722	55.83
9	BHILAI PP - III	NTPC - SAIL POWER COMPANY LIMITED	500.00	1.0481	0.6176	58.93
10	RIHAND	NTPC LTD.	3000.00	3.9218	2.0399	52.02
11	SIPAT	NTPC LTD.	2980.00	5.2473	3.0258	57.66
12	NABINAGAR SUPER TPS	NTPC LTD.	660.00	1.0431	0.5381	51.59
13	BONGAIGAON	NTPC LTD.	750.00	0.5244	0.3290	62.73
14	BARAUNI	NTPC LTD.	360.00	0.3304	0.1986	60.10
15	KHARGONE SUPER THERMAL POWER STATION	NTPC LTD.	660.00	0.9006	0.46216	51.31
16	YERAMARUS TPS	RAICHUR POWER CORPORATION LIMITED	1600.00	0.4668	0.2742	58.73
17	SKS POWER GENERATION (CC) LTD.	SKS POWER GENERATION (CHHATTISGARH) LIMITED	600.00	0.5821	0.40068	68.83
18	TUTICORIN	TAMIL NADU GENERATION AND DISTRIBUTION LIMITED	1050.00	1.0525	0.7354	69.88

Sl. No.	Name of TPS	Power Utility	Installed Capacity	Fly ash Generation	Fly ash Utilization	Percentage Utilization
			(Mega Watts)	(Million Tonnes)	(Million Tonnes)	(%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
19	KOTHAGUDEM-VII	TELANGANA STATE POWER GENERATION CORPORATION LIMITED	800.00	0.8142	0.4426	54.37
20	TALWANDI SABO POWER LTD	TALWANDI SABO POWER LTD.	1980.00	1.9360	1.1680	60.33
21	SAGARDIGHI	WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED	1600.00	2.1582	1.4987	69.44

It may be seen from the Table - XIII above that, 21 thermal power stations during the year 2020-21 have achieved a fly ash utilization level in the range of 50% to less than 70%.

4.7 Thermal Power Stations with Fly Ash Utilization below 50% during the Year 2020-21:

The Thermal Power Stations with fly ash utilization less than 50% during the year 2020-21 are given in Table – XIV :

TABLE - XIV

THERMAL POWER STATIONS WITH FLY ASH UTILIZATION BELOW 50% DURING THE YEAR 2020-21

Sl. No.	Name of TPS	Power Utility	Installed Capacity	Fly ash Generation	Fly ash Utilization	Percentage Utilization
			(Mega Watts)	(Million Tonnes)	(Million Tonnes)	(%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	NABINAGAR	BHARATIYA RAIL BIJLEE COMPANY LIMITED	750.00	1.2822	0.1928	15.04
2	Dr. Shyama Prasad Mukharjee TPP	Chhattisgarh State Power Generation Company Ltd.	500.00	0.9705	0.4268	43.98
3	Hasdeo TPP	Chhattisgarh State Power Generation Company Ltd.	1340.00	2.7495	1.2895	46.90
4	Korba (East)	Chhattisgarh State Power Generation Company Ltd.	240.00	0.4231	0.1304	30.82
5	RAGHUNATHPUR	Damodar Valley Corporation	1200.00	1.3933	0.1936	13.89
6	MAHAN	ESSAR POWER MP LTD.	1200.00	0.6950	0.284	40.86
7	O.P. Jindal Super TPP (Stage-I)	JINDAL POWER LIMITED	1000.00	1.5821	0.2467	15.59

SI No.	Name of TPS	Power Utility	Installed Capacity (Mega Watts)	Fly ash Generation (Million Tonnes)	Fly ash Utilization (Million Tonnes)	Percentage Utilization (%)
			(4)	(5)	(6)	(7)
(1)	(2)	(3)				
8	O.P. Jindal Super TPP (Stage-II)	JINDAL POWER LIMITED	2400.00	3.0635	0.5560	18.15
9	LANCO AMARKANTAK TPS	LANCO AMARKANTAK POWER LIMITED	600.00	1.1565	0.5159	44.61
10	ANPARA 'C' TPS	LANCO ANPARA POWER LIMITED	1200.00	1.7493	0.2953	16.88
11	SHREE SINGAJI TPS	MADHYA PRADESH POWER GENERATING COMPANY LIMITED	2520.00	1.4816	0.6456	43.58
12	CHANDRAPUR	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	2920.00	5.0617	0.8577	16.95
13	MEENAKSHI ENERGY PRIVATE LIMITED	MEENAKSHI ENERGY PRIVATE LIMITED	300.00	0.0074	0.0005	6.65
14	SINGRAULI	NTPC LTD.	2000.00	2.9843	0.9971	33.41
15	VINDHYACHAL	NTPC LTD.	4760.00	8.7137	3.2859	37.71
16	DARLIPALI TPS	NTPC LTD.	800.00	1.4900	0.0546	3.67
17	KUDGI	NTPC LTD.	2400.00	0.9816	0.4473	45.57
18	GADARWARA SUPER	NTPC LTD.	1600.00	0.9439	0.0778	8.24
19	IB VALLEY	ODISHA POWER GENERATION CORPORATION LIMITED	1740.00	3.2220	1.2156	37.73
20	CHHABRA SUPER CRITICAL TPP	RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED	1320.00	1.4852	0.7415	49.93
21	RAIGARH TPP	RAIGARH ENERGY GENERATION LIMITED	600.00	0.8522	0.3058	35.88
22	SASAN UMPP TPP	RELIANCE POWER LIMITED	3960.00	5.0270	2.2176	44.11
23	KOTHAGUDEM-V	TELANGANA STATE POWER GENERATION CORPORATION LIMITED	500.00	1.0051	0.4566	45.43
24	RAIGARH TPP	TRN ENERGY PRIVATE LIMITED	600.00	0.6814	0.2013	29.55
25	ANPARA 'A' & 'B'	UTTAR PRADESH RAJYA VIDYUT UTPADAN NIGAM LIMITED	2630.00	3.3609	0.9190	27.34
26	OBRA	UTTAR PRADESH RAJYA VIDYUT UTPADAN NIGAM LIMITED	1000.00	1.4089	0.0807	5.73

It may be seen from the **Table - XIV** above, that **26 Thermal Power Stations** have achieved a fly ash utilization level in the range of less than 50% during the year 2020-21.

4.8 THERMAL POWER STATIONS WITH NO FLY ASH GENERATION DURING THE YEAR 2020-21:

The Thermal Power Stations with NO FLY ASH generation during the year 2020-21 are given in **Table – XV :**

TABLE - XV

LIST OF THERMAL POWER STATIONS WITH NO ASH GENERATION DURING THE YEAR 2020-21

Sl. No.	Name of TPS	Power Utility	Date of Commissioning	Installed Capacity (Mega Watts)
(1)	(2)	(3)	(4)	(5)
1	SVPPL Renki	ACB (INDIA) Ltd.	12.10.2011	60.00
2	MIHAN	Abhijeet MADC Nagpur Energy Pvt. Ltd.	05.01.2011	246.00
3	Titagarh Generating Station	Calcutta Electric Supply Corporation Limited	05.03.1983	240.00
4	BELA TPS	IDEAL ENERGY PROJECTS LIMITED	18.07.2013	270.00
5	GURU NANAKDEV TPS, BATHINDA	PUNJAB STATE POWER CORPORATION LIMITED	22.09.1974	460.00
6	SIMHAPURI	SIMHAPURI ENERGY LIMITED	29.2.2012	600.00
7	SAI LILAGAR POWER GENERATION LTD.	SAI LILAGAR POWER GENERATION LIMITED	2007	86.00
8	SWASTIK POWER & MINERALS RESOURCES PVT. LTD.	SWASTIK POWER & MINERALS RESOURCES PVT. LTD.	02.05.2015	25.00
9	PANKI	UTTAR PRADESH RAJYA VIDYUT UTPADAN NIGAM LIMITED	Under Commissioning (660 MW)	0.00
10	BUTIBORI	VIDARBHA INDUSTRIES POWER LTD.	04.04.2013	600.00

It may be seen from the **Table - XV** above, that **10 Thermal power stations** during the year 2020-21 have not generated any fly ash.

5.0 FLY ASH UTILIZATION STATUS AS PER NOTIFICATION OF 3RD NOVEMBER, 2009 DURING THE YEAR 2020-21 (TARGET ACHIEVED AND NOT ACHIEVED):

As per the targets mandated by the MoEF's notification dated 3rd November 2009 for fly ash utilization by the power stations, a total of 118 stations achieved their target and as many as 74 Nos. could not reach the targets. The details are given at **Table - XVI** and **Table - XVII** respectively. However, the date of achieving the 100% ash utilization target is now extended to 31st December 2017 as per the new amendment notification dated 25th January 2016.

TABLE - XVI

FLY ASH UTILIZATION STATUS AS PER NOTIFICATION OF 3RD NOVEMBER, 2009 DURING THE YEAR 2020-21 (TARGET ACHIEVED)

SI No.	Name of TPS (2)	Power Utility (3)	Date of Commissioning (4)	Installed Capacity (5)	Fly ash Generation (Million Tonnes) (6)	Fly ash Utilization (Million Tonnes) (7)	% Utilizat ion (8)	Target in % age (9)	Status (10)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Dr. N.T.R TPS	Andhra Pradesh Power Generation Corporation	01.11.1979	1760.00	2.9414	2.9634	100.75	100	Achieved
2	RAYALSEEMA	Andhra Pradesh Power Generation Corporation	16.11.1994	1650.00	0.7301	0.9215	126.21	100	Achieved
3	KASAIPALI	ACB (INDIA) Ltd.	13.12.2011	270.00	0.5964	0.6556	109.92	100	Achieved
4	CHAKABURA TPP	ACB (INDIA) Ltd.	27.02.2007	30.00	0.0774	0.0774	100.00	100	Achieved
5	CHAKABURA TPP (EXTN)	ACB (INDIA) Ltd.	28.03.2014	30.00	0.1524	0.1524	100.00	100	Achieved
6	RATIJA TPS	ACB (INDIA) Ltd.	27.02.2013	100.00	0.3332	0.3332	100.00	100	Achieved
7	INDIRA GANDHI	Aravali Power Corporation Pvt. Ltd.	31.10.2010	1500.00	0.8522	1.9021	223.20	100	Achieved
8	MUNDRA TPS	ADANI POWER (MUNDRA) LIMITED	04.08.2009	4620.00	0.6792	0.7165	105.49	100	Achieved
9	TIRODA	ADANI POWER MAHARASHTRA LTD.	23.09.2012	3300.00	3.7800	4.5404	120.12	100	Achieved
10	KAWAI	ADANI POWER RAJASTHAN LTD.	31.05.2013	1320.00	1.4134	1.6122	114.06	100	Achieved
11	ADANI DAHANU	ADANI ELECTRICITY MUMBAI LIMITED	01.07.1995	500.00	0.3760	0.4210	111.97	100	Achieved
12	ADHUNIK PNR LTD.	ADHUNIK POWER & NATURAL RESOURCES LTD.	21.01.2013	540.00	0.8716	0.8927	102.42	100	Achieved
13	UTRAULA	Bajaj Energy Private Limited	30.01.2012	90.00	0.0625	0.0625	100.00	100	Achieved
14	BALCO CPP	BHARAT ALUMINIUM COMPANY LIMITED	6.2005	540.00	0.9300	0.9579	103.01	100	Achieved
15	BALCO TPP	BHARAT ALUMINIUM COMPANY LIMITED	8.2015	1200.00	2.2147	2.3067	104.16	100	Achieved
16	BHADRESHWAR VIDYUT PRIVATE LTD TPS	BHADRESHWAR VIDYUT PRIVATE LIMITED	04.01.2015	300.00	0.0324	0.0330	101.58	100	Achieved

SI No.	Name of TPS	Power Utility	Date of Commissioning	Installed Capacity	Fly ash Generation (Million Tonnes)	Fly ash Utilization (Million Tonnes)	% Utilization	Target in % age	Status
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
17	Budge Budge Generating Station	Calcutta Electric Supply Corporation Limited	16.09.1997	750.00	1.0430	1.0430	100.00	100	Achieved
18	Southern Generating Station	Calcutta Electric Supply Corporation Limited	12.08.1990	135.00	0.0210	0.0210	100.00	100	Achieved
19	MUTIARA	COASTAL ENERGEN PVT. LTD	23.12.2014	1200.00	0.0632	0.0666	105.35	100	Achieved
20	CHEMPLAST LIMITED TPS	CHEMPLAST LIMITED	07.03.2012	48.50	0.0184	0.0185	100.65	100	Achieved
21	BOKARO	Damodar Valley Corporation	31.03.1993	710.00	0.7973	1.0243	128.47	100	Achieved
22	CHANDRAPURA	Damodar Valley Corporation	07.07.1968	500.00	0.9086	1.2997	143.05	100	Achieved
23	DURGAPUR	Damodar Valley Corporation	Sep,1982	210.00	0.0536	0.1067	199.04	100	Achieved
24	KODERMA	Damodar Valley Corporation	18.07.2013	1000.00	1.9608	2.3739	121.07	100	Achieved
25	DHARIWAL INFRASTRUCTURE Ltd.	DHARIWAL INFRASTRUCTURE LIMITED	11.2.2014	600.00	0.9310	0.9460	101.61	100	Achieved
26	SALAYA TPS	ESSAR POWER GUJARAT LTD.	01.04.2012	1200.00	0.2216	0.2216	100.00	100	Achieved
27	SURAT LIGNITE	Gujarat Industries Power Company Limited	15.02.2000	500.00	0.4772	0.4772	100.00	100	Achieved
28	AKRIMOTA	Gujarat Mineral Development Corporation Limited	31.03.2005	250.00	0.1556	0.2060	132.43	100	Achieved
29	GANDHINAGAR	Gujarat State Electricity Corporation Limited	20.03.1990	630.00	0.3550	1.1160	314.37	100	Achieved
30	KUTCH LIGNITE	Gujarat State Electricity Corporation Limited	09.01.1990	150.00	0.2740	0.2740	100.00	100	Achieved
31	SIKKA	Gujarat State Electricity Corporation Limited	14.09.2015	500.00	0.0780	0.2980	382.05	100	Achieved
32	WANAKBORI	Gujarat State Electricity Corporation Limited	23.03.1982	2270.00	1.6380	1.8490	112.88	100	Achieved
33	BHAVNAGAR LIGNITE	Gujarat State Electricity Corporation Limited	16.05.2016	500.00	0.1425	0.1550	108.77	90	Achieved
34	GMR WARORA ENERGY LTD.	GMR WARORA ENERGY LTD.	19.03.2013	600.00	0.8342	1.1202	134.28	100	Achieved
35	GMR KAMALANGA TPP	GMR KAMALANGA ENERGY LTD.	30.04.2013	1050.00	2.0606	2.3822	115.61	100	Achieved
36	RAJIV GANDHI TPP, Hissar	Haryana Power Generation Corporation Limited	24.08.2010	1200.00	0.4464	0.6941	155.50	100	Achieved
37	Deen Bandhu Chhotu Ram TPS, YAMUNANAGAR	Haryana Power Generation Corporation Limited	14.04.2008	600.00	0.7424	1.4068	189.50	100	Achieved
38	PANIPAT	Haryana Power Generation Corporation Limited	28.03.1989	710.00	0.3238	3.2353	999.17	100	Achieved
39	HALDIA ENERGY LIMITED	HALDIA ENERGY LIMITED	28.01.2015	600.00	0.9580	0.9580	100.00	100	Achieved

SI No.	Name of TPS	Power Utility	Date of Commissioning	Installed Capacity	Fly ash Generation (Million Tonnes)	Fly ash Utilization (Million Tonnes)	% Utilization	Target in % age	Status
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
40	HINDUJA NATIONAL POWER CORPORATION LIMITED	HINDUJA NATIONAL POWER CORPORATION LIMITED	11.01.2016	1040.00	0.3245	0.3519	108.45	100	Achieved
41	DISHERGARH POWER STATION	INDIA POWER CORPORATION LTD.	25.09.2012	12.00	0.0161	0.0161	100.00	100	Achieved
42	INDIAN METALS & FERRO ALLOYS LTD.	INDIAN METALS & FERRO ALLOYS LTD.	2.1989	200.00	0.4873	0.4873	100.00	100	Achieved
43	MAHATMA GANDHI TPP	JHAJJAR POWER LIMITED	29.03.2012	1320.00	1.0410	1.0410	100.00	100	Achieved
44	JAYPEE BINA TPP	JAIPRAKSH POWER VENTURES LIMITED	31.08.2012	500.00	0.4316	0.4328	100.28	100	Achieved
45	JAYPEE NIGRIE SUPER TPP	JAIPRAKSH POWER VENTURES LIMITED	03.09.2014	1320.00	1.4399	1.4405	100.04	100	Achieved
46	RATNAGIRI	JSW ENERGY LIMITED	01.09.2010	1200.00	0.2647	0.2650	100.13	100	Achieved
47	VIJAYANAGAR	JSW ENERGY LIMITED	18.01.2000	860.00	0.1137	0.1137	100.00	100	Achieved
48	DONGAMAHUA CAPTIVE POWER PLANT	JINDAL STEEL AND POWER LIMITED	04.09.2010	576.00	0.9095	0.9099	100.04	100	Achieved
49	JSW ENERGY (BARMER) LIMITED	JSW ENERGY (BARMER) LIMITED (Formerly Raj Westpower Ltd.)	26.11.2009	1080.00	0.8895	0.9154	102.91	100	Achieved
50	JSW STEEL LIMITED CPP-II	JSW STEEL LIMITED	24.07.2006	90.00	0.0107	0.0107	100.53	100	Achieved
51	JINDAL STEEL AND POWER LIMITED	JINDAL STEEL AND POWER LIMITED	1996	299.00	0.2912	0.2912	100.00	100	Achieved
52	BALLARI	KARNATAKA POWER CORPORATION LIMITED	25.03.2008	1700.00	0.8029	0.9226	114.90	100	Achieved
53	KANTI BIJLEE UTPADAN NIGAM LIMITED	KANTI BIJLEE UTPADAN NIGAM LIMITED	11.2013	610.00	0.7110	0.7500	105.49	100	Achieved
54	KMPCL - NARIYARA	KSK MAHANADI POWER COMPANY LIMITED	Sept,2013	1800.00	2.3567	2.9074	123.37	100	Achieved
55	LALITPUR	LALITPUR POWER GENERATION COMPANY LIMITED	08.01.2016	1980.00	1.4402	1.7430	121.03	100	Achieved
56	MAITHON RIGHT BANK TPP	MAITHON POWER LIMITED	01.09.2011	1050.00	1.6483	2.1879	132.74	100	Achieved
57	SANJAY GANDHI	MADHYA PRADESH POWER GENERATING COMPANY LIMITED	07.10.1993	1340.00	2.0463	2.0484	100.10	100	Achieved
58	BHUSAVAL	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	18.09.1982	1210.00	1.4450	1.5299	105.87	100	Achieved
59	NASHIK	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	26.04.1979	630.00	0.2494	4.1892	1679.92	100	Achieved

SI No.	Name of TPS	Power Utility	Date of Commissioning	Installed Capacity	Fly ash Generation (Million Tonnes)	Fly ash Utilization (Million Tonnes)	% Utilization	Target in % age	Status
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
60	PARLI	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	01.11.2007	750.00	0.7121	4.3348	608.75	100	Achieved
61	MCCPL BANDHAKHARA	MARUTI CLEAN COAL AND POWER LIMITED	30.07.2015	300.00	0.6303	0.6499	103.11	100	Achieved
62	SAI WARDHA POWER Ltd., WARORA	MSELDC, CAPTIVE CONSUMERS	15.04.2010	540.00	0.3820	0.4110	107.59	100	Achieved
63	ANUPPUR TPS	MB POWER (MADHYA PRADESH) LIMITED	20.05.2015	1200.00	1.5410	1.7521	113.70	100	Achieved
64	MEJA TPP	MEJA URJA NIGAM PRIVATE LIMITED	30.04.2019	1320.00	1.0249	0.5722	55.83	50	Achieved
65	NEYVELI - I EXPN	NLC INDIA LIMITED	21.10.2002	420.00	0.1767	0.1767	100.00	100	Achieved
66	NEYVELI - II	NLC INDIA LIMITED	29.03.1986	1470.00	0.4557	1.6129	353.96	100	Achieved
67	NEYVELI - II EXPN	NLC INDIA LIMITED	18.05.2011	500.00	0.1356	0.1356	100.00	100	Achieved
68	NEYVELI NEW THERMAL POWER STATION	NLC INDIA LIMITED	28.12.2019	1000.00	0.2089	0.2089	100.00	50	Achieved
69	BARSINGSAR LIGNITE	NLC INDIA LIMITED	27.10.2009	250.00	0.0184	0.0184	100.00	100	Achieved
70	NLC TAMILNADU POWER Ltd	NLC TAMIL NADU POWER LIMITED	08.03.2015	1000.00	1.1449	1.1449	100.00	100	Achieved
71	DURGAPUR CPP	NTPC - SAIL POWER COMPANY LIMITED	17.02.1987	120.00	0.1615	0.1925	119.20	100	Achieved
72	ROURKELA CPP	NTPC - SAIL POWER COMPANY LIMITED	01.03.2001	120.00	0.3594	0.6551	182.28	100	Achieved
73	VALLUR	NTPC TAMILNADU ENERGY COMPANY LTD (NTECL)	09.03.2012	1500.00	1.2767	1.5680	122.82	100	Achieved
74	DADRI	NTPC LTD.	Oct,1991	1820.00	0.9405	0.9413	100.08	100	Achieved
75	FEROZE GANDHI UNCHAHAR	NTPC LTD.	01-11-88	1550.00	1.9772	3.2903	166.41	100	Achieved
76	TANDA	NTPC LTD.	01-01-00	1760.00	1.6742	2.8103	167.85	100	Achieved
77	RAMAGUNDAM	NTPC LTD.	01-11-83	2600.00	3.8570	4.2860	111.12	100	Achieved
78	SIMHADRI	NTPC LTD.	01-02-02	2000.00	2.4488	3.0249	123.52	100	Achieved
79	FARAKKA	NTPC LTD.	01-01-86	2100.00	2.8496	3.6162	126.90	100	Achieved
80	KAHALGAON	NTPC LTD.	01-03-92	2340.00	4.0150	4.1540	103.46	100	Achieved
81	BARH SUPER TPS	NTPC LTD.	01-11-14	1320.00	2.0397	2.2042	108.07	100	Achieved
82	NABINAGAR SUPER TPS	NTPC LTD.	06.09.2019	660.00	1.0431	0.5381	51.59	50	Achieved
83	TALCHER TPS	NTPC LTD.	03.06.1995	460.00	1.1892	1.1892	100.00	100	Achieved

SI No.	Name of TPS	Power Utility	Date of Commissioning	Installed Capacity	Fly ash Generation (Million Tonnes)	Fly ash Utilization (Million Tonnes)	% Utilization	Target in % age	Status
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
84	MOUDA TPS	NTPC LTD.	01-04-12	2320.00	1.7062	2.1969	128.76	100	Achieved
85	SOLAPUR	NTPC LTD.	01.04.2017	1320.00	0.7581	0.7436	98.08	70	Achieved
86	KHARGONE SUPER THERMAL POWER STATION	NTPC LTD.	29.09.2019	660.00	0.9006	0.4622	51.31	50	Achieved
87	RAJPURA TPS	NABHA POWER LIMITED	24.01.2014	1400.00	1.4203	1.4270	100.47	100	Achieved
88	OPG POWER GENERATION PRIVATE LIMITED	OPG POWER GENERATION PRIVATE LIMITED	01.08.2010	414.00	0.0841	0.0841	100.00	100	Achieved
89	GURU HARGOBIND TPP, LEHRA MOHABAT	PUNJAB STATE POWER CORPORATION LIMITED	25.05.1998	920.00	0.2314	0.2442	105.50	100	Achieved
90	GURU GOBIND SINGH TPP, ROPAR	PUNJAB STATE POWER CORPORATION LIMITED	31.03.1988	840.00	0.2170	1.7212	793.34	100	Achieved
91	PRAYAGRAJ TPS	PRAYAGRAJ POWER GENERATION COMPANY LTD.	29.02.2016	1980.00	2.0022	2.0079	100.29	100	Achieved
92	SURATGARH	RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED	31.10.1998	1500.00	0.2360	1.4143	599.38	100	Achieved
93	KALISINDH	RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED	07.05.2014	1200.00	1.0907	1.3248	121.46	100	Achieved
94	KOTA SUPER THERMAL POWER STATION	RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED	17.01.1983	1240.00	1.3766	1.7664	128.32	100	Achieved
95	ROSA TPP	ROSA POWER SUPPLY COMPANY LIMITED	12.03.2010	1200.00	1.4061	5.0125	356.49	100	Achieved
96	AMARAVATI TPS	RATTANINDIA POWER LTD.	03.06.2013	1350.00	0.5286	0.6035	114.17	100	Achieved
97	RAIPUR TPP	RAIPUR ENERGEN LIMITED	1.06.2015	1370.00	1.6015	1.6653	103.98	100	Achieved
98	SEMCORP ENERGY INDIA LTD.	SEMCORP ENERGY INDIA LTD.	Mar-15	1320.00	1.3395	1.3897	103.75	100	Achieved
99	SINGARENI TPP	THE SINGARENI COLLIERIES COMPANY LIMITED	25.09.2016	1200.00	1.5713	1.6865	107.33	90	Achieved
100	CUDDALORE - TAQA	TAQA NEYVELLY POWER CO.PVT. LTD.	15.12.2002	250.00	0.0503	0.1139	226.24	100	Achieved
101	JOJOBERA	THE TATA POWER COMPANY LIMITED	April,1996	547.50	0.8408	0.9283	110.41	100	Achieved
102	TROMBAY	THE TATA POWER COMPANY LIMITED	1984	750.00	0.0416	0.0422	101.44	100	Achieved
103	SABARMATI	TORRENT POWER LTD.	12.10.1978	362.00	0.1904	0.1907	100.15	100	Achieved
104	METTUR-I	TAMIL NADU GENERATION AND DISTRIBUTION LIMITED	07.01.1987	840.00	0.9026	1.3459	149.11	100	Achieved
105	METTUR-II	TAMIL NADU GENERATION AND	11.10.2012	600.00	0.2904	0.2904	100.00	100	Achieved

SI No.	Name of TPS	Power Utility	Date of Commissioning	Installed Capacity	Fly ash Generation (Million Tonnes)	Fly ash Utilization (Million Tonnes)	% Utilization	Target in % age	Status
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
		DISTRIBUTION LIMITED							
106	NORTH CHENNAI-I	TAMIL NADU GENERATION AND DISTRIBUTION LIMITED	25.10.1994	630.00	0.9085	2.3328	256.79	100	Achieved
107	NORTH CHENNAI-II	TAMIL NADU GENERATION AND DISTRIBUTION LIMITED	Mar - 2013	1200.00	1.0838	1.7759	163.86	100	Achieved
108	RAMAGUNDAM 'B'	TELANGANA STATE POWER GENERATION CORPORATION LIMITED	17.10.1971	62.50	0.0890	0.1015	114.09	100	Achieved
109	HARDUAGANJ	UTTAR PRADESH RAJYA VIDYUT UTPADAN NIGAM LIMITED	28.05.1978	610.00	0.5590	1.3909	248.83	100	Achieved
110	PARICHHA	UTTAR PRADESH RAJYA VIDYUT UTPADAN NIGAM LIMITED	31.03.1984	920.00	1.0844	1.0852	100.08	100	Achieved
111	UDUPI	UDUPI POWER CORPORATION LIMITED	11.11.2010	1200.00	0.0693	0.0695	100.25	100	Achieved
112	VS LIGNITE POWER PRIVATE LTD	VS LIGNITE POWER PRIVATE LIMITED	FEB 2010	135.00	0.2165	0.2165	100.00	100	Achieved
113	VEDANTA LTD TPP	VEDANTA LIMITED	09.11.2010	2400.00	4.8731	5.9989	123.10	100	Achieved
114	VEDANTA LTD CPP	VEDANTA LIMITED	30.07.2008	1215.00	3.2504	4.0119	123.43	100	Achieved
115	KOLAGHAT	WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED	16.08.1990	1260.00	0.5921	0.9542	161.15	100	Achieved
116	BANDEL	WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED	04.09.1965	335.00	0.3250	0.3299	101.50	100	Achieved
117	SANTALDIH	WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED	01.04.2009	500.00	1.0423	1.2079	115.89	100	Achieved
118	SITAPURAM TPS	ZUARI CEMENT LIMITED	01.03.2008	43.00	0.0693	0.0693	100.00	100	Achieved

Note: Target of fly ash utilization as per MoEF Notification 3rd NOVEMBER, 2009:

- (1) At least 50% of fly ash generation – One year from the date of Commissioning
- At least 70% of fly ash generation - Two years from the date of Commissioning
- At least 90% of fly ash generation - Three years from the date of Commissioning
- At least 100% of fly ash generation - Four years from the date of Commissioning

(2)*(Less than 50% for Thermal Power Stations commissioned within one year from the date of commissioning)

(3) Cut-off Date for utilization target was 31.12.2017

TABLE-XVII

**FLY ASH UTILIZATION STATUS AS PER NOTIFICATION OF 3RD NOVEMBER,
2009 DURING THE YEAR 2020-21 (THERMAL POWER STATIONS
WHO HAVE NOT MET THEIR TARGET)**

Sl No.	Name of TPS	Power Utility	Date of Commissioning	Installed Capacity (Mega Watts)	Fly ash Generation (Million Tonnes)	Fly ash Utilization (Million Tonnes)	% Utilisation	Target in % age	Status
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Aarti Steels Limited	Aarti Steels Limited	01.09.2005	90	0.1878	0.1868	99.46	100	Not Achieved
2	SRI DAMODARAM SANJEEVAIAH	Andhra Pradesh Power Development Company Limited	05.02.2015	1600.00	1.1953	1.0961	91.70	100	Not Achieved
3	BARKHERA	Bajaj Energy Private Limited	29.10.2011	90.00	0.0459	0.0458	99.61	100	Not Achieved
4	KHAMBHAR KHERA	Bajaj Energy Private Limited	30.09.2011	90.00	0.0435	0.0434	99.72	100	Not Achieved
5	KUNDARKI	Bajaj Energy Private Limited	03.01.2012	90.00	0.0582	0.0579	99.55	100	Not Achieved
6	MAQSOODAPUR	Bajaj Energy Private Limited	27.10.2011	90.00	0.0448	0.0446	99.67	100	Not Achieved
7	NABINAGAR	BHARATIYA RAIL BIJLEE COMPANY LIMITED	16.01.2017	750.00	1.2822	0.1928	15.04	90	Not Achieved
8	Atal Bihari Vajpayee TPP	Chhattisgarh State Power Generation Company Ltd.	31.03.2016	1000.00	1.4703	1.0003	68.04	100	Not Achieved
9	Dr. Shyama Prasad Mukharjee TPP	Chhattisgarh State Power Generation Company Ltd.	21.10.2007	500.00	0.9705	0.4268	43.98	100	Not Achieved
10	Hasdeo TPP	Chhattisgarh State Power Generation Company Ltd.	21.03.1983	1340.00	2.7495	1.2895	46.90	100	Not Achieved
11	Korba (East)	Chhattisgarh State Power Generation Company Ltd.	01.10.1966	240.00	0.4231	0.1304	30.82	100	Not Achieved
12	MUNDRA UMPP	Coastal Gujarat Power Limited	07.03.2012	4150.00	0.7600	0.6300	82.89	100	Not Achieved
13	DB POWER	DB POWER LIMITED	03.11.2014	1200.00	2.6457	2.6009	98.30	100	Not Achieved
14	MEJIA	Damodar Valley Corporation	01.12.1997	2340.00	3.9548	2.7253	68.91	100	Not Achieved
15	DURGAPUR STEEL	Damodar Valley Corporation	15.05.2012	1000.00	1.7248	1.5073	87.39	100	Not Achieved
16	RAGHUNATHPUR	Damodar Valley Corporation	31.03.2016	1200.00	1.3933	0.1936	13.89	100	Not Achieved
17	MAHAN	ESSAR POWER MP LTD.	29.04.2013	1200.00	0.6950	0.2840	40.86	100	Not Achieved
18	UKAI	Gujarat State Electricity Corporation Limited	21.01.1979	1110.00	1.1990	1.1780	98.25	100	Not Achieved
19	IL & FS TAMIL NADU POWER COMPANY LTD.	IL & FS TAMIL NADU POWER COMPANY LIMITED	29.09.2015	1200.00	0.1260	0.1123	89.16	100	Not Achieved
20	O.P. Jindal Super TPP (Stage-I)	JINDAL POWER LIMITED	08.12.2007	1000.00	1.5821	0.2467	15.59	100	Not Achieved
21	O.P. Jindal Super TPP (Stage-II)	JINDAL POWER LIMITED	14.03.2014	2400.00	3.0635	0.5560	18.15	100	Not Achieved
22	DERANG TPP	JINDAL INDIA THERMAL POWER LIMITED	05.06.2014	1200.00	1.7821	1.0347	58.06	100	Not Achieved

SI No.	Name of TPS	Power Utility	Date of Commissioning	Installed Capacity (Mega Watts)	Fly ash Generation (Million Tonnes)	Fly ash Utilization (Million Tonnes)	% Utilisation	Target in % age	Status
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
23	ANGUL CAPTIVE POWER PLANT	JINDAL STEEL AND POWER LIMITED	13.05.2011	810.00	0.9860	0.5310	53.85	100	Not Achieved
24	JHABUA POWER LIMITED	JHABUA POWER LIMITED	03.05.2016	600.00	1.0334	0.7220	69.87	90	Not Achieved
25	LANCO AMARKANTAK TPS	LANCO AMARKANTAK POWER LIMITED	01.05.2009	600.00	1.1565	0.5159	44.61	100	Not Achieved
26	ANPARA 'C' TPS	LANCO ANPARA POWER LIMITED	10.12.2011	1200.00	1.7493	0.2953	16.88	100	Not Achieved
27	SATPURA	MADHYA PRADESH POWER GENERATING COMPANY LIMITED	07.01.1979	1330.00	1.2890	1.2142	94.20	100	Not Achieved
28	AMARKANTAK	MADHYA PRADESH POWER GENERATING COMPANY LIMITED	10.09.2009	210.00	0.3360	0.2160	64.29	100	Not Achieved
29	SHREE SINGAJI TPS	MADHYA PRADESH POWER GENERATING COMPANY LIMITED	01.02.2014	2520.00	1.4816	0.6456	43.58	100	Not Achieved
30	CHANDRAPUR	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	03.05.1985	2920.00	5.0617	0.8577	16.95	100	Not Achieved
31	KHAPARKHEDA	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	26.03.1989	1340.00	2.8737	1.9686	68.51	100	Not Achieved
32	KORADI	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	30.03.1982	2400.00	2.8115	2.2762	80.96	100	Not Achieved
33	PARAS	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	31.03.2008	500.00	1.0146	1.0064	99.19	100	Not Achieved
34	MEENAKSHI ENERGY PRIVATE LIMITED	MEENAKSHI ENERGY PRIVATE LIMITED	07.10.2012	300.00	0.0074	0.0005	6.65	100	Not Achieved
35	NEYVELI - I	NLC INDIA LIMITED	1962	600.00	0.0392	0.0280	71.35	100	Not Achieved
36	BHILAI PP-II	NTPC - SAIL POWER COMPANY LIMITED	25.08.1982	74.00	0.1352	0.1067	78.95	100	Not Achieved
37	BHILAI PP - III	NTPC - SAIL POWER COMPANY LIMITED	05.01.2009	500.00	1.0481	0.6176	58.93	100	Not Achieved
38	SINGRAULI	NTPC LTD.	February-82	2000.00	2.9843	0.9971	33.41	100	Not Achieved
39	RIHAND	NTPC LTD.	March-88	3000.00	3.9218	2.0399	52.02	100	Not Achieved
40	KORBA	NTPC LTD.	01-03-83	2600.00	4.7930	3.4610	72.21	100	Not Achieved
41	VINDHYACHAL	NTPC LTD.	01-10-87	4760.00	8.7137	3.2859	37.71	100	Not Achieved
42	SIPAT	NTPC LTD.	01-05-07	2980.00	5.2473	3.0258	57.66	100	Not Achieved
43	TALCHER - KANIHA	NTPC LTD.	01-02-95	3000.00	6.8412	4.8070	70.27	100	Not Achieved
44	DARLIPALI TPS	NTPC LTD.	01.03.2020	800.00	1.4900	0.0546	3.67	50	Not Achieved
45	BONGAIGAON	NTPC LTD.	June,2015	750.00	0.5244	0.3290	62.73	100	Not Achieved

SI No.	Name of TPS	Power Utility	Date of Commissioning	Installed Capacity (Mega Watts)	Fly ash Generation (Million Tonnes)	Fly ash Utilization (Million Tonnes)	% Utilisation	Target in % age	Status
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
46	KUDGI	NTPC LTD.	1.12.2016	2400.00	0.9816	0.4473	45.57	90	Not Achieved
47	GADARWARA SUPER	NTPC LTD.	29.03.2019	1600.00	0.9439	0.0778	8.24	70	Not Achieved
48	BARAUNI	NTPC LTD.	01.05.1983	360.00	0.3304	0.1986	60.10	100	Not Achieved
49	LARA SUPER THERMAL POWER PROJECT	NTPC LTD.	23.03.2018	1600.00	1.3522	1.0056	74.37	90	Not Achieved
50	NALCO, CPP ANGUL	NATIONAL ALUMINUM COMPANY LIMITED	29.09.1986	1200.00	2.8920	2.1888	75.69	100	Not Achieved
51	IB VALLEY	ODISHA POWER GENERATION CORPORATION LIMITED	21.12.1994	1740.00	3.2220	1.2156	37.73	100	Not Achieved
52	GVK POWER (GOINDWALSAHIB) LTD.	PUNJAB STATE POWER CORPORATION LIMITED	2016	540.00	0.2885	0.2455	85.09	100	Not Achieved
53	UCHPINDA	R.K.M. POWERGEN PVT. LTD	23.11.2015	1440.00	1.4066	1.4062	99.97	100	Not Achieved
54	CHHABRA	RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED	11.06.2010	1000.00	1.2910	1.1260	87.22	100	Not Achieved
55	CHHABRA SUPER CRITICAL TPP	RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED	09.08.2018	1320.00	1.4852	0.7415	49.93	50	Not Achieved
56	YERAMARUS TPS	RAICHUR POWER CORPORATION LIMITED	07.03.2017	1600.00	0.4668	0.2742	58.73	90	Not Achieved
57	RINL CAPTIVE TPP	RASHTRIYA ISPAT NIGAM LIMITED	12.03.1989	315.00	0.6910	0.6201	89.74	100	Not Achieved
58	RAIGARH TPP	RAIGARH ENERGY GENERATION LIMITED	31.03.2014	600.00	0.8522	0.3058	35.88	100	Not Achieved
59	SASAN UMPP TPP	RELIANCE POWER LIMITED	16.08.2013	3960.00	5.0270	2.2176	44.11	100	Not Achieved
60	SKS POWER GENERATION (CC) LTD.	SKS POWER GENERATION (CHHATTISGARH) LIMITED	06.10.2017	600.00	0.5821	0.4007	68.83	70	Not Achieved
61	THE DURGAPUR POWER PROJECTS STATION	THE DURGAPUR PROJECTS LIMITED	30.04.2008	550.00	0.6335	0.5650	89.19	100	Not Achieved
62	TUTICORIN	TAMIL NADU GENERATION AND DISTRIBUTION LIMITED	09.07.1979	1050.00	1.0525	0.7354	69.88	100	Not Achieved
63	KOTHAGUDEM-V	TELANGANA STATE POWER GENERATION CORPORATION LIMITED	01.10.1997	500.00	1.0051	0.4566	45.43	100	Not Achieved
64	KOTHAGUDEM-VI	TELANGANA STATE POWER GENERATION CORPORATION LIMITED	23.10.2011	500.00	0.6846	0.5083	74.25	100	Not Achieved
65	KOTHAGUDEM-VII	TELANGANA STATE POWER GENERATION CORPORATION LIMITED	26.12.2018	800.00	0.8142	0.4426	54.37	70	Not Achieved
66	KAKATIYA (Stage-I)	TELANGANA STATE POWER GENERATION CORPORATION LIMITED	14.09.2010	500.00	0.4539	0.3590	79.08	100	Not Achieved

SI No.	Name of TPS	Power Utility	Date of Commissioning	Installed Capacity (Mega Watts)	Fly ash Generation (Million Tonnes)	Fly ash Utilization (Million Tonnes)	% Utilisation	Target in % age	Status
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
67	KAKATIYA (Stage-II)	TELANGANA STATE POWER GENERATION CORPORATION LIMITED	24.03.2016	600.00	0.6741	0.5247	77.83	100	Not Achieved
68	RAIGARH TPP	TRN ENERGY PRIVATE LIMITED	14.08.2016	600.00	0.6814	0.2013	29.55	90	Not Achieved
69	TENUGHAT TPS	TENUGHAT VIDHYUT NIGAM LIMITED	14.04.1994	420.00	0.5194	0.4773	91.90	100	Not Achieved
70	TALWANDI SABO POWER LTD	TALWANDI SABO POWER LTD.	05.07.2014	1980.00	1.9360	1.1680	60.33	100	Not Achieved
71	ANPARA 'A' & 'B'	UTTAR PRADESH RAJYA VIDYUT UTPADAN NIGAM LIMITED	01.01.1987	2630.00	3.3609	0.9190	27.34	100	Not Achieved
72	OBRA	UTTAR PRADESH RAJYA VIDYUT UTPADAN NIGAM LIMITED	26.01.1980	1000.00	1.4089	0.0807	5.73	100	Not Achieved
73	SAGARDIGHI	WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED	07.09.2008	1600.00	2.1582	1.4987	69.44	100	Not Achieved
74	BAKRESWAR	WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED	18.07.1999	1050.00	1.7501	1.4685	83.90	100	Not Achieved

From the above table, it may be seen that 74 Thermal Power Stations have failed to achieve the utilization target.

6.0 MODES OF FLY ASH UTILIZATION DURING THE YEAR 2020-21:

The data on fly ash utilization received from Thermal Power Stations / Power Utilities for the year 2020-21 has been analysed to ascertain the modes in which fly ash was utilized and the quantity utilized in each mode.

The modes in which fly ash were utilized during the year 2020-21 along with utilization in each mode are given in Table - XVIII below :

TABLE- XVIII
MODES OF FLY ASH UTILIZATION DURING THE YEAR 2020-21

SI No.	Mode of Utilization	Quantity of Fly Ash Utilized in the Mode of Utilization	Percentage (%)
		(Million tonnes)	
(1)	(2)	(3)	(4)
1	Cement	60.0229	25.81
2	Mine Filling	14.4187	6.20
3	Bricks & Tiles	30.1832	12.98
4	Reclamation of Low Lying Area	36.2463	15.59
5	Ash Dyke Raising	18.4722	7.94
6	Roads & Flyovers	34.9851	15.04
7	Agriculture	0.0773	0.03
8	Concrete	1.9189	0.83
9	Hydro Power Sector	0.0611	0.03
10	Others	18.5267	7.97
11	Unutilised Ash	17.6469	7.59
	Total	232.5595	100.00

The pie diagram showing the modes of utilization of fly ash during the Year 2020-21 is given in Figure-1 below:

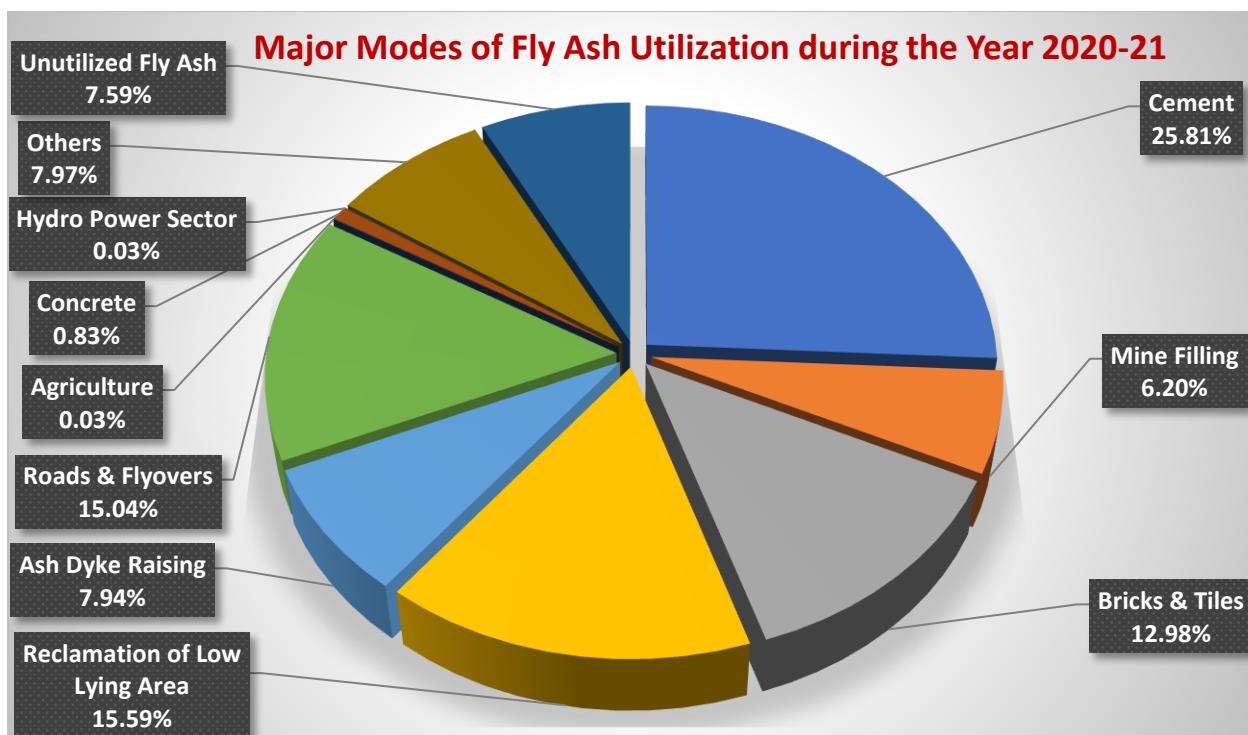


FIGURE-1

During the Year 2020-21, the maximum utilization of fly ash to the extent of 25.81 % of total fly ash generated was in the Cement sector, followed by 15.59 % in Reclamation of Low lying area, 15.04 % in Roads & Flyovers, 12.98 % in Bricks & Tiles, 7.94 % in Ash Dyke Raising, 6.20 % in Mine Filling, 0.83 % in Concrete, 0.03 % in Agriculture, 0.03 % in Hydro Power Sector, 7.97 % in Others and 7.59 % remained as unutilized fly ash.

7.0 PROGRESSIVE FLY ASH GENERATION & UTILIZATION DURING THE PERIOD FROM 1996-97 TO 2020-21:

Central Electricity Authority has been monitoring since 1996-1997, the fly ash generation and its utilization at Coal / Lignite based thermal power stations in the country. Based on data of fly ash generation and utilization received from Thermal Power Stations / Power Utilities since 1996-97, the progressive fly ash generation and its utilization for the period from 1996-97 to 2020-21 are given in Table - XIX below:

TABLE-XIX

PROGRESSIVE FLY ASH GENERATION AND ITS UTILIZATION DURING THE PERIOD FROM 1996-97 TO 2020-21

Sl No.	Year	No. of TPS who provided data	Fly Ash Generation	Fly Ash Utilization	Fly Ash Utilization in Percentage
			(Million-tonnes)	(Million-tonnes)	%
(1)	(2)	(3)	(4)	(5)	(6)
1	1996-97	-	68.88	6.64	09.63
2	1997-98	-	78.06	8.43	10.80
3	1998-99	-	78.99	9.22	11.70
4	1999-2000	-	74.03	8.91	12.03
5	2000-01	-	86.29	13.54	15.70
6	2001-02	-	82.81	15.57	18.80
7	2002-03	-	91.65	20.79	22.68
8	2003-04	-	96.28	28.29	29.39
9	2004-05	-	98.57	37.49	38.04
10	2005-06	-	98.97	45.22	45.69
11	2006-07	-	108.15	55.01	50.86
12	2007-08	-	116.94	61.98	53.00
13	2008-09	-	116.69	66.64	57.11
14	2009-10	-	123.54	77.33	62.60
15	2010-11	88	131.09	73.13	55.79
16	2011-12	124	145.41	85.05	58.48
17	2012-13	138	163.56	100.37	61.37
18	2013-14	143	172.87	99.62	57.63
19	2014-15	145	184.14	102.54	55.69
20	2015-16	151	176.74	107.77	60.97
21	2016-17	155	169.25	107.1	63.28
22	2017-18	167	196.44	131.87	67.13
23	2018-19	195	217.04	168.4	77.59
24	2019-20	197	226.95	189.01	83.28
25	2020-21	202	232.56	214.91	92.41

A graph showing progressive fly ash generation and its utilization for the period from 1996-97 to 2020-21 is given in **Figure-2** below:

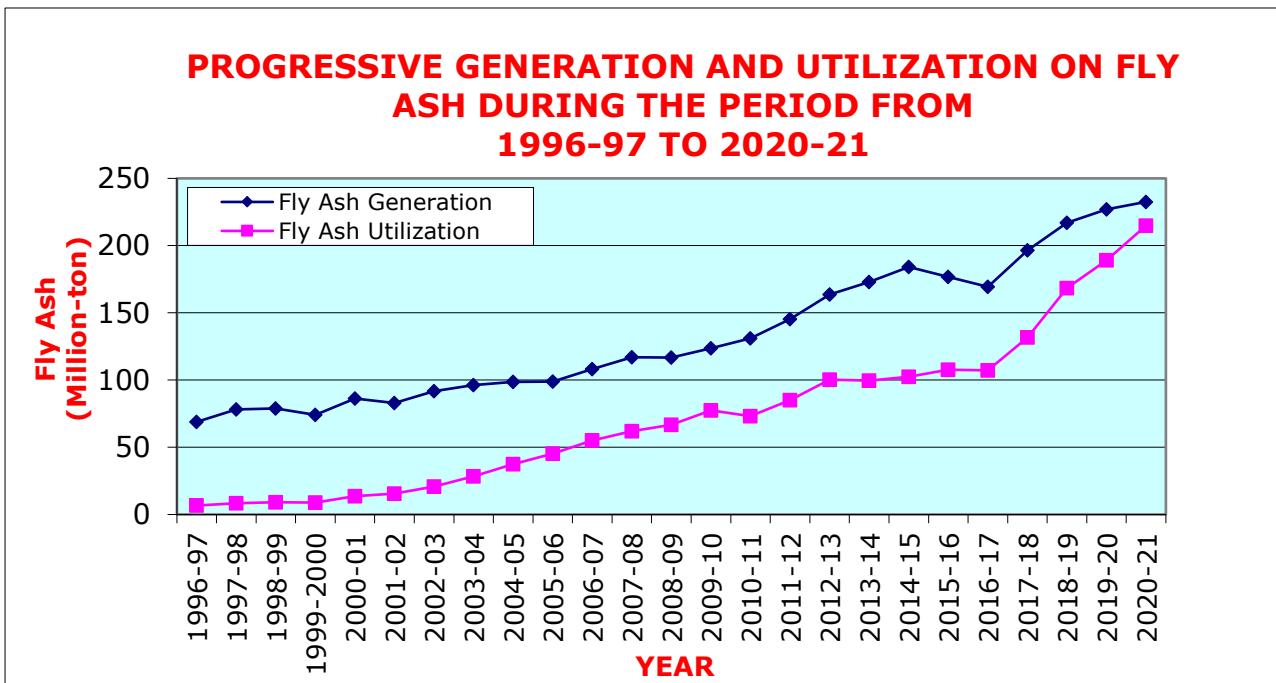


FIGURE-2

It may be seen from **Table - XIX** and **Figure - 2** above that:

- (i) The fly ash generation as well as utilization has generally been increasing since 1996-97. However, the Fly ash generation has shown a slight downtrend for the year 2016-17 due to lesser coal utilization than 2015-16.
- (ii) Fly ash utilization has increased from 9.63% in 1996-97 to the highest level of 92.41 % during 2020-21.
- (iii) The fly ash generation has increased from 68.88 Million Tonnes in 1996-97 to 232.56 Million Tonnes in 2020-21 i.e. nearly 3.38 times.
- (iv) However, fly ash utilization has increased from 6.64 Million Tonnes in 1996-97 to a level of 214.91 Million Tonnes in 2020-21 i.e. nearly more than 32.37 times over the same period.
- (v) From **Table XIX**, it is seen that quantities of fly ash generation during 2016-17, 2017-18, 2018-19, 2019-20 and 2020-21 have been 169.25, 196.44, 217.04, 226.95 and 232.56 Million Tonnes respectively. Fly ash utilization during the said five years are 107.10, 131.87, 168.40, 189.01 and 214.91 Million Tonnes respectively. The utilization of fly ash during 2020-21 is the highest ever so far.
- (vi) The number of Thermal Power Stations that are providing data has been increasing during successive years.

8.0 PROGRESSIVE FLY ASH UTILIZATION IN VARIOUS MODES DURING THE PERIOD FROM 1998-99 TO 2020-21:

8.1 Cement Industry

Fly ash is being used by Cement Industry as a pozzolanic material in the manufacture of Portland Pozzolana Cement. It saves both precious Lime stone and Coal. The utilization of fly ash in the manufacture of cement is highly value-added use. A graph showing progressive utilization of fly ash by the Cement Industry for the period from 1998-99 to 2020-21 is given in Figure-3 below:

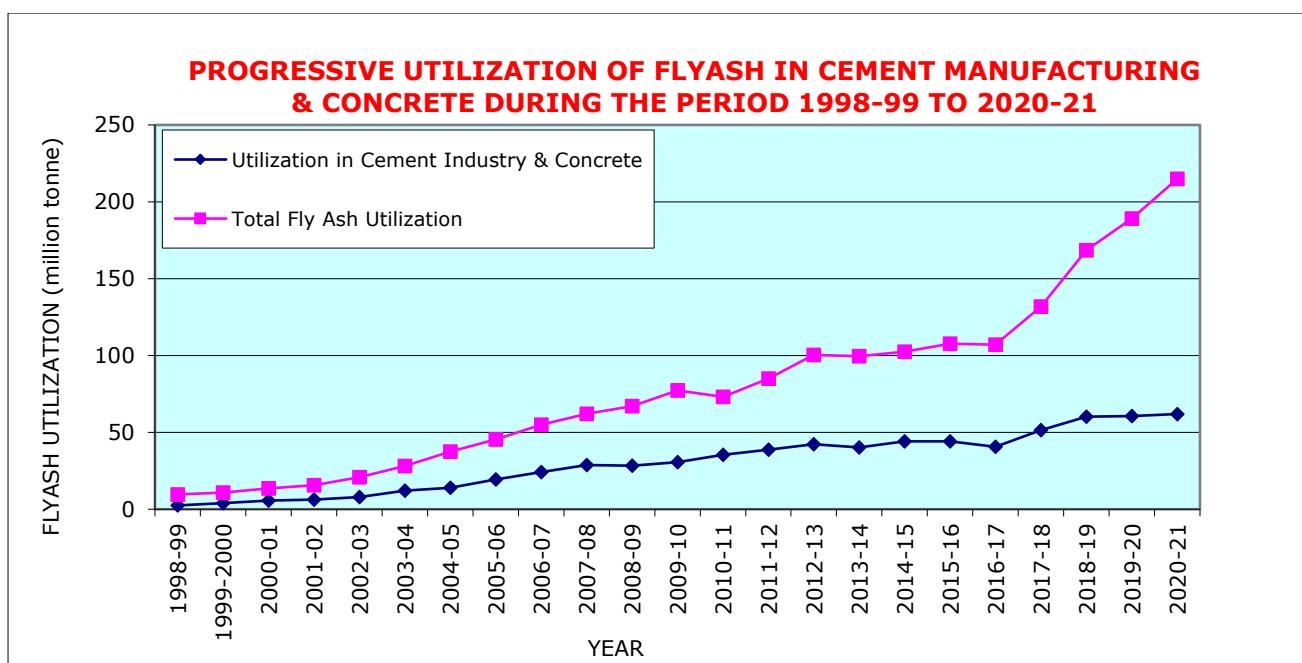


FIGURE-3

It may be seen from Figure-3 above that, 2.45 Million Tonnes of fly ash was used by Cement Industry in 1998-99 which increased to 61.94 Million Tonnes during 2020-21 and constituted about 26.63 % of total fly ash generation in the aforesaid year.

8.2 Reclamation of Low Lying Areas

Fly ash as a substitute for Soil / Sand is used for reclamation of low lying areas, thereby saving top soil. A graph showing the progressive utilization of fly ash in the reclamation of low lying area for the period from 1998-99 to 2020-21 is given in Figure-4.

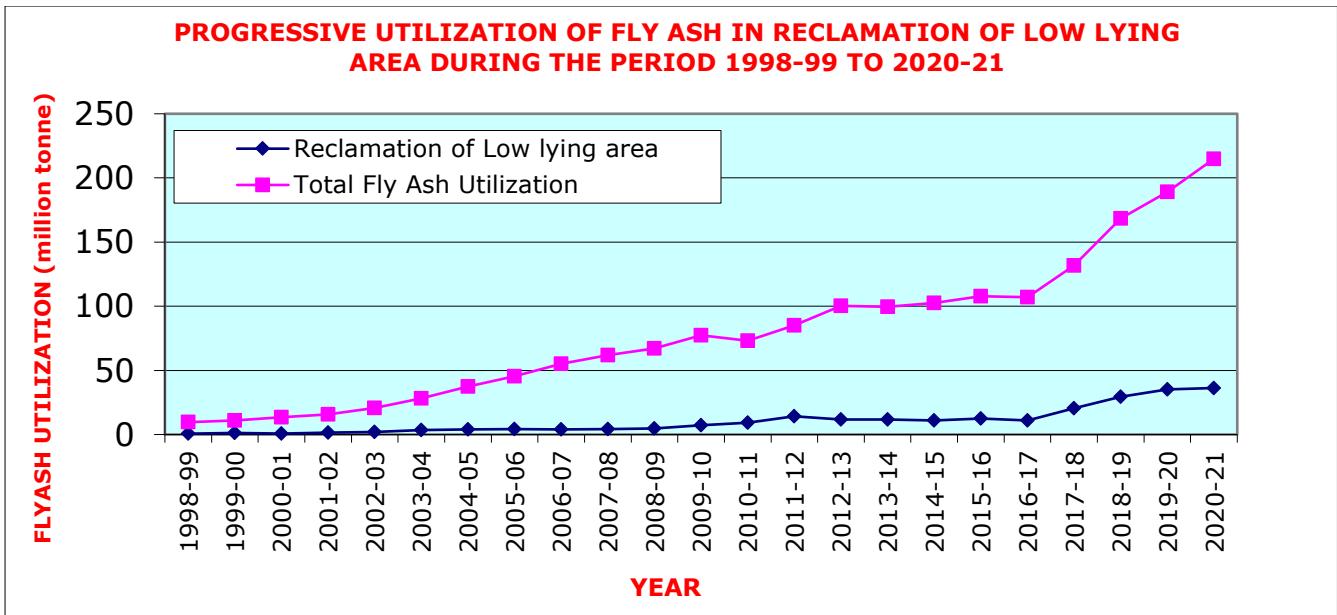


FIGURE-4

It may be seen from Figure-4 above, that 0.65 Million Tonnes of fly ash was used for the Reclamation of Low Lying Area in 1998-99 which has increased to 36.25 Million Tonnes in 2020 - 21 constituting about 15.59 % of total fly ash generation during the aforesaid year.

8.3 Construction of Roads / Embankments / Flyovers and Raising of Ash Dykes

Fly ash is being used in the construction of Roads / Embankments / Flyovers and the Raising of Ash Dykes. It has a large potential for fly ash utilization. A graph showing the progressive utilization of fly ash in the construction of roads & embankments and the raising of ash dykes for the period from 1998-99 to 2020-21 is given in Figure-5 below:

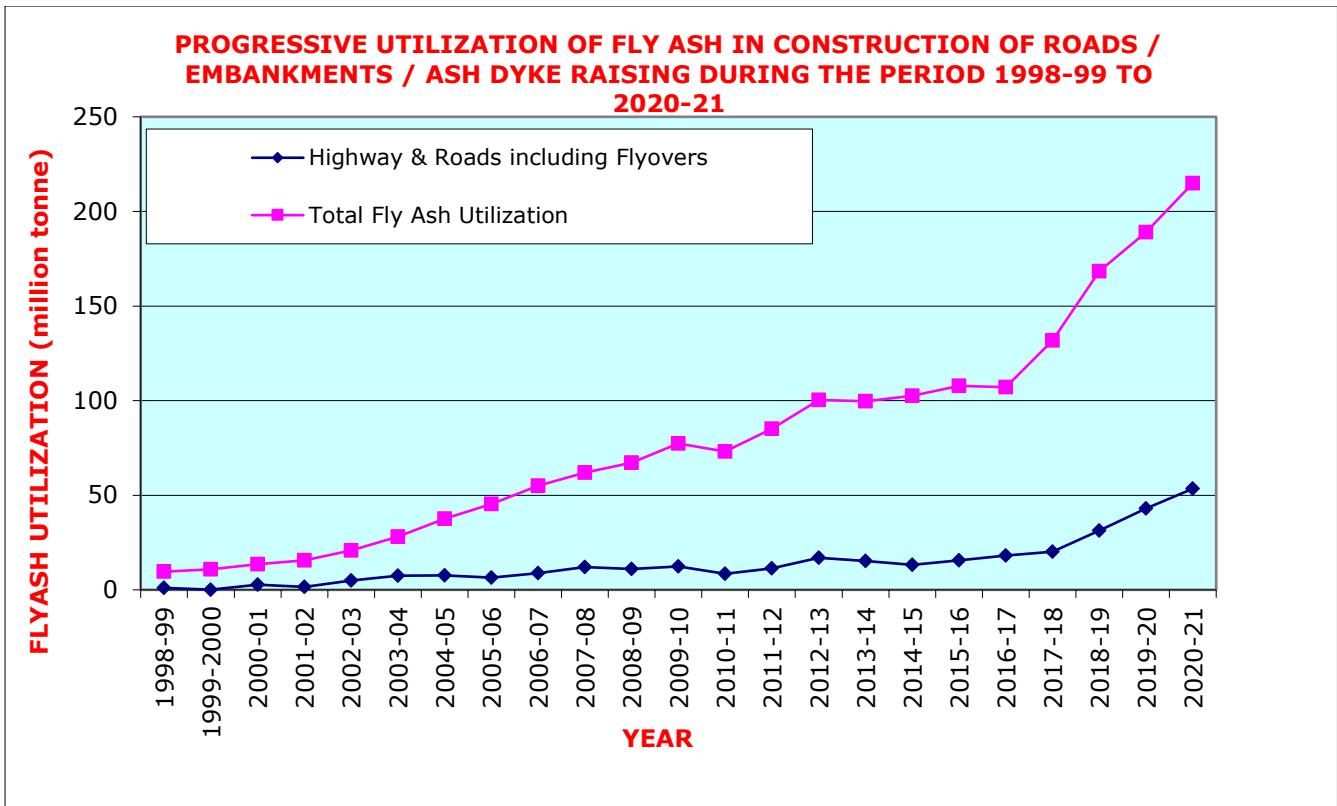


FIGURE-5

It may be seen from **Figure-5** above that 1.055 Million Tonnes of fly ash was used in the construction of roads /embankments / flyovers and raising of ash dykes etc. during 1998-99 which increased to 53.46 Million Tonnes in 2020-21 and constituted about 22.99 % of total fly ash generation in the aforesaid year.

8.4 Back Filling / Stowing of Mines :

Fly ash is being used for the backfilling of open cast mines and stowing of underground mines which result in the saving of top fertile soil and precious river sand. It has a large potential for fly ash utilization especially for pit head thermal power stations. A graph showing the progressive utilization of fly ash in the backfilling / stowing of mines for the period from 1998-99 to 2020-21 is given in **Figure-6**:

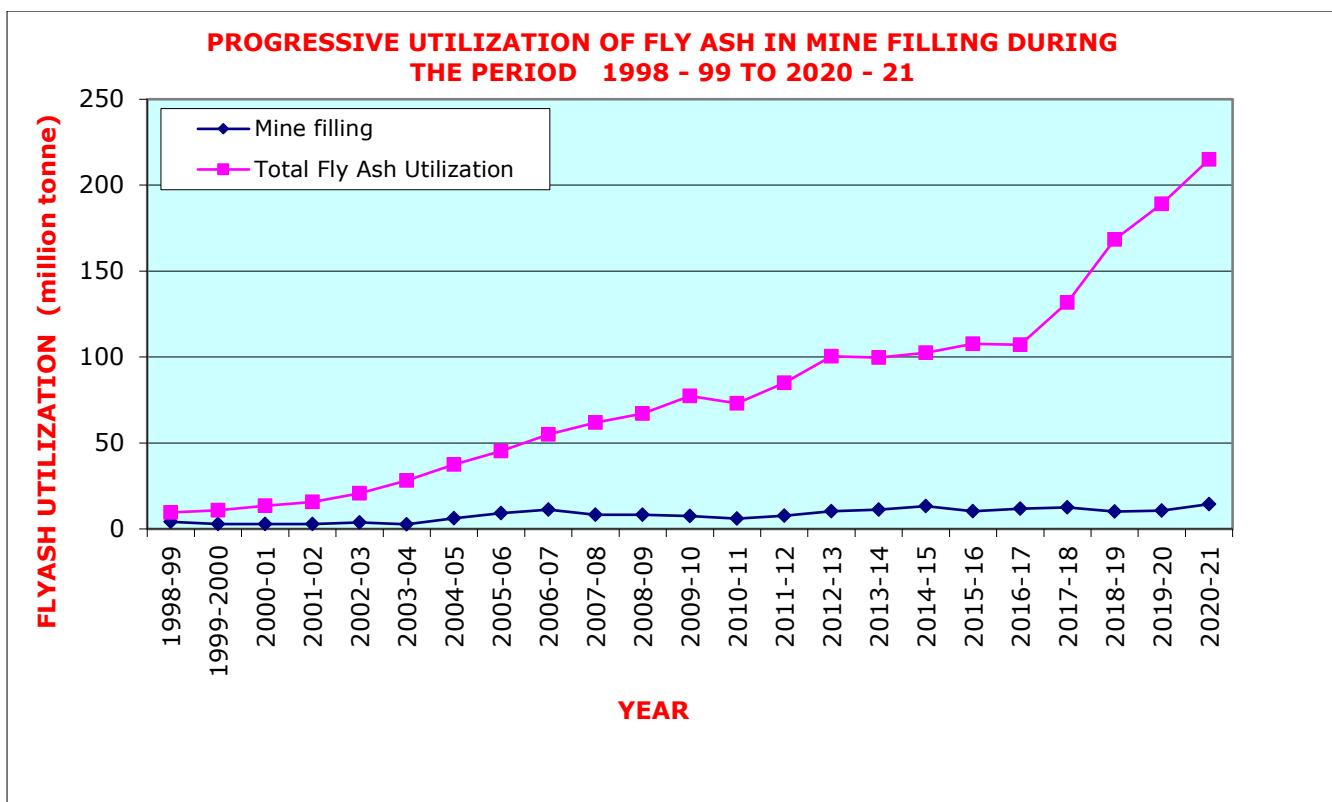


FIGURE-6

It may be seen from **Figure-6** above that 4.17 Million tonnes of fly ash was used for backfilling / stowing of open cast and underground mines during 1998-99 to 14.42 Million Tonnes in 2020-21, constituting about 6.20 % of total fly ash generation in the aforesaid year.

8.5 Building Materials like Bricks, Blocks and Tiles etc.

Fly ash is used in the manufacturing of fly ash based building products like bricks, blocks, tiles, etc. which results in the saving of fertile topsoil. Fly ash based Bricks / Blocks / Tiles are as good as clay-based conventional building products. It has substantial potential of fly ash utilization especially for thermal power stations located near load centers. A graph showing progressive utilization of fly ash in making of fly ash based building products for the period from 1998-99 to 2020-21 is given in **Figure - 7**.

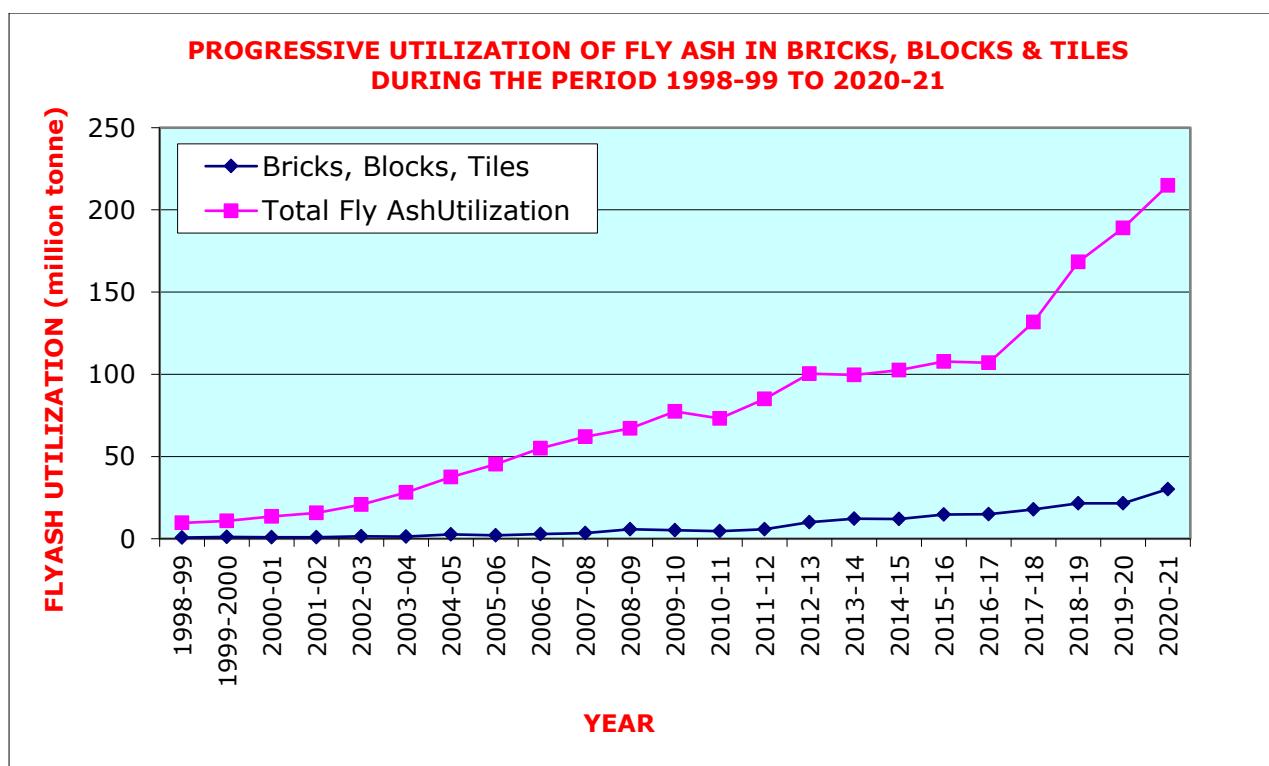


FIGURE-7

It may be seen from Figure-7 above that 0.70 Million Tonnes of fly ash was used for making fly ash based bricks / blocks / tiles etc. during 1998-99 which increased to 30.18 Million Tonnes in 2020-21 and constituted about 12.98 % of total fly ash generation in the aforesaid year.

8.6 Agriculture:

Fly ash is being used as manure in the agricultural sector as it has many micro nutrients. The progressive utilization of fly ash in the Agricultural Sector for the period from 1998-99 to 2020-21 is given in Figure-8.

**PROGRESSIVE UTILIZATION OF FLY ASH UTILIZATION IN
AGRICULTURE/WASTE LAND DEVELOPMENT DURING
THE PERIOD 1998-99 TO 2020-21**

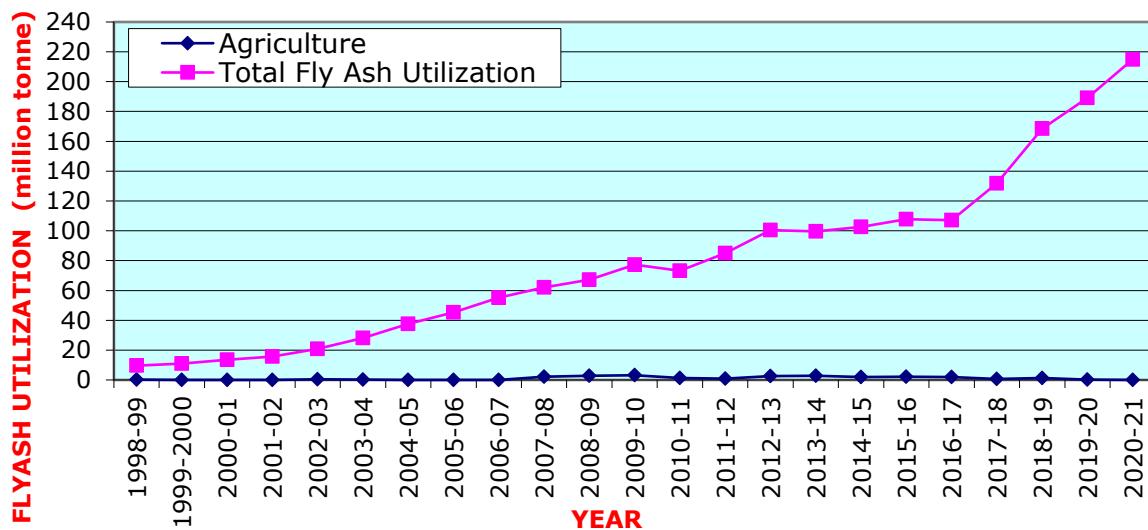


FIGURE-8

It may be seen from Figure-8 above that 0.13 Million Tonnes of fly ash was used in the agricultural sector during 1998-99, which has decreased to 0.08 Million Tonnes in 2020-21, the reason being Covid-19 Pandemic and constituted about 0.03 % of total fly ash generation in the aforesaid year.

9.0 LEGACY ASH As on 31.03.2021 :

The Ash Stock (Legacy Ash) details as provided by the Thermal Power Plants as on 31.03.2021 is shown below :

SI No.	Name of TPS	Power Utility & State	State	Installed Capacity (Mega Watts)	Total Ash stock available as on 31.03.2021
					(6)
(1)	(2)	(3)	(4)	(5)	(6)
1	Aarti Steels Ltd	Aarti Steels Ltd (Odisha)	Odisha	90.00	0.0012
2	Dr. N.T.R (Vijayawada)	APGENCO (Andhra Pradesh)	Andhra Pradesh	1760	42.1770
3	RAYALSEEMA	APGENCO (Andhra Pradesh)	Andhra Pradesh	1650	15.6520
4	SRI DAMODARAM SANJEEVAIAH	APPDCL (Andhra Pradesh)	Andhra Pradesh	1600	2.7930
5	KASAI PALI	ACB (INDIA) LTD CHHATTISGARH	Chhattisgarh	270	0.6872
6	SVPPL Renki	ACB India Limited (Chhattisgarh)	Chhattisgarh	60	0.0000
7	CHAKABURA TPP	ACB (INDIA) Ltd. (Chhattisgarh)	Chhattisgarh	30	0.0000
8	CHAKABURA TPP (EXTN)	ACB (INDIA) Ltd. (Chhattisgarh)	Chhattisgarh	30	0.0000

SI No.	Name of TPS	Power Utility & State	State	Installed Capacity (Mega Watts)	Total Ash stock available as on 31.03.2021
					(Million Metric Tonnes)
9	RATIJA TPS	ACB (INDIA) LIMITED (Chhattisgarh)	Chhattisgarh	100	0.4110
10	INDIRA GANDHI SUPER TPP, JHAJJAR	ARAVALI POWER COMPANY PRIVATE LIMITED (Haryana)	Haryana	1500	4.0413
11	MUNDRA TPS	ADANI POWER LIMITED (Gujarat)	Gujarat	4620	0.0443
12	TIRODA	ADANI POWER MAHARASHTRA LTD. (Maharashtra)	Maharashtra	3300	6.8922
13	KAWAI	ADANI POWER RAJASTHAN Ltd. (Rajasthan)	Rajasthan	1320	0.1536
14	MIHAN	Abhijeet MADC Nagpur Energy Pvt. Ltd. (Maharashtra)	Maharashtra	246	0.0000
15	ADANI DAHANU	ADANI ELECTRICITY MUMBAI LIMITED (Maharashtra)	Maharashtra	500	2.4460
16	ADHUNIK PNR LTD	ADHUNIK POWER & NATURAL RESOURCE LIMITED (JHARKHAND)	Jharkhand	540	0.0000
17	BARKHERA	Bajaj Energy Private Ltd. (Uttar Pradesh)	Uttar Pradesh	90	0.0002
18	KHAMBERKHERA	Bajaj Energy Private Ltd. (Uttar Pradesh)	Uttar Pradesh	90	0.0000
19	KUNDARKI	Bajaj Energy Private Ltd. (Uttar Pradesh)	Uttar Pradesh	90	0.0002
20	MAQSOODAPUR	Bajaj Energy Private Ltd. (Uttar Pradesh)	Uttar Pradesh	90	0.0001
21	UTRAULA	Bajaj Energy Private Ltd. (Uttar Pradesh)	Uttar Pradesh	90	0.0001
22	NABINAGAR - BRBCL	BHARATIYA RAIL BIJLEE COMPANY LTD (Bihar)	Bihar	750	1.6436
23	BALCO CPP	Bharat Aluminum Company Ltd (BALCO) (Chhattisgarh)	Chhattisgarh	540	10.0384
24	BALCO TPP	Bharat Aluminum Company Ltd (BALCO) (Chhattisgarh)	Chhattisgarh	1200	2.6220
25	BHADRESHWAR VIDYUT PVT LTD	BHADRESHWAR VIDYUT PVT LTD (Gujarat)	Gujarat	300	0.0083
26	Budge Budge Generating Station	C.E.S.C. (West Bengal)	West Bengal	750	0.0000
27	Southern Generating Station	C.E.S.C. (West Bengal)	West Bengal	135	0.0000
28	Titagarh Generating Station	C.E.S.C. (West Bengal)	West Bengal	240	0.0000
29	Atal Bihari Vajpayee TPS (Marwa)	C.S.P.G.C.L (Chhattisgarh)	Chhattisgarh	1000	4.1340

SI No.	Name of TPS	Power Utility & State	State	Installed Capacity (Mega Watts)	Total Ash stock available as on 31.03.2021
					(Million Metric Tonnes)
30	Dr. Shyama Prasad Mukherjee TPS (DSPM)	C.S.P.G.C.L (Chhattisgarh)	Chhattisgarh	500	18.0990
31	Hasdeo TPP (Korba west)	C.S.P.G.C.L (Chhattisgarh)	Chhattisgarh	1340	56.4160
32	Korba Thermal Power Station (Korba East)	C.S.P.G.C.L (Chhattisgarh)	Chhattisgarh	240	33.7347
33	MUTIARA	COASTAL ENERGEN PVT. LTD (Tamil Nadu)	Tamil Nadu	1200	0.0030
34	MUNDRA UMPP	CGPL (Gujarat)	Gujarat	4150	1.7600
35	CHEMPLAST LTD, Coal power plant	CHEMPLAST SANMAR LTD (TAMIL NADU)	Tamil Nadu	48.5	0.0002
36	DB Power Ltd.	DB Power Ltd., Chhattisgarh	Chhattisgarh	1200	2.3289
37	BOKARO Thermal Power Station (BTPS)	Damodar Valley Corporation (Jharkhand)	Jharkhand	710	0.7974
38	CHANDRAPURA	Damodar Valley Corporation (Jharkhand)	Jharkhand	500	4.2394
39	DURGAPUR	Damodar Valley Corporation (West Bengal)	West Bengal	210	3.1280
40	MEJIA	Damodar Valley Corporation (West Bengal)	West Bengal	2340	18.3070
41	DURGAPUR STEEL	Damodar Valley Corporation (West Bengal)	West Bengal	1000	5.2330
42	KODERMA	Damodar Valley Corporation (Jharkhand)	Jharkhand	1000	1.1096
43	RAGHUNATHPUR	Damodar Valley Corporation (West Bengal)	West Bengal	1200	3.7304
44	DHARIWAL INFRASTRUCTURE Ltd.	Dhariwal Infrastructure Ltd. (Maharashtra)	Maharashtra	600	0.0000
45	MAHAN	ESSAR POWER (MP) LTD., Madhya Pradesh	Madhya Pradesh	1200	0.5280
46	SALAYA TPS	ESSAR POWER GUJARAT LIMITED	Gujarat	1200	0.0000
47	SURAT LIGNITE	G.I.P.C.L. (Gujarat)	Gujarat	500	0.0000
48	AKRIMOTA	G.M.D.C.L. (Gujarat)	Gujarat	250	0.0001
49	GANDHINAGAR	G.S.E.C.L. (Gujarat)	Gujarat	630	5.7000

SI No.	Name of TPS	Power Utility & State	State	Installed Capacity (Mega Watts)	Total Ash stock available as on 31.03.2021
					(Million Metric Tonnes)
50	KUTCH LIGNITE	G.S.E.C.L. (Gujarat)	Gujarat	150	1.2000
51	SIKKA	G.S.E.C.L. (Gujarat)	Gujarat	500	0.9600
52	UKAI	G.S.E.C.L. (Gujarat)	Gujarat	1110	13.0000
53	WANAKBORI	G.S.E.C.L. (Gujarat)	Gujarat	2270	38.1000
54	BHAVNAGAR LIGNITE	G.S.E.C.L. (Gujarat)	Gujarat	500	0.0060
55	GMR WARORA ENERGY Ltd.	GMR WARORA ENERGY Ltd. (Maharashtra)	Maharashtra	600	0.2630
56	GMR KAMALANGA TPP	GMR KAMALANGA ENERGY Ltd. (Odisha)	Odisha	1050	1.0740
57	RAJIV GANDHI TPP HISAR	H.P.G.C.L.(Haryana)	Haryana	1200	4.8010
58	Deen Bandhu Chhotu Ram TPS, YAMUNANAGAR	H.P.G.C.L. (Haryana)	Haryana	600	1.8008
59	PANIPAT	H.P.G.C.L.(Haryana)	Haryana	710	29.9000
60	HALDIA ENERGY LIMITED	HALDIA ENERGY LIMITED (West Bengal)	West Bengal	600	0.0000
61	Vizag TPS (Hinduja Power Plant, Vishakhapatnam)	HINDUJA NATIONAL POWER COPORATION LIMITED (Andhra Pradesh)	Andhra Pradesh	1040	1.1945
62	DISHERGARH TPS	INDIA POWER CORPORATION LIMITED (West Bengal)	West Bengal	12	0.0000
63	INDIAN METALS & FERRO ALLOYS LTD.	INDIAN METALS & FERRO ALLOYS Ltd. (Odisha)	Odisha	200	0.0000
64	IL & FS TNPC Ltd	IL & FS TAMIL NADU POWER COMPANY Ltd (Tamil Nadu)	Tamil Nadu	1200	0.0347
65	BELA TPS	IDEAL ENERGY PROJECTS Ltd. (Maharashtra)	Maharashtra	270	0.1168
66	MAHATMA GANDHI	JHAJJAR POWER LIMITED (Haryana)	Haryana	1320	0.0003
67	O.P. Jindal Super TPP (Stage-I)	JINDAL POWER LIMITED (Chhattisgarh)	Chhattisgarh	1000	10.1420
68	O.P. Jindal Super TPP (Stage-II)	JINDAL POWER LIMITED (Chhattisgarh)	Chhattisgarh	2400	5.3570
69	JAYPEE BINA	JAIPRAKASH POWER VENTURES LIMITED (Madhya Pradesh)	Madhya Pradesh	500	2.0000
70	JAYPEE NIGRIE SUPER	JAIPRAKASH POWER VENTURES LIMITED (Madhya Pradesh)	Madhya Pradesh	1320	0.2185
71	RATNAGIRI	JSW Energy Ltd (Maharashtra)	Maharashtra	1200	0.0479

SI No.	Name of TPS	Power Utility & State	State	Installed Capacity (Mega Watts)	Total Ash stock available as on 31.03.2021
					(Million Metric Tonnes)
72	VIJAYANAGAR	JSW Energy Limited (Karnataka)	Karnataka	860	0.1197
73	DERANG TPP	JINDAL INDIA THERMAL POWER LIMITED (Odisha)	Odisha	1200	9.1548
74	DONGAMAHUA CAPTIVE POWER PLANT	JINDAL STEEL AND POWER LIMITED (Chhattisgarh)	Chhattisgarh	576	0.0011
75	Angul CPP	JINDAL STEEL AND POWER LIMITED (Odisha)	Odisha	810	0.4550
76	JSW Energy (Barmer) Ltd [JALIPA KAPURDI]	JSW Energy (Barmer) Ltd. (Formerly Raj Westpower Ltd) Rajasthan	Rajasthan	1080	0.1416
77	JSW STEEL LTD, Salem works CPP-II	JSW STEEL LTD, Salem works(TAMIL NADU)	Tamil Nadu	90	0.0001
78	Captive Power Plant of Jindal Steel & power Ltd (Kharsia CPP)	JINDAL STEEL AND POWER LIMITED (Chhattisgarh)	Chhattisgarh	299	12.9830
79	JHABUA POWER LIMITED	JHABUA POWER LIMITED (MP)	Madhya Pradesh	600	0.8926
80	BALLARI	K.P.C.L (Karnataka)	Karnataka	1700	6.2540
81	Kanti TPS	KANTI BIJLEE UTPADAN NIGAM LIMITED (Bihar)	Bihar	610	1.9440
82	KMPCL-Nariyara	M/s KSK MAHANADI POWER COMPANY LIMITED (Chhattisgarh)	Chhattisgarh	1800	0.4856
83	AMARKANTAK - LANCO	LANCO AMARKANTAK POWER LIMITED(Chhattisgarh)	Chhattisgarh	600	6.4730
84	LALITPUR TPS	LALITPUR POWER GENERATION COMPANY LIMITED (UP)	Uttar Pradesh	1980	0.0719
85	ANPARA-C TPP (Lanco Anpara TPS)	LANCO ANPARA POWER LTD (UTTAR PRADESH)	Uttar Pradesh	1200	13.5845
86	MAITHON Right Bank TPP	MPL (Jharkhand)	Jharkhand	1050	0.0893
87	SANJAY GANDHI	M.P.P.G.C.L. (Madhya Pradesh)	Madhya Pradesh	1340	15.6467
88	SATPURA	M.P.P.G.C.L. (Madhya Pradesh)	Madhya Pradesh	1330	85.0450
89	AMARKANTAK MPPGCL	M.P.P.G.C.L. (Madhya Pradesh)	Madhya Pradesh	210	3.3176
90	SHREE SINGAJI TPS	M.P.P.G.C.L. (Madhya Pradesh)	Madhya Pradesh	2520	7.7184
91	BHUSAWAL TPS	M.S.P.G.C.L (Maharashtra)	Maharashtra	1210	6.7496
92	CHANDRAPUR SUPER TPP	M.S.P.G.C.L. (Maharashtra)	Maharashtra	2920	77.3275

SI No.	Name of TPS	Power Utility & State	State	Installed Capacity (Mega Watts)	Total Ash stock available as on 31.03.2021
					(Million Metric Tonnes)
93	KHAPARKHEDA	M.S.P.G.C.L. (Maharashtra)	Maharashtra	1340	26.8896
94	KORADI	M.S.P.G.C.L. (Maharashtra)	Maharashtra	2400	31.2103
95	NASHIK	M.S.P.G.C.L. (Maharashtra)	Maharashtra	630	10.3792
96	PARLI TPS	M.S.P.G.C.L. (Maharashtra)	Maharashtra	750	20.4196
97	PARAS	M.S.P.G.C.L. (Maharashtra)	Maharashtra	500	1.7653
98	MCCPL BANDHAKHAR	Maruti Clean Coal & Power Ltd (Chhattisgarh)	Chhattisgarh	300	0.3286
99	SAI WARDHA POWER Ltd. WARORA	MSELDC, Captive Consumers, Maharashtra	Maharashtra	540	0.0000
100	THAMMINAPATNAM TPS	MEENAKSHI ENERGY Ltd. (Andhra Pradesh)	Andhra Pradesh	300	0.0000
101	ANUPPUR	MB POWER (MADHYA PRADESH) LIMITED (Madhya Pradesh)	Madhya Pradesh	1200	1.4233
102	MEJA TPP	MEJA URJA NIGAM PVT LTD (UTTAR PRADESH)	Uttar Pradesh	1320	0.6972
103	NEYVELI - I	N.L.C.LTD (Tamil Nadu)	Tamil Nadu	600	0.0000
104	NEYVELI -I EXPN	N.L.C.LTD (Tamil Nadu)	Tamil Nadu	420	0.0000
105	NEYVELI - II	N.L.C.LTD (Tamil Nadu)	Tamil Nadu	1470	8.1900
106	NEYVELI - II EXPN	N.L.C.LTD (Tamil Nadu)	Tamil Nadu	500	0.0000
107	NEYVELI NEW TPS	N.L.C.LTD (Tamil Nadu)	Tamil Nadu	1000	0.0000
108	BARSINGSAR LIGNITE	N.L.C.LTD (Rajasthan)	Rajasthan	250	0.0000
109	NLC TAMILNADU POWER LTD. (Tuticorin)	NLC TAMILNADU POWER LIMITED (Tamil Nadu)	Tamil Nadu	1000	0.0000
110	BHILAI PP-II	NSPCL (Chhattisgarh)	Chhattisgarh	74	0.9225
111	BHILAI PP-III	NSPCL (Chhattisgarh)	Chhattisgarh	500	3.6705
112	DURGAPUR CAPTIVE POWER PLANT	NSPCL (West Bengal)	West Bengal	120	4.1177
113	ROURKELA CPP-II	NSPCL , Odisha	Odisha	120	1.8200
114	VALLUR	NTECL (Tamil Nadu)	Tamil Nadu	1500	3.6470
115	DADRI	N.T.P.C.LTD (U.P.)	Uttar Pradesh	1820	0.0185
116	SINGRAULI	N.T.P.C.LTD (U.P.)	Uttar Pradesh	2000	75.6100

SI No.	Name of TPS	Power Utility & State	State	Installed Capacity (Mega Watts)	Total Ash stock available as on 31.03.2021
					(Million Metric Tonnes)
117	RIHAND	N.T.P.C.LTD (U.P.)	Uttar Pradesh	3000	38.6310
118	FEROZE GANDHI UNCHAHAR	N.T.P.C. LTD (U.P.)	Uttar Pradesh	1550	7.2040
119	TANDA	N.T.P.C.LTD (U.P.)	Uttar Pradesh	1760	3.5826
120	KORBA	N.T.P.C.LTD (Chhattisgarh)	Chhattisgarh	2600	53.5900
121	VINDHYACHAL	N.T.P.C.LTD (M.P.)	Madhya Pradesh	4760	80.1700
122	SIPAT	N.T.P.C.LTD (Chhattisgarh)	Chhattisgarh	2980	37.2840
123	RAMAGUNDAM	N.T.P.C.LTD	Telangana	2600	69.2280
124	SIMHADRI	N.T.P.C.LTD (Andhra Pradesh)	Andhra Pradesh	2000	15.1500
125	FARAKKA	N.T.P.C.LTD (W.B.)	West Bengal	2100	39.2847
126	KAHALGAON	N.T.P.C.LTD (Bihar)	Bihar	2340	66.5000
127	BARH SUPER TPS	N.T.P.C.LTD (Bihar)	Bihar	1320	6.2111
128	Nabinagar - NTPC	NPGCL (Bihar)	Bihar	660	0.8173
129	TALCHER(TPS)	N.T.P.C.LTD (Odisha)	Odisha	460	2.4710
130	TALCHER - KANIHA	N.T.P.C.LTD (Odisha)	Odisha	3000	88.0565
131	Darlipali	N.T.P.C.LTD(Odisha)	Odisha	800	1.4014
132	MOUDA TPS	N.T.P.C.LTD (Maharashtra)	Maharashtra	2320	1.0400
133	BONGAIGAON	N.T.P.C.LTD (Assam)	Assam	750	1.3583
134	SOLAPUR	N.T.P.C.LTD (Maharashtra)	Maharashtra	1320	0.0150
135	KUDGI	N.T.P.C.LTD (Karnataka)	Karnataka	2400	1.3529
136	GADARWARA	N.T.P.C.LTD (M.P.)	Madhya Pradesh	1600	1.1543
137	BARAUNI	NTPC Ltd	Bihar	360	0.1957
138	Lara Super TPP	N.T.P.C LTD., Chhattisgarh	Chhattisgarh	1600	0.9134
139	KHARGONE SUPER TPS	N.T.P.C.LTD (M.P.)	Madhya Pradesh	660	0.5479
140	Rajpura TPS	NABHA POWER LIMITED, PUNJAB	Punjab	1400	0.0140
141	NALCO, CPP ANGUL	NATIONAL ALUMINIUM COMPANY LIMITED (NALCO) (Odisha)	Odisha	1200	18.7750

SI No.	Name of TPS	Power Utility & State	State	Installed Capacity (Mega Watts)	Total Ash stock available as on 31.03.2021
					(Million Metric Tonnes)
142	IB VALLEY	O.P.G.C.L.(Odisha)	Odisha	1740	23.6780
143	OPG POWER GENERATION PVT LTD	OPG POWER GENERATION PVT LTD., Tamil Nadu	Tamil Nadu	414	0.0000
144	Guru Nanakdev TPP, BATHINDA	P.S.P.C.L. (Punjab)	Punjab	460	20.6786
145	Guru Hargobind, LEHRA MOHABAT	P.S.P.C.L. (Punjab)	Punjab	920	6.6315
146	Guru Gobind Singh TPS, Ropar	P.S.P.C.L. (Punjab)	Punjab	840	20.6207
147	GVK POWER (GOINDWALASAHI) LTD	PSPCL (PUNJAB)	Punjab	540	0.3320
148	PRAYAGRAJ	PRAYAGRAJ POWER GENERATION COMPANY LIMITED (Uttar Pradesh)	Uttar Pradesh	1980	1.9572
149	Uchpinda	R K M POWERGEN PRIVATE LIMITED (Chhattisgarh)	Chhattisgarh	1440	0.0000
150	CHHABRA	RRVUNL (Rajasthan)	Rajasthan	1000	0.4386
151	CHHABRA SUPER CRITICAL TPS	RRVUNL (Rajasthan)	Rajasthan	1320	1.5594
152	SURATGARH TPS	RRVUNL (Rajasthan)	Rajasthan	1500	7.8970
153	KALISINDH	RRVUNL (Rajasthan)	Rajasthan	1200	0.0544
154	Kota Super TPS	RRVUNL (Rajasthan)	Rajasthan	1240	1.0006
155	ROSA PHASE-I	RPSCL (U.P)	Uttar Pradesh	1200	1.0054
156	AMARAVATI TPS	RATTAN INDIA POWER LTD., Maharashtra	Maharashtra	1350	0.6704
157	YERAMARUS TPS	RAICHUR POWER CORPORATION LIMITED (Karnataka)	Karnataka	1600	0.0036
158	RINL CAPTIVE TPP, VISAKHAPATNAM	RASHTRIYA ISPAT NIGAM LTD., (AP)	Andhra Pradesh	315	0.7100
159	RAIGARH TPP (Formerly KWPLC)	RAIGARH ENERGY GENERATION LTD (Chhattisgarh)	Chhattisgarh	600	1.5320
160	Raipur TPP	Raipur Energen Limited (Chhattisgarh)	Chhattisgarh	1370	0.1275
161	Sasan UMPP	Reliance Power Ltd., Madhya Pradesh	Madhya Pradesh	3960	22.1585
162	SIMHAPURI	SIMHAPURI ENERGY LIMITED (Andhra Pradesh)	Andhra Pradesh	600	0.0000
163	SAI LILAGARH POWER GENERATION LTD	SAI LILAGARH POWER GENERATION LTD (Chhattisgarh)	Chhattisgarh	86	0.0000

SI No.	Name of TPS	Power Utility & State	State	Installed Capacity (Mega Watts)	Total Ash stock available as on 31.03.2021
					(Million Metric Tonnes)
164	SEMCORP ENERGY INDIA LIMITED	SEMCORP ENERGY INDIA LIMITED (Andhra Pradesh)	Andhra Pradesh	1320	2.8320
165	SWASTIK POWER & MINERALS RESOURCES PVT. LTD.	SWASTIK POWER & MINERALS RESOURCES PVT. LTD (Chhattisgarh)	Chhattisgarh	25	0.0000
166	SKS POWER GENERATION (CG) LTD	SKS POWER GENERATION (CHHATTISGARH)	Chhattisgarh	600	0.3840
167	Durgapur Projects Power Station	The Durgapur Projects Limited (West Bengal)	West Bengal	550	0.7675
168	SINGARENI	THE SINGARENI COLLIERIES COMPANY LIMITED (Telangana)	Telangana	1200	0.4000
169	CUDDALORE - TAQA	TAQA Neyveli Power Co. Pvt. Ltd. (Tamil Nadu)	Tamil Nadu	250	0.2450
170	JOJOBERA	T.P.CO. (Jharkhand)	Jharkhand	547.5	0.0447
171	TROMBAY	T.P.CO.(Maharashtra)	Maharashtra	750	0.0000
172	SABARMATI	TORRENT POWER LTD. (Gujarat)	Gujarat	362	1.0033
173	TUTICORIN	T.N.G & D Corporation (Tamil Nadu)	Tamil Nadu	1050	40.9380
174	METTUR-I	T.N.G & D Corporation (Tamil Nadu)	Tamil Nadu	840.0	18.7484
175	METTUR-II	T.N.G & D Corporation (Tamil Nadu)	Tamil Nadu	600	0.0000
176	NORTH CHENNAI-I	T.N.G & D Corporation (Tamil Nadu)	Tamil Nadu	630	11.4960
177	NORTH CHENNAI-II	T.N.G & D Corporation (Tamil Nadu)	Tamil Nadu	1200	6.3690
178	RAMAGUNDAM-B-TSGenco	TSGENCO (Telangana)	Telangana	62.5	0.8870
179	KOTHAGUDEM-V	TSGENCO (Telangana)	Telangana	500	77.7000
180	KOTHAGUDEM-VI	TSGENCO (Telangana)	Telangana	500	0.0000
181	KOTHAGUDEM-VII	TSGENCO (Telangana)	Telangana	800	1.1746
182	KAKATIYA (Stage-I)	TSGENCO (Telangana)	Telangana	500	3.4720
183	KAKATIYA (Stage-II)	TSGENCO (Telangana)	Telangana	600	1.1040
184	RAIGARH TPP - TEPL	TRN ENERGY PRIVATE LIMITED (Chhattisgarh)	Chhattisgarh	600	1.3643
185	TENUGHAT TPS	TENUGHAT VIDHYUT NIGAM LIMITED (Jharkhand)	Jharkhand	420	0.0000

SI No.	Name of TPS	Power Utility & State	State	Installed Capacity (Mega Watts)	Total Ash stock available as on 31.03.2021
					(Million Metric Tonnes)
186	TALWANDI SABO POWER LTD	TALWANDI SABO POWER LTD., Punjab	Punjab	1980	3.2670
187	ANPARA 'A' & 'B'	U.P.R.V.U.N.L. (U.P.)	Uttar Pradesh	2630	57.3283
188	HARDUAGANJ	U.P.R.V.U.N.L. (U.P.)	Uttar Pradesh	610	7.7542
189	OBRA	U.P.R.V.U.N.L. (U.P.)	Uttar Pradesh	1000	12.8651
190	Panki Extension	U.P.R.V.U.N.L. (U.P.)	Uttar Pradesh	0	
191	PARICHHA	U.P.R.V.U.N.L. (U.P.)	Uttar Pradesh	920	8.5667
192	UDUPI	Udupi Power Corporation Limited (Karnataka)	Karnataka	1200	0.0327
193	BUTIBORI	VIDARBHA INDUSTRIES POWER LIMITED (Maharashtra)	Maharashtra	600	0.0000
194	VS LIGNITE POWER PVT LTD	VS LIGNITE POWER PVT LTD (RAJASTHAN)	Rajasthan	135	0.0000
195	VEDANTA TPP	VEDANTA LTD (ODISHA)	Odisha	2400	5.6000
196	VEDANTA CPP	VEDANTA LTD (ODISHA)	Odisha	1215	9.2000
197	KOLAGHAT	W.B.P.D.C.L (W.B.)	West Bengal	1260	0.0111
198	SAGARDIGHI	W.B.P.D.C.L (W.B.)	West Bengal	1600	7.4166
199	BANDEL	W.B.P.D.C.L (W.B.)	West Bengal	335	0.1958
200	SANTALDIH	W.B.P.D.C.L (W.B.)	West Bengal	500	3.8047
201	BAKRESWAR	W.B.P.D.C.L (W.B.)	West Bengal	1050	8.5700
202	SITAPURAM POWER PLANT	ZUARI CEMENT LIMITED	Telangana	43	0.0000
		Grand Total		209990.50	1738.1860

From the above table it may be seen that a total of 1738.19 Million Tonnes of Legacy Ash is available as reported by 202 Thermal Power Plants as on 31.03.2021.

10.0 WEB BASED MONITORING SYSTEM AND A MOBILE APPLICATION FOR UTILIZATION OF FLY ASH:

Annual Fly ash utilization has remained 92.41 % of the fly ash generated and therefore, it has become a matter of concern because of its environmental effect. Besides, progressive accumulation may lead to a situation when ash pond may not be in a position to accommodate fly ash further.

Due to the importance of utilization of fly ash & slag for reducing the burden on the environment, NITI AAYOG convened several meetings on policy framework on utilization of fly ash and slag. In a meeting held on 17.03.2017, it was decided by NITI AAYOG that an online repository of the fly ash generated by thermal power plants indicating the following parameters should be launched by Ministry of Power by 15th April, 2017:

- Cumulative amount of fly ash available in the ash ponds as on 31.03.2017
- Quantum of fly ash generated for the respective month (Ex. For the month of April 2017)
- Number of ash ponds available and their approved capacity in metric tonnes
- Cumulative stock of fly ash available in the ponds for the month as on 30th April 2017
- Total quantum of fly ash disposed to the consuming industries, which is located within the vicinity of 100 Kms., 101-300 Kms., etc. along with the details of the consumers. In this detail, it should also be indicated whether the transportation was paid by the thermal power or not. Similarly, it should also indicate whether fly ash has been given free or it has been charged. If it has been charged then the rate should also be indicated for each consumer
- Balance stock of fly ash available in the ash ponds for the month ending April, 2017

Accordingly, a web-based monitoring system and a mobile application (ASH TRACK) was developed by CEA in collaboration with M/s NTPC Limited. Login ID and password have been issued to those Power Utilities / Thermal Power Stations for uploading the monthly data of fly ash generation and its utilization.

11.0 RECOMMANDATIONS OF THE EXPERT COMMITTEE

NITI Aayog vide O.M. No. 25(11)/2014-Minerals dated 12.06.2018 has constituted an Expert Committee under the chairmanship of Joint Secretary, MoEF & CC and represented by various concerned Ministries for developing a focus strategy for best utilization of fly ash to manufacture end products.

Expert Committee held two meetings on 5th September and 1st October 2018 and finalized its recommendations. An inter-ministerial consultation meeting was also held on 21st January 2018 under the chairmanship of Secretary, MoEF&CC to review the recommendations of the Expert Committee for effective utilization of fly ash, wherein the recommendations of the Committee were accepted.

The expert Committee had recommended the following recommendations for implementation by all Thermal Power Plants for effective utilization of fly ash:

- i. Tender / auction for the sale of fly ash should be done by TPPs initially for end-user / industry and not for traders. If fly ash is not taken by end-user / industry, then it could be given to traders. TPPs should also consider entering into longer-term contracts with end-users.
- ii. TPPs may explore the possibility that once a tender for utilization of fly ash is allotted to a company, any unit / plant of the same company should be allowed to purchase and utilize the fly ash and TPPs can also directly raise the invoice to such Unit / Plant.
- iii. Creation of fly ash parks / hubs on public-private-partnership mode. Such parks will act as facilities for enabling quality control of fly ash made ash-made products, generate

employment and act as models which will promote the use of innovative fly ash products that can be replicated at other locations.

- iv. TPPs should give incentive to entities which can (through R&D) come up with fly ash products with ash content of at least 75% and established sustainable application of those fly ash products in the industry. The incentive could be given from the money available with the TPPs from auctioning of fly ash.
- v. Ministry of Power should come up with Awards / Incentives for TPPs that innovate new methodology in fly ash disposal keeping all the environment and pollution norms in Consideration.

12.0 CONCLUSIONS & RECOMMENDATIONS:

1. The fly ash generation during 2020-21 was 232.56 Million Tonnes due to a combustion of 686.34 Million Tonnes of Coal / Lignite. During 2019-20, 226.95 Million Tonnes of fly ash was generated due to combustion of 680.84 Million Tonnes of coal / lignite. However, the fly ash utilization during 2019-20 and 2020-21 were 189.01 Million Tonnes and 214.91 Million Tonnes, respectively. It is seen that the absolute quantity of fly ash utilization has increased as compared to last year and similarly the percentage utilization of fly ash has also increased.
2. The highest level of fly ash utilization of about 92.41 % is achieved during the year 2020-21. It would require a lot of efforts to achieve the target of 100 % utilization of fly ash. The stipulations of notification of 2009 and the subsequent amendments should be effectively implemented. About 7.59 % un-utilized fly ash was dumped at the various Thermal Power Stations in the country during 2020-21.
3. A few strategies which need to be adopted to further increase the utilization level of fly ash are given below:
 - Renovation and modernisation of Coal / Lignite based Thermal Power Stations need to include the technological advancement required to ensure the development of dry fly ash collection, storage and disposal facilities so that fly ash in dry form could be made available to its users.
 - As per MoEF& CC's Amendment Notification dated 25.01.2016, Para 2 (14) "The coal or lignite based thermal power plants shall within a radius of three hundred kilometres bear the entire cost of transportation of ash to the site of road construction projects under Pradhan Mantri Gramin Sadak Yojana and asset creation programmes of the Government involving the construction of buildings, roads, dams, and embankments". The meaning of the words "Asset Creation Programme of the Government" may be read in the context of projects carried out under a certain plan schemes of the Government Departments. In this regard, the Ministry of Environment, Forest, and climate change (MoEF & CC) has clarified that road being constructed by NHAI as well as the State Government are covered by the Notification dated 25.01.2016 in order to fully utilize the fly ash.
 - Use of fly ash in the construction of embankments for laying railway lines has also significant potential for large scale utilization of fly ash. There are safety concerns in the use of fly ash in the construction of railway embankments having

passenger traffic. There is a need to address these concerns by carrying out necessary studies by organizations like RDSO, a research organization under the Ministry of Railways.

- Thermal Power Stations have to ensure the utilization of fly ash and fly ash based building products within the thermal power station for the development of infrastructure like construction of buildings & roads, reclamation of low lying areas, etc.
- A large number of technologies have been developed for gainful utilization and safe management of fly ash through research projects funded by Fly Ash Mission / Fly Ash Unit under the Ministry of Science & Technology, GoI since 1994. Propagation of these technologies by establishing ‘Self-sustaining technology demonstration centers would facilitate and accelerate the fly ash utilization in the country.
- Thermal Power Stations have to explore and promote all possible modes of fly ash utilization at their respective thermal power station for increasing the fly ash utilization in the country in line with MoEF’s notifications.
- There is a need to encourage ‘Industry Institute Interactions’ for entrepreneur development, creating awareness, and organizing training programmes and workshops.
- Induction of ‘Fly Ash’ as a subject in the academic curriculum of Engineering and Architecture is needed.

13.0 Abbreviations

CEA	:	Central Electricity Authority
MoEF	:	Ministry of Environment & Forest
MoEF&CC	:	Ministry of Environment & Forest and Climate Change
MW	:	Mega Watt
MoP	:	Ministry of Power
MT	:	Million Tonnes
TPS	:	Thermal Power Stations
APGENCO	:	Andhra Pradesh Power Generation Corporation Ltd.
APPDCL	:	Andhra Pradesh Power Distribution Company Limited
ACBPL	:	Aryan Coal Beneficiation Private Ltd.
APL	:	Adani Power Ltd.,
APCPL	:	Aravali Power Corporation Pvt. Ltd.
AMNEPL	:	Abhijet MADC Nagpur energy Pvt. Ltd.
BEPL	:	Bajaj Energy Pvt. Ltd.
BSPGC	:	Bihar State Power Generation Company
CESC	:	Calcutta Electric Supply Company
CGPL	:	Coastal Gujarat Power Ltd.
CSPGCL	:	Chhattisgarh State Power Generation Company Ltd.
DVC	:	Damodar Valley Corporation
DPL	:	Durgapur Project Ltd.
DPSC	:	Dishergarh Power Supply Company Ltd.
EPGL	:	Essar Power Gujarat Ltd.
GIPCL	:	Gujarat Industries Power Corporation Ltd.
GMDCL	:	Gujarat Mineral Development Corporation Ltd.
GSECL	:	Gujarat State Electric Corporation Ltd.
HPGCL	:	Haryana Power Generating company Ltd.
IPGCL	:	Indraprastha Power Generation Company Ltd.
IPCL	:	IL&FS Tamil Nadu Power Company Ltd.
JSEB	:	Jharkhand State Electricity Board.
JHPL	:	Jhajjar Power Ltd.
JPL	:	Jindal Power Ltd.
JSW	:	Jindal Steel Works
KPCL	:	Karnataka Power Corporation Ltd.

KBUNL	:	Kanti Bijlee Utpadan Nigam Ltd.
MPPGCL	:	Madhya Pradesh Power Generating Company Ltd.
MPL	:	Maithon Power Ltd.
MSPGCL	:	Maharashtra State Power Generating Company Ltd.
NLC	:	Neyveli Lignite Corporation
NSPCL	:	NTPC -SAIL Power Corporation Ltd.
NTPC	:	National thermal Power Corporation
NTECL	:	NTPC – Tamil Nadu Electric Company Ltd.
OPGCL	:	Odisha Power Generation Corporation Ltd.
PSPCL	:	Punjab State Power Corporation Ltd.
RRVUNL	:	Rajasthan Rajya Vidyut Utpadan Nigam Ltd.
RIL	:	Reliance Infrastructure Ltd.
RPSCL	:	Rosa Power Supply Company Ltd.
RWPL	:	Raj West Power Ltd.
SEL	:	Sterlite energy Ltd.
SVPL	:	Shri Vardhman Power Pvt. Ltd.
ST-CMS	:	ST-CMS
TPCO	:	Tata Power Company Ltd.
TVNL	:	Tenughat Vidyut Nigam Ltd.
TNG&D	:	Tamil Nadu Generating and Distribution Corporation Ltd.
UPCI	:	Udupi Power Company Ltd.
UPRVUNL	:	Uttar Pradesh Rajya Vidyut Utpadan Nigam Ltd.
VESPL	:	Vandana Energy Supply Power Ltd.
WBDCL	:	West Bengal Power Development Corporation Ltd.
WPCL	:	Wardha Power Company Ltd.
GEPL	:	Gupta Power Company Ltd.
VIP	:	Vidarbha Industries Power Ltd.
EPL	:	Essar Power Ltd.
ACB	:	Aryan Coal Beneficiary Ltd.
AP	:	Andhra Pradesh
MP	:	Madhya Pradesh
TN	:	Tamil Nadu
UP	:	Uttar Pradesh
WB	:	West Bengal

FLY ASH GENERATION AND ITS UTILIZATION AT COAL / LIGNITE BASED THERMAL POWER STATIONS IN THE COUNTRY FOR THE YEAR 2020 - 21 (APRIL - 2020 TO MARCH - 2021) (POWER UTILITY WISE)

Sl No.	Name of TPS	Name of Power Utility	State	Installed Capacity	Coal Consumed	Ash Content of coal	Fly Ash Generation	Fly Ash Utilization	Percentage utilization	In the manufacture of Fly Ash based Bricks / Blocks / Tiles etc.	In the manufacture of Portland Pozzolana Cement	In the construction of Highways & Roads including Flyovers	Part Replacement of Cement in Concrete	In Hydro Power Sector in RCC Dams Construction	In Ash Dyke Raising	In the Reclamation of Low lying Area	In Mine Filling	In Agriculture / Waste Land Development	Others	Total Utilization
				(MW)	(MT)	%	(MT)	(MT)	%	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
1	Aarti Steels Limited	Aarti Steels Limited	Odisha	90.00	0.3479	53.99	0.1878	0.1868	99.46	0.0824	0.0143	0.0165				0.0612		0.0125		0.1868
2	Dr. N.T.R TPS	Andhra Pradesh Power Generation Corporation	Andhra Pradesh	1760.00	6.6404	44.29	2.9414	2.9634	100.75	1.5353	1.0417	0.1106	0.0631			0.1047			0.1080	2.9634
3	RAYALSEEMA	Andhra Pradesh Power Generation Corporation	Andhra Pradesh	1650.00	1.6760	43.56	0.7301	0.9215	126.21	0.1490	0.7725									0.9215
4	SRI DAMODARAM SANJEEVAIAH	Andhra Pradesh Power Development Company Limited	Andhra Pradesh	1600.00	4.0275	29.68	1.1953	1.0961	91.70	0.1235	0.7106	0.0707			0.1649	0.0264				1.0961
5	KASAIPALI	ACB (INDIA) Ltd.	Chhattisgarh	270.00	1.2151	49.08	0.5964	0.6556	109.92	0.0336		0.0071				0.6149			0.0000	0.6556
6	SVPL Renki	ACB (INDIA) Ltd.	Chhattisgarh	60.00	0.0000	-	0.0000	0.0000	-											0.0000
7	CHAKABURA TPP	ACB (INDIA) Ltd.	Chhattisgarh	30.00	0.1386	55.82	0.0774	0.0774	100.00	0.0078							0.0696			0.0774
8	CHAKABURA TPP (EXTN)	ACB (INDIA) Ltd.	Chhattisgarh	30.00	0.2683	56.80	0.1524	0.1524	100.00	0.0162						0.1362				0.1524
9	RATIJA TPS	ACB (INDIA) Ltd.	Chhattisgarh	100.00	0.6020	55.34	0.3332	0.3332	100.00	0.0154						0.3178				0.3332
10	INDIRA GANDHI	Aravali Power Corporation Pvt. Ltd.	Haryana	1500.00	2.4502	34.78	0.8522	1.9021	223.20	0.3502	1.3832								0.1687	1.9021
11	MUNDRA TPS	ADANI POWER (MUNDRA) LIMITED	Gujarat	4620.00	13.9599	4.87	0.6792	0.7165	105.49		0.4118					0.1345			0.1702	0.7165
12	TIRODA	ADANI POWER MAHARASHTRA LTD.	Maharashtra	3300.00	11.4702	32.96	3.7800	4.5404	120.12	0.1492	1.0822	0.0860			0.0740	2.6986	0.0202	0.0032	0.4271	4.5404
13	KAWAI	ADANI POWER RAJASTHAN LTD.	Rajasthan	1320.00	4.8469	29.16	1.4134	1.6122	114.06	0.3731	1.1897	0.0065				0.0428			0.0000	1.6122
14	MIHAN	Abhijeet MADC Nagpur Energy Pvt. Ltd.	Maharashtra	246.00	0.0000	-	0.0000	0.0000	-											-
15	ADANI DAHANU	ADANI ELECTRICITY MUMBAI LIMITED	Maharashtra	500.00	1.7850	21.06	0.3760	0.4210	111.97	0.0000			0.2090		0.0000				0.2120	0.4210
16	ADHUNIK PNR LTD.	ADHUNIK POWER & NATURAL RESOURCES LTD.	Jharkhand	540.00	2.0169	43.21	0.8716	0.8927	102.42	0.1191	0.4855		0.0000		0.0000	0.2881			0.0000	0.8927
17	BARKHERA	Bajaj Energy Private Limited	Uttar Pradesh	90.00	0.1392	33.01	0.0459	0.0458	99.61	0.0144	0.0159				0.0002	0.0152				0.0458
18	KHAMBHAR KHERA	Bajaj Energy Private Limited	Uttar Pradesh	90.00	0.1390	31.31	0.0435	0.0434	99.72	0.0051	0.0356				0.0001	0.0025				0.0434
19	KUNDARKI	Bajaj Energy Private Limited	Uttar Pradesh	90.00	0.1794	32.42	0.0582	0.0579	99.55	0.0048	0.0512				0.0002	0.0017				0.0579
20	MAQSOODAPUR	Bajaj Energy Private Limited	Uttar Pradesh	90.00	0.1432	31.27	0.0448	0.0446	99.67	0.0000	0.0228				0.0001	0.0217		0.0000		0.0446
21	UTRAULA	Bajaj Energy Private Limited	Uttar Pradesh	90.00	0.1956	31.93	0.0625	0.0625	100.00	0.0098	0.0486					0.0041				0.0625
22	NABINAGAR	BHARATIYA RAIL BIJLEE COMPANY LIMITED	Bihar	750.00	3.0845	41.57	1.2822	0.1928	15.04	0.0208	0.1720									0.1928
23	BALCO CPP	BHARAT ALUMINIUM COMPANY LIMITED	Chhattisgarh	540.00	2.3419	39.71	0.9300	0.9579	103.01	0.0244	0.0243					0.5387	0.2124		0.1581	0.9579
24	BALCO TPP	BHARAT ALUMINIUM COMPANY LIMITED	Chhattisgarh	1200.00	5.6455	39.23	2.2147	2.3067	104.16	0.0542	0.0566					1.2291	0.4056		0.5613	2.3067
25	BHADRESHWAR VIDYUT PRIVATE LTD TPS	BHADRESHWAR VIDYUT PRIVATE LIMITED	Gujarat	300.00	0.9533	3.40	0.0324	0.0330	101.58										0.0330	0.0330
26	Budge Budge Generating Station	Calcutta Electric Supply Corporation Limited	West Bengal	750.00	3.1670	32.93	1.0430	1.0430	100.00	0.0890	0.7900	0.0000	0.0000		0.0000	0.1640				1.0430
27	Southern Generating Station	Calcutta Electric Supply Corporation Limited	West Bengal	135.00	0.0650	32.31	0.0210	0.0210	100.00	0.0020	0.0110	0.0000	0.0060			0.0020				0.0210
28	Titagarh Generating Station	Calcutta Electric Supply Corporation Limited	West Bengal	240.00	0.0000	-	0.0000	0.0000	-	0.0000	0.0000	0.0000				0.0000				0.0000
29	Atal Bihar Vajpayee TPP	Chhattisgarh State Power Generation Company Ltd.	Chhattisgarh	1000.00	3.5123	41.86	1.4703	1.0003	68.04	0.1132	0.0535	0.0787			0.4288	0.3261				1.0003
30	Dr. Shyama Prasad Mukherjee TPP	Chhattisgarh State Power Generation Company Ltd.	Chhattisgarh	500.00	2.3059	42.09	0.9705	0.4268	43.98						0.1923	0.1319	0.1027	0.0000		0.4268

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				(MW)	(MT)	%	(MT)	(MT)	%	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	
31	Hasdeo TPP	Chhattisgarh State Power Generation Company Ltd.	Chhattisgarh	1340.00	6.7931	40.47	2.7495	1.2895	46.90	0.0905		0.1569	0.0020		0.0455	0.8830	0.1116		0.0000	1.2895	
32	Korba (East)	Chhattisgarh State Power Generation Company Ltd.	Chhattisgarh	240.00	0.9159	46.19	0.4231	0.1304	30.82	0.0122					0.0130	0.0466	0.0586			0.1304	
33	MUTIARA	COASTAL ENERGEN PVT. LTD	Tamil Nadu	1200.00	1.4578	4.33	0.0632	0.0666	105.35	0.0140	0.0367					0.0159		0.0000		0.0666	
34	MUNDRA UMPP	Coastal Gujarat Power Limited	Gujarat	4150.00	10.2000	7.45	0.7600	0.6300	82.89	0.0130	0.3980	0.0070	0.1070			0.0000	0.0530		0.0520	0.6300	
35	CHEMPLAST LIMITED TPS	CHEMPLAST LIMITED	Tamil Nadu	48.50	0.2155	8.53	0.0184	0.0185	100.65	0.0185										0.0185	
36	DB POWER	DB POWER LIMITED	Chhattisgarh	1200.00	5.8182	45.47	2.6457	2.6009	98.30	0.0537	0.5365	0.3666	0.0030			0.3070	1.3341			2.6009	
37	BOKARO	Damodar Valley Corporation	Jharkhand	710.00	1.8668	42.71	0.7973	1.0243	128.47		0.0498	0.0000				0.9745	0.0000			1.0243	
38	CHANDRAPURA	Damodar Valley Corporation	Jharkhand	500.00	1.9716	46.08	0.9086	1.2997	143.05	0.0014	0.3279	0.8797				0.0908	0.0000			1.2997	
39	DURGAPUR	Damodar Valley Corporation	West Bengal	210.00	0.1086	49.35	0.0536	0.1067	199.04		0.0000					0.1067				0.1067	
40	MEJIA	Damodar Valley Corporation	West Bengal	2340.00	8.4702	46.69	3.9548	2.7253	68.91	0.1498	1.0193									1.5562	
41	DURGAPUR STEEL	Damodar Valley Corporation	West Bengal	1000.00	3.7463	46.04	1.7248	1.5073	87.39	0.2259	0.6428					0.2662				1.5073	
42	KODERMA	Damodar Valley Corporation	Jharkhand	1000.00	4.4200	44.36	1.9608	2.3739	121.07	0.0053	0.6770	0.0650			0.0000	0.2753	1.3513			2.3739	
43	RAGHUNATHPUR	Damodar Valley Corporation	West Bengal	1200.00	3.1675	43.99	1.3933	0.1936	13.89	0.0121	0.1814									0.1936	
44	DHARIWAL INFRASTRUCTURE Ltd.	DHARIWAL INFRASTRUCTURE LIMITED	Maharashtra	600.00	2.7450	33.92	0.9310	0.9460	101.61	0.0670	0.7712	0.0098			0.0000	0.0000	0.0980			0.9460	
45	MAHAN	ESSAR POWER MP LTD.	Madhya Pradesh	1200.00	2.0570	33.79	0.6950	0.2840	40.86	0.0000	0.0960	0.0000			0.0000	0.1380			0.0500	0.2840	
46	SALAYA TPS	ESSAR POWER GUJARAT LTD.	Gujarat	1200.00	2.0860	10.62	0.2216	0.2216	100.00		0.2018					0.0198				0.2216	
47	SURAT LIGNITE	Gujarat Industries Power Company Limited	Gujarat	500.00	3.0701	15.54	0.4772	0.4772	100.00	0.2578										0.2194	
48	AKRIMOTA	Gujarat Mineral Development Corporation Limited	Gujarat	250.00	0.5846	26.61	0.1556	0.2060	132.43											0.2060	
49	GANDHINAGAR	Gujarat State Electricity Corporation Limited	Gujarat	630.00	1.0120	35.08	0.3550	1.1160	314.37	0.3370	0.6570	0.0760	0.0460							0.0000	
50	KUTCH LIGNITE	Gujarat State Electricity Corporation Limited	Gujarat	150.00	1.0910	25.11	0.2740	0.2740	100.00		0.0770							0.1970			0.2740
51	SIKKA	Gujarat State Electricity Corporation Limited	Gujarat	500.00	0.9090	8.58	0.0780	0.2980	382.05	0.1690	0.1290										0.2980
52	UKAI	Gujarat State Electricity Corporation Limited	Gujarat	1110.00	3.1120	38.53	1.1990	1.1780	98.25	0.3590	0.3180		0.0000				0.2800			0.2210	
53	WANAKBORI	Gujarat State Electricity Corporation Limited	Gujarat	2270.00	4.2690	38.37	1.6380	1.8490	112.88	0.1780	0.8320				0.0000		0.5330			0.3060	
54	BHAVNAGAR LIGNITE	Gujarat State Electricity Corporation Limited	Gujarat	500.00	1.3900	10.25	0.1425	0.1550	108.77	0.0500	0.0000						0.0870			0.0180	
55	GMR WARORA ENERGY LTD.	GMR WARORA ENERGY LTD.	Maharashtra	600.00	2.4985	33.39	0.8342	1.1202	134.28	0.3008	0.3220	0.2757				0.2217	0.0000			1.1202	
56	GMR KAMALANGA TPP	GMR KAMALANGA ENERGY LTD.	Odisha	1050.00	5.1668	39.88	2.0606	2.3822	115.61	1.0333	0.0000	1.3489				0.0000	0.0000	0.0000		2.3822	
57	RAJIV GANDHI TPP, Hissar	Haryana Power Generation Corporation Limited	Haryana	1200.00	1.1536	38.69	0.4464	0.6941	155.50	0.0606	0.2842	0.3493	0.0000				0.0000			0.6941	
58	Deen Bandhu Chhotu Ram TPS, YAMUNANAGAR	Haryana Power Generation Corporation Limited	Haryana	600.00	1.8017	41.21	0.7424	1.4068	189.50	0.0343	0.5277	0.0878				0.7571			0.0000	1.4068	
59	PANIPAT	Haryana Power Generation Corporation Limited	Haryana	710.00	0.8265	39.18	0.3238	3.2353	999.17	0.0251	1.0566	1.2379				0.8658			0.0499	3.2353	
60	HALDIA ENERGY LIMITED	HALDIA ENERGY LIMITED	West Bengal	600.00	2.8110	34.08	0.9580	0.9580	100.00	0.0270	0.7930					0.0000			0.1380	0.9580	
61	HINDUJA NATIONAL POWER CORPORATION LIMITED	HINDUJA NATIONAL POWER CORPORATION LIMITED	Andhra Pradesh	1040.00	0.8205	39.55	0.3245	0.3519	108.45	0.1741	0.1069	0.0692							0.0017	0.3519	
62	DISHERGARH POWER STATION	INDIA POWER CORPORATION LTD.	West Bengal	12.00	0.0306	52.67	0.0161	0.0161	100.00							0.0161				0.0161	

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				(MW)	(MT)	%	(MT)	(MT)	%	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
63	INDIAN METALS & FERRO ALLOYS LTD.	INDIAN METALS & FERRO ALLOYS LTD.	Odisha	200.00	1.0614	45.91	0.4873	0.4873	100.00	0.1518	0.0909	0.0050				0.2378		0.0019	0.4873	
64	IL & FS TAMIL NADU POWER COMPANY LTD.	IL & FS TAMIL NADU POWER COMPANY LIMITED	Tamil Nadu	1200.00	2.3896	5.27	0.1260	0.1123	89.16	0.0000	0.1123									0.1123
65	BELA TPS	IDEAL ENERGY PROJECTS LIMITED	Maharashtra	270.00	0.0000	-	0.0000	0.0000	-						0.0000					0.0000
66	MAHATMA GANDHI TPP	JHAJJAR POWER LIMITED	Haryana	1320.00	2.8620	36.37	1.0410	1.0410	100.00	0.0591	0.9097	0.0006	0.0142						0.0574	1.0410
67	O.P. Jindal Super TPP (Stage-I)	JINDAL POWER LIMITED	Chhattisgarh	1000.00	3.4981	45.23	1.5821	0.2467	15.59			0.0080			0.0000	0.0590	0.1797			0.2467
68	O.P. Jindal Super TPP (Stage-II)	JINDAL POWER LIMITED	Chhattisgarh	2400.00	6.7990	45.06	3.0635	0.5560	18.15	0.0146	0.0174				0.0000	0.0706	0.4534			0.5560
69	JAYPEE BINA TPP	JAIPRAKSH POWER VENTURES LIMITED	Madhya Pradesh	500.00	1.1306	38.17	0.4316	0.4328	100.28	0.0193	0.2532					0.1604				0.4328
70	JAYPEE NIGRIE SUPER TPP	JAIPRAKSH POWER VENTURES LIMITED	Madhya Pradesh	1320.00	4.5894	31.37	1.4399	1.4405	100.04	0.0115	0.9826				0.4464					1.4405
71	RATNAGIRI	JSW ENERGY LIMITED	Maharashtra	1200.00	2.5448	10.40	0.2647	0.2650	100.13	0.0883	0.0777		0.0991							0.2650
72	VIJAYANAGAR	JSW ENERGY LIMITED	Karnataka	860.00	0.8205	13.85	0.1137	0.1137	100.00	0.0139	0.0785				0.0158				0.0054	0.1137
73	DERANG TPP	JINDAL INDIA THERMAL POWER LIMITED	Odisha	1200.00	4.3483	40.98	1.7821	1.0347	58.06	0.1334					0.4960	0.4035		0.0018		1.0347
74	DONGAMAHUA CAPTIVE POWER PLANT	JINDAL STEEL AND POWER LIMITED	Chhattisgarh	576.00	1.8260	49.81	0.9095	0.9099	100.04	0.0003	0.0014						0.9082			0.9099
75	ANGUL CAPTIVE POWER PLANT	JINDAL STEEL AND POWER LIMITED	Odisha	810.00	2.2520	43.78	0.9860	0.5310	53.85	0.0480		0.0000			0.2040	0.2790			0.0000	0.5310
76	JSW ENERGY (BARMER) LIMITED	JSW ENERGY (BARMER) LIMITED (Formerly Raj Westpower Ltd.)	Rajasthan	1080.00	6.1338	14.50	0.8895	0.9154	102.91	0.1765	0.6622					0.0000	0.0767			0.9154
77	JSW STEEL LIMITED CPP-II	JSW STEEL LIMITED	Tamil Nadu	90.00	0.1270	8.41	0.0107	0.0107	100.53	0.0107										0.0107
78	JINDAL STEEL AND POWER LIMITED	JINDAL STEEL AND POWER LIMITED	Chhattisgarh	299.00	0.6461	45.08	0.2912	0.2912	100.00	0.1462	0.0274				0.0011	0.1166				0.2912
79	JHABUA POWER LIMITED	JHABUA POWER LIMITED	Madhya Pradesh	600.00	2.5835	40.00	1.0334	0.7220	69.87	0.0677	0.4334	0.0142				0.2067			0.0000	0.7220
80	BALLARI	KARNATAKA POWER CORPORATION LIMITED	Karnataka	1700.00	2.0340	39.48	0.8029	0.9226	114.90	0.2052	0.7174	0.0000								0.9226
81	KANTI BIJLEE UTPADAN NIGAM LIMITED	KANTI BIJLEE UTPADAN NIGAM LIMITED	Bihar	610.00	1.8640	38.14	0.7110	0.7500	105.49	0.0640		0.1020	0.0660			0.5180				0.7500
82	KMPCL - NARIYARA	KSK MAHANADI POWER COMPANY LIMITED	Chhattisgarh	1800.00	6.6959	35.20	2.3567	2.9074	123.37	0.0176	1.2016	0.0893				0.1841	1.1972		0.2177	2.9074
83	LANCO AMARKANTAK TPS	LANCO AMARKANTAK POWER LIMITED	Chhattisgarh	600.00	2.9993	38.56	1.1565	0.5159	44.61	0.0040	0.3384	0.0000			0.0200	0.1535				0.5159
84	LALITPUR	LALITPUR POWER GENERATION COMPANY LIMITED	Uttar Pradesh	1980.00	4.2211	34.12	1.4402	1.7430	121.03	0.0000	0.7794	0.0011			0.0000	0.9626				1.7430
85	ANPARA 'C' TPS	LANCO ANPARA POWER LIMITED	Uttar Pradesh	1200.00	5.3948	32.43	1.7493	0.2953	16.88	0.0099	0.2854									0.2953
86	MAITHON RIGHT BANK TPP	MAITHON POWER LIMITED	Jharkhand	1050.00	4.0205	41.00	1.6483	2.1879	132.74	0.1302	0.6346				0.0000	0.0578	1.3654			2.1879
87	SANJAY GANDHI	MADHYA PRADESH POWER GENERATING COMPANY LIMITED	Madhya Pradesh	1340.00	5.8127	35.20	2.0463	2.0484	100.10	0.0375	0.9673	0.0051		0.0006		0.0000			1.0380	2.0484
88	SATPURA	MADHYA PRADESH POWER GENERATING COMPANY LIMITED	Madhya Pradesh	1330.00	3.1782	40.56	1.2890	1.2142	94.20	0.3590	0.2718		0.0365		0.0000	0.0028	0.0000		0.5441	1.2142
89	AMARKANTAK	MADHYA PRADESH POWER GENERATING COMPANY LIMITED	Madhya Pradesh	210.00	0.9988	33.64	0.3360	0.2160	64.29	0.0846	0.0999	0.0030			0.0285		0.0000			0.2160
90	SHREE SINGAJI TPS	MADHYA PRADESH POWER GENERATING COMPANY LIMITED	Madhya Pradesh	2520.00	4.0493	36.59	1.4816	0.6456	43.58	0.0034	0.4590				0.0195				0.1637	0.6456
91	BHUSAWAL	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	Maharashtra	1210.00	3.7368	38.67	1.4450	1.5299	105.87	0.1255	0.6371	0.2918			0.0000			0.0007	0.4748	1.5299

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				(MW)	(MT)	%	(MT)	(MT)	%	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
92	CHANDRAPUR	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	Maharashtra	2920.00	12.7114	39.82	5.0617	0.8577	16.95	0.0649	0.7837	0.000000	0.000000			0.009090				0.8577
93	KHAPARKHEDA	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	Maharashtra	1340.00	6.8565	41.91	2.8737	1.9686	68.51	0.6735		0.0000			0.7974	0.4978				1.9686
94	KORADI	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	Maharashtra	2400.00	6.7094	41.90	2.8115	2.2762	80.96	0.9534	0.0003	0.4385			0.8839	0.0001				2.2762
95	NASHIK	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	Maharashtra	630.00	0.6435	38.75	0.2494	4.1892	1679.92	3.1678	0.1189	0.9025								4.1892
96	PARLI	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	Maharashtra	750.00	1.7893	39.80	0.7121	4.3348	608.75	3.8853	0.0291		0.0000		0.0000			0.0382	0.3822	4.3348
97	PARAS	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	Maharashtra	500.00	2.6273	38.62	1.0146	1.0064	99.19	0.9512	0.0552								0.0000	1.0064
98	MCCPL BANDHAKHAR	MARUTI CLEAN COAL AND POWER LIMITED	Chhattisgarh	300.00	1.4007	45.00	0.6303	0.6499	103.11	0.0267		0.3804				0.2429				0.6499
99	SAI WARDHA POWER Ltd., WARORA	MSELDC, CAPTIVE CONSUMERS	Maharashtra	540.00	1.3555	28.18	0.3820	0.4110	107.59	0.0295	0.2650	0.0060	0.0211		0.0000		0.0894		0.0000	0.4110
100	MEENAKSHI ENERGY PRIVATE LIMITED	MEENAKSHI ENERGY PRIVATE LIMITED	Andhra Pradesh	300.00	0.1091	6.82	0.0074	0.0005	6.65	0.0005					0.0000					0.0005
101	ANUPPUR TPS	MB POWER (MADHYA PRADESH) LIMITED	Madhya Pradesh	1200.00	4.6260	33.31	1.5410	1.7521	113.70	0.0103	1.1639	0.0000	0.0000		0.0000	0.5762			0.0018	1.7521
102	MEJA TPP	MEJA URJA NIGAM PRIVATE LIMITED	Uttar Pradesh	1320.00	2.7327	37.51	1.0249	0.5722	55.8303	0.0055	0.3818								0.1849	0.5722
103	NEYVELI - I	NLC INDIA LIMITED	Tamil Nadu	600.00	0.8118	4.83	0.0392	0.0280	71.35	0.0037	0.0182								0.0060	0.0280
104	NEYVELI - I EXPN	NLC INDIA LIMITED	Tamil Nadu	420.00	2.8420	6.22	0.1767	0.1767	100.00	0.0364	0.1022		0.0000		0.0074		0.0201	0.0103	0.0003	0.1767
105	NEYVELI - II	NLC INDIA LIMITED	Tamil Nadu	1470.00	7.6190	5.98	0.4557	1.6129	353.96	0.1207	0.1788	1.1571			0.0916		0.0646		0.0002	1.6129
106	NEYVELI - II EXPN	NLC INDIA LIMITED	Tamil Nadu	500.00	2.0314	6.68	0.1356	0.1356	100.00	0.0975							0.0281	0.0000	0.0100	0.1356
107	NEYVELI NEW THERMAL POWER STATION	NLC INDIA LIMITED	Tamil Nadu	1000.00	3.3672	6.20	0.2089	0.2089	100.00	0.0617	0.1134				0.0121		0.0111		0.0105	0.2089
108	BARSINGAR LIGNITE	NLC INDIA LIMITED	Rajasthan	250.00	0.1259	14.64	0.0184	0.0184	100.00	0.0035	0.0110					0.0040	0.0000			0.0184
109	NLC TAMILNADU POWER Ltd	NLC TAMIL NADU POWER LIMITED	Tamil Nadu	1000.00	3.5095	32.62	1.1449	1.1449	100.00	0.2007	0.9348	0.0094							0.0000	1.1449
110	BHILAI PP-II	NTPC - SAIL POWER COMPANY LIMITED	Chhattisgarh	74.00	0.3385	39.93	0.1352	0.1067	78.95	0.0112	0.0242				0.0034	0.0679				0.1067
111	BHILAI PP - III	NTPC - SAIL POWER COMPANY LIMITED	Chhattisgarh	500.00	2.4355	43.03	1.0481	0.6176	58.93	0.2042	0.3225	0.0646			0.0000	0.0263				0.6176
112	DURGAPUR CPP	NTPC - SAIL POWER COMPANY LIMITED	West Bengal	120.00	0.6385	25.29	0.1615	0.1925	119.20	0.0234	0.0598	0.0000			0.0000	0.1093				0.1925
113	OURKELA CPP	NTPC - SAIL POWER COMPANY LIMITED	Odisha	120.00	0.9042	39.75	0.3594	0.6551	182.28	0.0757	0.0023	0.5152	0.0186		0.0000	0.0430			0.0004	0.6551
114	VALLUR	NTPC TAMILNADU ENERGY COMPANY LTD (NTECL)	Tamil Nadu	1500.00	3.2223	39.62	1.2767	1.5680	122.82	0.1731	0.2285		0.2293						0.9371	1.5680
115	DADRI	NTPC LTD.	Uttar Pradesh	1820.00	2.7016	34.81	0.9405	0.9413	100.08	0.1380	0.6565	0.0504				0.0383			0.0582	0.9413
116	SINGRAULI	NTPC LTD.	Uttar Pradesh	2000.00	9.4837	31.47	2.9843	0.9971	33.41	0.0057	0.0000	0.5156			0.3600	0.1158			0.9971	
117	RIHAND	NTPC LTD.	Uttar Pradesh	3000.00	14.0233	27.97	3.9218	2.0399	52.02	0.1662	0.0790	0.2897			0.5099	0.7098			0.2853	2.0399
118	FEROZE GANDHI UNCHAHAR	NTPC LTD.	Uttar Pradesh	1550.00	5.1800	38.17	1.9772	3.2903	166.41	0.0440	0.7855	2.4607			0.0000	0.0000		0.0000	0.0000	3.2903
119	TANDA	NTPC LTD.	Uttar Pradesh	1760.00	4.0118	41.73	1.6742	2.8103	167.85	0.0089	0.4564	2.1478				0.1971				2.8103
120	KORBA	NTPC LTD.	Chhattisgarh	2600.00	13.9610	34.33	4.7930	3.4610	72.21	0.0730	0.0000	0.3350			1.7960	0.1110	0.4440	0.0000	0.7020	3.4610
121	VINDHYACHAL	NTPC LTD.	Madhya Pradesh	4760.00	25.0098	34.84	8.7137	3.2859	37.71	0.2284	0.1470	0.1777			1.2708	1.2877			0.1743	3.2859
122	SIPAT	NTPC LTD.	Chhattisgarh	2980.00	15.0266	34.92	5.2473	3.0258	57.66	0.3349	0.1144	1.5927			0.4980	0.4851			0.0000	3.0258
123	RAMAGUNDAM	NTPC LTD.	Telangana	2600.00	10.5400	36.59	3.8570	4.2860	111.12	2.5600	0.8420	0.0830			0.1700	0.0780	0.5530	0.0000	4.2860	
124	SIMHADRI	NTPC LTD.	Andhra Pradesh	2000.00	6.4479	37.98	2.4488	3.0249	123.52	0.4874	0.2517	2.1631			0.0605	0.0450	0.0000		0.0172	3.0249
125	FARAKKA	NTPC LTD.	West Bengal	2100.00	8.2039	34.73	2.8496	3.6162	126.90	0.1149	0.2621	2.5419			0.0000	0.4154			0.2818	3.6162
126	KAHALGAON	NTPC LTD.	Bihar	2340.00	10.8210	37.10	4.0150	4.1540	103.46	0.1160	0.7860	2.3160			0.6970	0.0700			0.1690	4.1540

Sl No.	Name of TPS	Name of Power Utility	State	Installed Capacity	Coal Consumed	Ash Content of coal	Fly Ash Generation	Fly Ash Utilization	Percentage utilization	In the manufacture of Fly Ash based Bricks / Blocks / Tiles etc.	In the manufacture of Portland Pozzolana Cement	In the construction of Highways & Roads including Flyovers	Part Replacement of Cement in Concrete	In Hydro Power Sector in RCC Dams Construction	In Ash Dyke Raising	In the Reclamation on Low lying Area	In Mine Filling	In Agriculture / Waste Land Development	Others	Total Utilization
				(MW)	(MT)	%	(MT)	(MT)	%	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
127	BARH SUPER TPS	NTPC LTD.	Bihar	1320.00	5.3676	38.00	2.0397	2.2042	108.07	0.2519	0.3688	1.2551				0.1631			0.1653	2.2042
128	NABINAGAR SUPER TPS	NTPC LTD.	Bihar	660.00	2.8659	36.40	1.0431	0.5381	51.59	0.0028	0.5354									0.5381
129	TALCHER TPS	NTPC LTD.	Odisha	460.00	3.0491	39.00	1.1892	1.1892	100.00	0.0116	0.0000				0.0000	0.0000	1.1776		1.1892	
130	TALCHER - KANIHA	NTPC LTD.	Odisha	3000.00	16.4920	41.48	6.8412	4.8070	70.27	0.1225	0.0235	1.8191			2.7812	0.0606			4.8070	
131	DARLIPALI TPS	NTPC LTD.	Odisha	800.00	3.3300	44.74	1.4900	0.0546	3.67	0.0001	0.0065	0.0377					0.0103		0.0546	
132	MOUDA TPS	NTPC LTD.	Maharashtra	2320.00	4.4936	37.97	1.7062	2.1969	128.76	0.3919	0.2782	0.9970			0.3172	0.2126			2.1969	
133	BONGAIGAON	NTPC LTD.	Assam	750.00	1.7142	30.59	0.5244	0.3290	62.73	0.0355	0.2935	0.0000								0.3290
134	SOLAPUR	NTPC LTD.	Maharashtra	1320.00	2.3666	32.03	0.7581	0.7436	98.08	0.2679	0.4130				0.0000				0.0626	0.7436
135	KUDGI	NTPC LTD.	Karnataka	2400.00	2.8869	34.00	0.9816	0.4473	45.57	0.0116	0.4357								0.0000	0.4473
136	GADARWARA SUPER	NTPC LTD.	Madhya Pradesh	1600.00	2.7372	34.49	0.9439	0.0778	8.24	0.0101	0.0677								0.0778	
137	BARAUNI	NTPC LTD.	Bihar	360.00	0.8520	38.78	0.3304	0.1986	60.10	0.0086	0.0498	0.1328	0.0004			0.0070			0.1986	
138	LARA SUPER THERMAL POWER PROJECT	NTPC LTD.	Chhattisgarh	1600.00	3.7053	36.49	1.3522	1.0056	74.37	0.0130		0.8278			0.1150	0.0490			0.0009	1.0056
139	KHARGONE SUPER THERMAL POWER STATION	NTPC LTD.	Madhya Pradesh	660.00	2.5534	35.27	0.9006	0.4622	51.31	0.0149	0.3932								0.0541	0.4622
140	RAJIPURA TPS	NABHA POWER LIMITED	Punjab	1400.00	4.2368	33.52	1.4203	1.4270	100.47	0.0677	1.0018	0.0000	0.0098			0.0000			0.3476	1.4270
141	NALCO, CPP ANGUL	NATIONAL ALUMINIUM COMPANY LIMITED	Odisha	1200.00	6.1869	46.74	2.8920	2.1888	75.69	0.6298	0.0001	0.6185			0.8922	0.0472	0.0010		2.1888	
142	IB VALLEY	ODISHA POWER GENERATION CORPORATION LIMITED	Odisha	1740.00	7.2301	44.56	3.2220	1.2156	37.73	0.0101		0.0000			0.9821	0.2185		0.0000	0.0049	1.2156
143	OPG POWER GENERATION PRIVATE LIMITED	OPG POWER GENERATION PRIVATE LIMITED	Tamil Nadu	414.00	1.2380	6.80	0.0841	0.0841	100.00	0.0168	0.0673								0.0000	0.0841
144	GURU NANAKDEV TPS, BATHINDA	PUNJAB STATE POWER CORPORATION LIMITED	Punjab	460.00	0.0000	-	0.0000	0.3411	-	0.0570	0.2841								0.3411	
145	GURU HARGOBIND TPP, LEHRA MOHABAT	PUNJAB STATE POWER CORPORATION LIMITED	Punjab	920.00	0.6061	38.18	0.2314	0.2442	105.50	0.0196	0.2246	0.0000				0.0000			0.2442	
146	GURU GOBIND SINGH TPP, ROPAR	PUNJAB STATE POWER CORPORATION LIMITED	Punjab	840.00	0.6104	35.54	0.2170	1.7212	793.34	0.0244	0.7658	0.6416	0.0000			0.2858		0.0035	1.7212	
147	GVK POWER (GOINDWALSAHIB) LTD.	PUNJAB STATE POWER CORPORATION LIMITED	Punjab	540.00	0.8545	33.76	0.2885	0.2455	85.09		0.2455				0.0000				0.2455	
148	PRAYAGRAJ TPS	PRAYAGRAJ POWER GENERATION COMPANY LTD.	Uttar Pradesh	1980.00	6.3843	31.36	2.0022	2.0079	100.29	0.0004	1.3935				0.0000	0.3445	0.2694		2.0079	
149	UCHPINDA	R.K.M. POWERGEN PVT. LTD.	Chhattisgarh	1440.00	3.2749	42.95	1.4066	1.4062	99.97	0.0002	0.4567	0.1877			0.0056	0.0593			0.6967	1.4062
150	CHHABRA	RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED	Rajasthan	1000.00	4.0120	32.18	1.2910	1.1260	87.22	0.2050	0.7040	0.0000				0.0660			0.1510	1.1260
151	CHHABRA SUPER CRITICAL TPP	RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED	Rajasthan	1320.00	4.5087	32.94	1.4852	0.7415	49.93	0.0170	0.7245								0.7415	
152	SURATGARH	RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED	Rajasthan	1500.00	0.6560	35.97	0.2360	1.4143	599.38	0.0019	0.1511								1.2613	1.4143
153	KALISINDH	RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED	Rajasthan	1200.00	3.5395	30.81	1.0907	1.3248	121.46	0.1728	0.6731	0.3021			0.0000	0.0000			0.1767	1.3248
154	KOTA SUPER THERMAL POWER STATION	RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED	Rajasthan	1240.00	3.6783	37.42	1.3766	1.7664	128.32	0.1173	1.0127	0.0802	0.0009						0.5553	1.7664
155	ROSA TPP	ROSA POWER SUPPLY COMPANY LIMITED	Uttar Pradesh	1200.00	4.0168	35.01	1.4061	5.0125	356.49	0.0059	1.0376		0.0000		0.0000	0.3738		0.0000	3.5953	5.0125
156	AMARAVATI TPS	RATTANINDIA POWER LTD.	Maharashtra	1350.00	1.6377	32.27	0.5286	0.6035	114.17	0.4497		0.0655	0.0174		0.0000	0.0708			0.0000 00	0.6035

Sl No.	Name of TPS	Name of Power Utility	State	Installed Capacity	Coal Consumed	Ash Content of coal	Fly Ash Generation	Fly Ash Utilization	Percentage utilization	In the manufacture of Fly Ash based Bricks / Blocks / Tiles etc.	In the manufacture of Portland Pozzolana Cement	In the construction of Highways & Roads including Flyovers	Part Replacement of Cement in Concrete	In Hydro Power Sector in RCC Dams Construction	In Ash Dyke Raising	In the Reclamation of Low lying Area	In Mine Filling	In Agriculture / Waste Land Development	Others	Total Utilization	
				(MW)	(MT)	%	(MT)	(MT)	%	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	
157	YERAMARUS TPS	RAICHUR POWER CORPORATION LIMITED	Karnataka	1600.00	1.9772	23.61	0.4668	0.2742	58.73	0.0005	0.2737									0.2742	
158	RINL CAPTIVE TPP	RASHTRIYA ISPAT NIGAM LIMITED	Andhra Pradesh	315.00	1.6853	41.00	0.6910	0.6201	89.74	0.0000	0.1297						0.4904			0.6201	
159	RAIGARH TPP	RAIGARH ENERGY GENERATION LIMITED	Chhattisgarh	600.00	2.2301	38.21	0.8522	0.3058	35.88							0.3058				0.3058	
160	RAIPUR TPP	RAIPUR ENERGEN LIMITED	Chhattisgarh	1370.00	4.8037	33.34	1.6015	1.6653	103.98	0.0568	1.2295	0.01622				0.3463	0.0165			1.6653	
161	SASAN UMP TPP	RELIANCE POWER LIMITED	Madhya Pradesh	3960.00	18.2281	27.58	5.0270	2.2176	44.11	0.0014	0.0267	0.00000	0.0005		2.0978	0.0000	0.0896	0.0014	0.0002	2.2176	
162	SIMHPURI	SIMHPURI ENERGY LIMITED	Andhra Pradesh	600.00	0.0000	-	0.0000	0.0000	-	0.0000	0.0000	0.00000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
163	SAI LILAGAR POWER GENERATION LTD.	SAI LILAGAR POWER GENERATION LIMITED	Chhattisgarh	86.00	0.0000	-	0.0000	0.0000	-											0.0000	
164	SEMCORP ENERGY INDIA LTD.	SEMCORP ENERGY INDIA LTD.	Andhra Pradesh	1320.00	5.2629	25.45	1.3395	1.3897	103.75	0.0897	0.9546		0.0211		0.3083	0.0160				1.3897	
165	SWASTIK POWER & MINERALS RESOURCES PVT. LTD.	SWASTIK POWER & MINERALS RESOURCES PVT. LTD.	Chhattisgarh	25.00	0.0000	-	0.0000	0.0000	-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
166	SKS POWER GENERATION (CC) LTD.	SKS POWER GENERATION (CHHATTISGARH) LIMITED	Chhattisgarh	600.00	1.3288	43.81	0.5821	0.4007	68.83	0.0385	0.1711	0.0004				0.0357	0.1549			0.4007	
167	THE DURGAPUR POWER PROJECTS STATION	THE DURGAPUR PROJECTS LIMITED	West Bengal	550.00	1.7327	36.56	0.6335	0.5650	89.19	0.0002	0.4967					0.0681				0.5650	
168	SINGARENI TPP	THE SINGARENI COLLIERIES COMPANY LIMITED	Telangana	1200.00	4.3042	36.51	1.5713	1.6865	107.33	0.2416	0.5173	0.0274	0.2823			0.0649	0.4331		0.1198	1.6865	
169	CUDDALORE - TAQA	TAQA NEYVELLY POWER CO.PVT. LTD.	Tamil Nadu	250.00	0.8995	5.60	0.0503	0.1139	226.24	0.0126	0.0247						0.0002	0.0044	0.0721	0.1139	
170	JOBOERA	THE TATA POWER COMPANY LIMITED	Jharkhand	547.50	0.2260	372.04	0.8408	0.9283	110.41	0.0200	0.0423		0.5430			0.3230				0.9283	
171	TROMBAY	THE TATA POWER COMPANY LIMITED	Maharashtra	750.00	1.6760	2.48	0.0416	0.0422	101.44	0.0038			0.0294				0.0077	0.0013	0.0000	0.0422	
172	SABARMATI	TORRENT POWER LTD.	Gujarat	362.00	0.7845	24.27	0.1904	0.1907	100.15		0.1578	0.0632			-	0.0303			0.0000	0.1907	
173	TUTICORIN	TAMIL NADU GENERATION AND DISTRIBUTION LIMITED	Tamil Nadu	1050.00	3.4388	30.61	1.0525	0.7354	69.88	0.1241	0.6065					0.0048	0.0000		0.0000	0.7354	
174	METTUR-I	TAMIL NADU GENERATION AND DISTRIBUTION LIMITED	Tamil Nadu	840.00	2.7602	32.70	0.9026	1.3459	149.11	0.2166	0.0573								1.0720	1.3459	
175	METTUR-II	TAMIL NADU GENERATION AND DISTRIBUTION LIMITED	Tamil Nadu	600.00	1.0318	28.14	0.2904	0.2904	100.00	0.0213	0.2448					0.0121				0.0122	0.2904
176	NORTH CHENNAI-I	TAMIL NADU GENERATION AND DISTRIBUTION LIMITED	Tamil Nadu	630.00	2.3325	38.95	0.9085	2.3328	256.79	0.0180	0.0842	2.1709	0.0597							2.3328	
177	NORTH CHENNAI-II	TAMIL NADU GENERATION AND DISTRIBUTION LIMITED	Tamil Nadu	1200.00	2.9456	36.79	1.0838	1.7759	163.86	0.1676	0.6207	0.9876								1.7759	
178	RAMAGUNDAM 'B'	TELANGANA STATE POWER GENERATION CORPORATION LIMITED	Telangana	62.50	0.2104	42.28	0.0890	0.1015	114.09		0.0000								0.1015	0.1015	
179	KOTHAGUDEM-V	TELANGANA STATE POWER GENERATION CORPORATION LIMITED	Telangana	500.00	2.1513	46.72	1.0051	0.4566	45.43	0.2467	0.0981	0.1118						0.0000	0.4566		
180	KOTHAGUDEM-VI	TELANGANA STATE POWER GENERATION CORPORATION LIMITED	Telangana	500.00	1.9332	35.41	0.6846	0.5083	74.25	0.3786	0.0511	0.0786								0.5083	
181	KOTHAGUDEM-VII	TELANGANA STATE POWER GENERATION CORPORATION LIMITED	Telangana	800.00	2.7943	29.14	0.8142	0.4426	54.37	0.2013	0.2413									0.4426	
182	KAKATIYA (Stage-I)	TELANGANA STATE POWER GENERATION CORPORATION LIMITED	Telangana	500.00	1.3227	34.32	0.4539	0.3590	79.08	0.2185	0.1243		0.0000		0.0000	0.0000		0.0162	0.3590		

Sl No.	Name of TPS	Name of Power Utility	State	Installed Capacity	Coal Consumed	Ash Content of coal	Fly Ash Generation	Fly Ash Utilization	Percentage utilization	In the manufacture of Fly Ash based Bricks / Blocks / Tiles etc.	In the manufacture of Portland Pozzolana Cement	In the construction of Highways & Roads including Flyovers	Part Replacement of Cement in Concrete	In Hydro Power Sector in RCC Dams Construction	In Ash Dyke Raising	In the Reclamation of Low lying Area	In Mine Filling	In Agriculture / Waste Land Development	Others	Total Utilization	
				(MW)	(MT)	%	(MT)	(MT)	%	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	
183	KAKATIYA (Stage-II)	TELANGANA STATE POWER GENERATION CORPORATION LIMITED	Telangana	600.00	1.9830	34.00	0.6741	0.5247	77.83	0.3064	0.1974		0.0000		0.0000	0.0000			0.0210	0.5247	
184	RAIGARH TPP	TRN ENERGY PRIVATE LIMITED	Chhattisgarh	600.00	1.5886	42.89	0.6814	0.2013	29.55	0.1020						0.0794	0.0199			0.2013	
185	TENUGHAT TPS	TENUGHAT VIDHYUT NIGAM LIMITED	Jharkhand	420.00	1.5925	32.62	0.5194	0.4773	91.90							0.4773			0.0000	0.4773	
186	TALWANDI SABO POWER LTD	TALWANDI SABO POWER LTD.	Punjab	1980.00	4.8838	39.64	1.9360	1.1680	60.33	0.3159	0.5800	0.2598				0.0123			0.0000	1.1680	
187	ANPARA 'A' & 'B'	UTTAR PRADESH RAJYA VIDYUT UTPADAN NIGAM LIMITED	Uttar Pradesh	2630.00	9.8953	33.97	3.3609	0.9190	27.34	0.0004	0.1437				0.4466	0.3283			0.0000	0.9190	
188	HARDUAGANJ	UTTAR PRADESH RAJYA VIDYUT UTPADAN NIGAM LIMITED	Uttar Pradesh	610.00	1.4007	39.91	0.5590	1.3909	248.83	0.0686	0.2513					1.0711				1.3909	
189	OBRA	UTTAR PRADESH RAJYA VIDYUT UTPADAN NIGAM LIMITED	Uttar Pradesh	1000.00	3.4739	40.56	1.4089	0.0807	5.73	0.0032	0.0775	0.0000								0.0807	
190	PANKI	UTTAR PRADESH RAJYA VIDYUT UTPADAN NIGAM LIMITED	Uttar Pradesh	0.00	0.0000	-	0.0000	0.0000	-	0.0000	0.0000	0.0000								0.0000	
191	PARICCHA	UTTAR PRADESH RAJYA VIDYUT UTPADAN NIGAM LIMITED	Uttar Pradesh	920.00	2.6220	41.36	1.0844	1.0852	100.08	0.0746	0.6205	0.2502			0.0000	0.1399				1.0852	
192	UDUPI	UDUPI POWER CORPORATION LIMITED	Karnataka	1200.00	0.9881	7.02	0.0693	0.0695	100.25	0.0212	0.0384			0.0078						0.0021	0.0695
193	BUTIBORI	VIDARBHA INDUSTRIES POWER LTD.	Maharashtra	600.00	0.0000	-	0.0000	0.0213	-	0.0000	0.0000	0.0213	0.0000							0.0213	
194	VS LIGNITE POWER PRIVATE LTD	VS LIGNITE POWER PRIVATE LIMITED	Rajasthan	135.00	0.9394	23.05	0.2165	0.2165	100.00	0.0269										0.1896	0.2165
195	VEDANTA LTD TPP	VEDANTA LIMITED	Odisha	2400.00	19.7574	24.66	4.8731	5.9989	123.10	0.0613	0.1487	0.0000	0.0255		0.7904	4.4606			0.5122	5.9989	
196	VEDANTA LTD CPP	VEDANTA LIMITED	Odisha	1215.00	7.3451	44.25	3.2504	4.0119	123.43	0.0119	0.0929	0.0226			0.9075	2.6365			0.3404	4.0119	
197	KOLAGHAT	WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED	West Bengal	1260.00	1.3871	42.69	0.5921	0.9542	161.15	0.0579	0.3139					0.5824				0.9542	
198	SAGARDIGHI	WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED	West Bengal	1600.00	6.0665	35.58	2.1582	1.4987	69.44	0.0522	0.6532	0.0000				0.7933				1.4987	
199	BANDEL	WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED	West Bengal	335.00	0.8082	40.21	0.3250	0.3299	101.50	0.0030	0.1873	0.0365				0.1031				0.3299	
200	SANTALDIH	WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED	West Bengal	500.00	2.2790	45.73	1.0423	1.2079	115.89	0.0353	0.5841				0.5824			0.0061	1.2079		
201	BAKRESWAR	WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED	West Bengal	1050.00	4.6883	37.33	1.7501	1.4685	83.90	0.0448	0.6860				0.5163	0.2213		0.0000	1.4685		
202	SITAPURAM TPS	ZUARI CEMENT LIMITED	Telangana	43.00	0.1600	43.35	0.0693	0.0693	100.00	0.0000	0.0606				0.0087	0.0000		0.0000	0.0693		
		Grand Total		209990.50	686.3420	33.88	232.5595	214.9125	92.41	30.1832	60.0229	34.9851	1.9189	0.0611	18.4722	36.2463	14.4187	0.0773	18.5267	214.9125	

FLY ASH GENERATION AND ITS UTILIZATION AT COAL / LIGNITE BASED THERMAL POWER STATIONS IN THE COUNTRY FOR THE YEAR 2020-21 (APRIL - 2020 TO MARCH - 2021) (State WISE)

Sl. no.	Name of TPS	Power Utility & State	Installed Capacity	Coal Consumed	Ash Content of Coal	Fly Ash Generation	Fly Ash Utilization	Percentage utilization	In the manufacture of Fly Ash based Bricks / Blocks / Tiles etc.	In the manufacture of Portland Pozzolana Cement	In the construction of Highways & Roads including Flyovers	Part Replacement of Cement in Concrete	In Hydro Power Sector in RCC Dams Construction	In Ash Dyke Raising	In the Reclamation of Low lying Area	In Mine Filling	In Agriculture Waste Land Development	Others	Total Utilization
			(MW)	MT	%	MT	MT	%	MT	MT	MT	MT	MT	MT	MT	MT	MT	(MT) $\Sigma(10)$ to (19)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
ANDHRA PRADESH																			
1	Dr. N.T.R TPS	Andhra Pradesh Power Generation Corporation	1760.00	6.6404	44.29	2.9414	2.9634	100.75	1.5353	1.0417	0.1106	0.0631	0.0000	0.0000	0.1047	0.0000	0.0000	0.1080	2.9634
2	RAYALSEEMA	Andhra Pradesh Power Generation Corporation	1650.00	1.6760	43.56	0.7301	0.9215	126.21	0.1490	0.7725	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.9215
3	SRI DAMODARAM SANJEEVAIAH	Andhra Pradesh Power Development Company Limited	1600.00	4.0275	29.68	1.1953	1.0961	91.70	0.1235	0.7106	0.0707	0.0000	0.0000	0.1649	0.0264	0.0000	0.0000	0.0000	1.0961
4	HINDUJA NATIONAL POWER CORPORATION LIMITED	HINDUJA NATIONAL POWER CORPORATION LIMITED	1040.00	0.8205	55.34	0.3245	0.3519	108.45	0.1741	0.1069	0.0692	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0017	0.3519
5	MEENAKSHI ENERGY Pvt. Ltd.(Andhra Pradesh)	MEENAKSHI ENERGY Pvt. Ltd.(Andhra Pradesh)	300.00	0.1091	6.82	0.0074	0.0005	6.65	0.0005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0005
6	SIMHADRI	N.T.P.C. (Andhra Pradesh).	2000.00	6.4479	37.98	2.4488	3.0249	123.52	0.4874	0.2517	2.1631	0.0000	0.0605	0.0450	0.0000	0.0000	0.0000	0.0172	3.0249
7	RINL CAPTIVE TPP	RASHTRIYA ISPAT NGAM LIMITED	315.00	1.6853	41.00	0.6910	0.6201	89.74	0.0000	0.1297	0.0000				0.4904				0.6201
8	SIMHAPURI	SIMHAPURI ENERGY LIMITED	600.00	0.0000	0.00	0.0000	0.0000	-	0.0000	0.0000	0.0000								0.0000
9	SEMCORP ENERGY INDIA LTD.	SEMCORP ENERGY INDIA LTD.	1320.00	5.2629	25.45	1.3395	1.3897	103.75	0.0897	0.9546	0.0000	0.0211	0.0000	0.3083	0.0160	0.0000	0.0000	0.0000	1.3897
	SUB TOTAL		10585.00	26.6697	36.29	9.6780	10.3680	107.13	2.5595	3.9676	2.4136	0.0842	0.0605	0.5182	0.6375	0.0000	0.0000	0.1269	10.3680
ASSAM																			
1	BONGAIGAON	NTPC LTD.	750.00	1.7142	30.59	0.5244	0.3290	62.73	0.0355	0.2935	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.3290
	SUB TOTAL		750.00	1.7142	30.5936	0.5244	0.3290	62.7341	0.0355	0.2935	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.3290
BIHAR																			
1	NABINAGAR	BHARATIYA RAIL BIJLEE COMPANY LIMITED	750.00	3.0845	41.57	1.2822	0.1928	15.04	0.0208	0.1720	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1928
2	MUZAFFARPUR	KANTI BIJLEE UTPADAN NGAM LIMITED	610.00	1.8640	38.14	0.7110	0.7500	105.49	0.0640		0.1020	0.0660			0.5180				0.7500
3	KAHALGAON	NTPC LTD.	2340.00	10.8210	37.10	4.0150	4.1540	103.46	0.1160	0.7860	2.3160	0.0000	0.0000	0.6970	0.0700	0.0000	0.0000	0.1690	4.1540
4	BARTH SUPER TPS	NTPC LTD.	1320.00	5.3676	38.00	2.0397	2.2042	108.07	0.2519	0.3688	1.2551	0.0000	0.0000	0.0000	0.1631	0.0000	0.0000	0.1653	2.2042
5	BARAUNI	NTPC LTD.	360.00	0.8520	38.78	0.3304	0.1986	60.10	0.0086	0.0498	0.1328	0.0004			0.0070				0.1986
6	NABINAGAR SUPER TPS	NTPC LTD.	660.00	2.8659	36.40	1.0431	0.5381	51.59	0.0028	0.5354	0.0000								0.5381
	SUB TOTAL		6040.00	24.8550	37.9058	9.4215	8.0378	85.3135	0.4640	1.9120	3.8060	0.0664	0.0000	0.6970	0.7581	0.0000	0.0000	0.3343	8.0378
CHHATTISGARH																			
1	KASAIPALI	ACB (INDIA) Ltd.	270.00	1.2151	49.08	0.5964	0.6556	109.92	0.0336	0.0000	0.0071	0.0000	0.0000	0.0000	0.6149	0.0000	0.0000	0.0000	0.6556
2	SVPL Renki	ACB (INDIA) Ltd.	60.00	0.0000	0.00	0.0000	0.0000	-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	CHAKABURA TPP	ACB (INDIA) Ltd.	30.00	0.1386	55.82	0.0774	0.0774	100.00	0.0078	0.0000	0.0000	0.0000	0.0000	0.0000	0.0696	0.0000	0.0000	0.0000	0.0774
4	CHAKABURA TPP (EXTN)	ACB (INDIA) Ltd.	30.00	0.2683	56.80	0.1524	0.1524	100.00	0.0162	0.0000	0.0000	0.0000	0.0000	0.0000	0.1362	0.0000	0.0000	0.0000	0.1524
5	BALCO CPP	BHARAT ALUMINIUM COMPANY LIMITED	540.00	2.3419	39.71	0.9300	0.9579	103.01	0.0244	0.0243	0.0000	0.0000	0.0000	0.0000	0.5387	0.2124	0.0000	0.1581	0.9579

Sl. no.	Name of TPS	Power Utility & State	Installed Capacity	Coal Consumed	Ash Content o f Coal	Fly Ash Generation	Fly Ash Utilization	Percentage utilization	In the manufacture of Fly Ash based Bricks / Blocks / Tiles etc.	In the manufacture of Portland Pozzolana Cement	In the construction of Highways & Roads including Flyovers	Part Replacement of Cement in Concrete	In Hydro Power Sector in RCC Dams Construction	In Ash Dyke Raising	In the Reclamation of Low lying Area	In Mine Filling	In Agriculture Waste Land Development	Others	Total Utilization
			(MW)	MT	%	MT	MT	%	MT	MT	MT	MT	MT	MT	MT	MT	MT	(MT) $\Sigma(10)$ to (19)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
6	Atal Bihari Vajpayee TPP	Chhattisgarh State Power Generation Company Ltd.	1000.00	3.5123	41.86	1.4703	1.0003	68.04	0.1132	0.0535	0.0787	0.0000	0.0000	0.4288	0.3261	0.0000	0.0000	0.0000	1.0003
7	Dr. Shyama Prasad Mukharjee TPP	Chhattisgarh State Power Generation Company Ltd.	500.00	2.3059	42.09	0.9705	0.4268	43.98	0.0000	0.0000	0.0000	0.0000	0.0000	0.1923	0.1319	0.1027	0.0000	0.0000	0.4268
8	Hasdeo TPP	Chhattisgarh State Power Generation Company Ltd.	1340.00	6.7931	40.47	2.7495	1.2895	46.90	0.0905	0.0000	0.1569	0.0020	0.0000	0.0455	0.8830	0.1116	0.0000	0.0000	1.2895
9	BALCO TPP-III	BHARAT ALUMINIUM COMPANY LIMITED	1200.00	5.6455	39.23	2.2147	2.3067	104.16	0.0542	0.0566	0.0000	0.0000	0.0000	0.0000	1.2291	0.4056	0.0000	0.5613	2.3067
10	O.P.Jindal Super TPP (Stage-I)	JPL (Chhattisgarh.)	1000.00	3.4981	45.23	1.5821	0.2467	15.59	0.0000	0.0000	0.0080	0.0000	0.0000	0.0000	0.0590	0.1797	0.0000	0.0000	0.2467
11	O.P.Jindal Super TPP(Stage-II)	JPL (Chhattisgarh.)	2400.00	6.7990	45.06	3.0635	0.5560	18.15	0.0146	0.0174	0.0000	0.0000	0.0000	0.0000	0.0706	0.4534	0.0000	0.0000	0.5560
12	DONGAMHUA CAPTIVE POWER PLANT	JINDAL STEEL AND POWER LIMITED	576.00	1.8260	49.81	0.9095	0.9099	100.04	0.0003	0.0014	0.0000	0.0000	0.0000	0.0000	0.0000	0.9082	0.0000	0.0000	0.9099
13	KMPC - NARIYARA	KSK MAHANADI POWER COMPANY LIMITED	1800.00	6.6959	35.20	2.3567	2.9074	123.37	0.0176	1.2016	0.0893	0.0000	0.0000	0.0000	0.1841	1.1972	0.0000	0.2177	2.9074
14	LANCO AMARKANTAK TPS	LANCO AMARKANTAK POWER LIMITED	600.00	2.9993	38.56	1.1565	0.5159	44.61	0.0040	0.3384	0.0000	0.0000	0.0000	0.0200	0.1535	0.0000	0.0000	0.0000	0.5159
15	MCCPL BANDHAKHAR	MARUTI CLEAN COAL AND POWER LIMITED	300.00	1.4007	45.00	0.6303	0.6499	103.11	0.0267	0.0000	0.3804	0.0000	0.0000	0.0000	0.2429	0.0000	0.0000	0.0000	0.6499
16	BHILAI PP - III	NTPC - SAIL POWER COMPANY LIMITED	500.00	2.4355	43.03	1.0481	0.6176	58.93	0.2042	0.3225	0.0646	0.0000	0.0000	0.0000	0.0263	0.0000	0.0000	0.0000	0.6176
17	BHILAI PP-II	NTPC - SAIL POWER COMPANY LIMITED	74.00	0.3385	39.93	0.1352	0.1067	78.95	0.0112	0.0242	0.0000	0.0000	0.0000	0.0034	0.0679	0.0000	0.0000	0.0000	0.1067
18	KORBA	NTPC LTD.	2600.00	13.9610	34.33	4.7930	3.4610	72.21	0.0730	0.0000	0.3350	0.0000	0.0000	1.7960	0.1110	0.4440	0.0000	0.7020	3.4610
19	SIPAT	NTPC LTD.	2980.00	15.0266	34.92	5.2473	3.0258	57.66	0.3349	0.1144	1.5927	0.0000	0.0000	0.4980	0.4851	0.0000	0.0000	0.0007	3.0258
20	UCHPINDA	R.K.M. POWERGEN PVT. LTD.	1440.00	3.2749	42.95	1.4066	1.4062	99.97	0.0002	0.4567	0.1877	0.0000	0.0000	0.0056	0.0593	0.0000	0.0000	0.6967	1.4062
21	RAIPUR TPP	RAIPUR ENERGEN LIMITED	1370.00	4.8037	33.34	1.6015	1.6653	103.98	0.0568	1.2295	0.0162	0.0000	0.0000	0.0000	0.3463	0.0165	0.0000	0.0000	1.6653
22	RATIJA TPS	ACB (INDIA) Ltd.	100.00	0.6020	55.34	0.3332	0.3332	100.00	0.0154	0.0000	0.0000	0.0000	0.0000	0.0000	0.3178	0.0000	0.0000	0.0000	0.3332
23	SAI LILAGAR POWER GENERATION LTD.	SAI LILAGAR POWER GENERATION LIMITED	86.00	0.0000	0.00	0.0000	0.0000	-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
24	SWASTIK POWER & MINERALS RESOURCES PVT. LTD.	SWASTIK POWER & MINERALS RESOURCES PVT. LTD.	25.00	0.0000	0.00	0.0000	0.0000	-										0.0000	
25	SKS POWER GENERATION (CC) LTD.	SKS POWER GENERATION (CHHATTISGARH) LIMITED	600.00	1.3288	43.81	0.5821	0.4007	68.83	0.0385	0.1711	0.0004	0.0000	0.0000	0.0357	0.1549	0.0000	0.0000	0.4007	
26	RAIGARH TPP	TRN ENERGY PRIVATE LIMITED	600.00	1.5886	42.89	0.6814	0.2013	29.55	0.1020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0794	0.0199	0.0000	0.0000	0.2013
27	LARA SUPER THERMAL POWER PROJECT	NTPC LTD.	1600.00	3.7053	36.49	1.3522	1.0056	74.37	0.0130		0.8278			0.1150	0.0490			0.0009	1.0056
28	KHARSIA TPP	JINDAL STEEL AND POWER LIMITED	299.00	0.6461	45.08	0.2912	0.2912	100.00	0.1462	0.0274				0.0011	0.1166				0.2912
29	Korba (East)	Chhattisgarh State Power Generation Company Ltd.	240.00	0.9159	46.19	0.4231	0.1304	30.82	0.0122					0.0130	0.0466	0.0586			0.1304

Sl. no.	Name of TPS	Power Utility & State	Installed Capacity	Coal Consumed	Ash Content o f Coal	Fly Ash Generation	Fly Ash Utilization	Percentage utilization	In the manufacture of Fly Ash based Bricks / Blocks / Tiles etc.	In the manufacture of Portland Pozzolana Cement	In the construction of Highways & Roads including Flyovers	Part Replacement of Cement in Concrete	In Hydro Power Sector in RCC Dams Construction	In Ash Dyke Raising	In the Reclamation of Low lying Area	In Mine Filling	In Agriculture Waste Land Development	Others	Total Utilization
			(MW)	MT	%	MT	MT	%	MT	MT	MT	MT	MT	MT	MT	MT	MT	(MT) $\Sigma(10)$ to (19)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
30	RAIGARH TPP	RAIGARH ENERGY GENERATION LIMITED	600.00	2.2301	38.21	0.8522	0.3058	35.88							0.3058				0.3058
31	DB POWER	DB POWER LIMITED	1200.00	5.8182	45.47	2.6457	2.6009	98.30	0.0537	0.5365	0.3666	0.0030		0.3070	1.3341			2.6009	
		SUB TOTAL	2596.00	102.1151	39.42	40.2526	28.2042	70.07	1.4643	4.5754	4.1114	0.0050	0.0000	3.1188	6.9932	5.5987	0.0000	2.3373	28.2042
		GUJARAT																	
1	MUNDRA TPS	ADANI POWER (MUNDRA) LIMITED	4620.00	13.9599	4.87	0.6792	0.7165	105.49	0.0000	0.4118	0.0000	0.0000	0.0000	0.0000	0.1345	0.0000	0.0000	0.1702	0.7165
2	BHADRESHWAR VIDYUT PRIVATE LTD TPS	BHADRESHWAR VIDYUT PRIVATE LIMITED	300.00	0.9533	3.40	0.0324	0.0330	101.58	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0330	0.0330
3	MUNDRA UMPP	Coastal Gujarat Power Limited	4150.00	10.2000	7.45	0.7600	0.6300	82.89	0.0130	0.3980	0.0070	0.1070	0.0000	0.0000	0.0000	0.0530	0.0000	0.0520	0.6300
4	SURAT LIGNITE	Gujarat Industries Power Company Limited	500.00	3.0701	15.54	0.4772	0.4772	100.00	0.2578	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.2194	0.4772
5	AKRIMOTA	Gujarat Mineral Development Corporation Limited	250.00	0.5846	26.61	0.1556	0.2060	132.43	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.2060	0.0000	0.0000	0.2060
6	GANDHINAGAR	Gujarat State Electricity Corporation Limited	630.00	1.0120	35.08	0.3550	1.1160	314.37	0.3370	0.6570	0.0760	0.0460	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.1160
7	KUTCH LIGNITE	Gujarat State Electricity Corporation Limited	150.00	1.0910	25.11	0.2740	0.2740	100.00	0.0000	0.0770	0.0000	0.0000	0.0000	0.0000	0.0000	0.1970	0.0000	0.0000	0.2740
8	SIKKA	Gujarat State Electricity Corporation Limited	500.00	0.9090	8.58	0.0780	0.2980	382.05	0.1690	0.1290	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.2980
9	UKAI	Gujarat State Electricity Corporation Limited	1110.00	3.1120	38.53	1.1990	1.1780	98.25	0.3590	0.3180	0.0000	0.0000	0.0000	0.0000	0.0000	0.2800	0.0000	0.2210	1.1780
10	WANAKBORI	Gujarat State Electricity Corporation Limited	2270.00	4.2690	38.37	1.6380	1.8490	112.88	0.1780	0.8320	0.0000	0.0000	0.0000	0.0000	0.0000	0.5330	0.0000	0.3060	1.8490
11	BHAVNAGAR LIGNITE	Gujarat State Electricity Corporation Limited	500.00	1.3900	10.25	0.1425	0.1550	108.77	0.0500	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0870	0.0000	0.0180	0.1550
12	SABARMATI	TORRENT POWER LTD.	362.00	0.7845	24.27	0.1904	0.1907	100.15	0.0000	0.1578	0.0632	0.0000	0.0000	-0.0303	0.0000	0.0000	0.0000	0.0000	0.1907
13	SALAYA TPS	ESSAR POWER GUJARAT LTD.	1200.00	2.0860	10.62	0.2216	0.2216	100.00		0.2018					0.0198				0.2216
		SUB TOTAL	16542.00	43.4213	14.29	6.2029	7.3449	118.41	1.3638	3.1825	0.1462	0.1530	0.0000	-0.0303	0.1542	1.3560	0.0000	1.0196	7.3449
		HARYANA																	
1	INDIRA GANDHI	Aravali Power Corporation Pvt. Ltd.	1500.00	2.4502	34.78	0.8522	1.9021	223.20	0.3502	1.3832	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1687	1.9021
2	RAJIV GANDHI TPP, Hissar	Haryana Power Generation Corporation Limited	1200.00	1.1536	38.69	0.4464	0.6941	155.50	0.0606	0.2842	0.3493	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.6941
3	Deen Bandhu Chhotu Ram TPS, YAMUNANAGAR	Haryana Power Generation Corporation Limited	600.00	1.8017	41.21	0.7424	1.4068	189.50	0.0343	0.5277	0.0878	0.0000	0.0000	0.0000	0.7571	0.0000	0.0000	0.0000	1.4068
4	PANIPAT	Haryana Power Generation Corporation Limited	710.00	0.8265	39.18	0.3238	3.2353	999.17	0.0251	1.0566	1.2379	0.0000	0.0000	0.0000	0.8658	0.0000	0.0000	0.0499	3.2353
5	MAHATMA GANDHI TPP	JHAJJAR POWER LIMITED	1320.00	2.8620	36.37	1.0410	1.0410	100.00	0.0591	0.9097	0.0006	0.0142	0.0000	0.0000	0.0000	0.0000	0.0000	0.0574	1.0410
		SUB TOTAL	5330.00	9.0940	37.45	3.4058	8.2794	243.10	0.5293	4.1613	1.6756	0.0142	0.0000	0.0000	1.6229	0.0000	0.0000	0.2760	8.2794
		JHARKHAND																	
1	ADHUNIK PNR LTD.	ADHUNIK POWER & NATURAL RESOURCES LTD.	540.00	2.0169	43.21	0.8716	0.8927	102.42	0.1191	0.4855	0.0000	0.0000	0.0000	0.0000	0.2881	0.0000	0.0000	0.0000	0.8927
2	BOKARO	Damodar Valley Corporation	710.00	1.8668	42.71	0.7973	1.0243	128.47	0.0000	0.0498	0.0000	0.0000	0.0000	0.0000	0.9745	0.0000	0.0000	0.0000	1.0243
3	CHANDRAPURA	Damodar Valley Corporation	500.00	1.9716	46.08	0.9086	1.2997	143.05	0.0014	0.3279	0.8797	0.0000	0.0000	0.0000	0.0908	0.0000	0.0000	0.0000	1.2997
4	KODERMA	Damodar Valley Corporation	1000.00	4.4200	44.36	1.9608	2.3739	121.07	0.0053	0.6770	0.0650	0.0000	0.0000	0.0000	0.2753	1.3513	0.0000	0.0000	2.3739

Sl. no.	Name of TPS	Power Utility & State	Installed Capacity	Coal Consumed	Ash Content o f Coal	Fly Ash Generation	Fly Ash Utilization	Percentage utilization	In the manufacture of Fly Ash based Bricks / Blocks / Tiles etc.	In the manufacture of Portland Pozzolana Cement	In the construction of Highways & Roads including Flyovers	Part Replacement of Cement in Concrete	In Hydro Power Sector in RCC Dams Construction	In Ash Dyke Raising	In the Reclamation of Low lying Area	In Mine Filling	In Agriculture Waste Land Development	Others	Total Utilization
			(MW)	MT	%	MT	MT	%	MT	MT	MT	MT	MT	MT	MT	MT	MT	(MT) Σ(10) to (19)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
5	MAITHON RIGHT BANK TPP	MAITHON POWER LIMITED	1050.00	4.0205	41.00	1.6483	2.1879	132.74	0.1302	0.6346	0.0000	0.0000	0.0000	0.0000	0.0578	1.3654	0.0000	0.0000	2.1879
6	JOJOBERA	THE TATA POWER COMPANY LIMITED	547.50	0.2260	372.04	0.8408	0.9283	110.41	0.0200	0.0423	0.0000	0.5430	0.0000	0.0000	0.3230	0.0000	0.0000	0.0000	0.9283
7	TENUGHAT TPS	TENUGHAT VIDHYUT NIGAM LIMITED	420.00	1.5925	32.62	0.5194	0.4773	91.90	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.4773	0.0000	0.0000	0.0000	0.4773
		SUB TOTAL	4767.50	16.1142	46.83	7.5468	9.1842	121.70	0.2760	2.2171	0.9447	0.5430	0.0000	0.0000	2.4868	2.7166	0.0000	0.0000	9.1842
		KARNATAKA																	
1	VIJAYANAGAR	JSW ENERGY LIMITED	860.00	0.8205	13.85	0.1137	0.1137	100.00	0.0139	0.0785	0.0000	0.0000	0.0000	0.0158	0.0000	0.0000	0.0000	0.0054	0.1137
2	BALLARI	KARNATAKA POWER CORPORATION LIMITED	1700.00	2.0340	39.48	0.8029	0.9226	114.90	0.2052	0.7174	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.9226
3	KUDGI	NTPC LTD.	2400.00	2.8869	34.00	0.9816	0.4473	45.57	0.0116	0.4357	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.4473
4	YERAMARUS TPS	RAICHUR POWER CORPORATION LIMITED	1600.00	1.9772	23.61	0.4668	0.2742	58.73	0.0005	0.2737	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.2742
5	UDUPI	UDUPI POWER CORPORATION LIMITED	1200.00	0.9881	7.02	0.0693	0.0695	100.25	0.0212	0.0384	0.0000	0.0078	0.0000	0.0000	0.0000	0.0000	0.0000	0.0021	0.0695
		SUB TOTAL	7760.00	8.7067	27.96	2.4343	1.8272	75.06	0.2524	1.5437	0.0000	0.0078	0.0000	0.0158	0.0000	0.0000	0.0000	0.0075	1.8272
		MADHYA PRADESH																	
1	MAHAN	ESSAR POWER MP LTD.	1200.00	2.0570	33.79	0.6950	0.2840	40.86	0.0000	0.0960	0.0000	0.0000	0.0000	0.0000	0.1380	0.0000	0.0000	0.0500	0.2840
2	JAYPEE BINA TPP	JAIPRAKSH POWER VENTURES LIMITED	500.00	1.1306	38.17	0.4316	0.4328	100.28	0.0193	0.2532	0.0000	0.0000	0.0000	0.0000	0.1604	0.0000	0.0000	0.0000	0.4328
3	JAYPEE NIGRIE SUPER TPP	JAIPRAKSH POWER VENTURES LIMITED	1320.00	4.5894	31.37	1.4399	1.4405	100.04	0.0115	0.9826	0.0000	0.0000	0.0000	0.0000	0.4464	0.0000	0.0000	0.0000	1.4405
4	SANJAY GANDHI	MADHYA PRADESH POWER GENERATING COMPANY LIMITED	1340.00	5.8127	35.20	2.0463	2.0484	100.10	0.0375	0.9673	0.0051	0.0000	0.0006	0.0000	0.0000	0.0000	0.0000	1.0380	2.0484
5	SATPURA	MADHYA PRADESH POWER GENERATING COMPANY LIMITED	1330.00	3.1782	40.56	1.2890	1.2142	94.20	0.3590	0.2718	0.0000	0.0365	0.0000	0.0000	0.0028	0.0000	0.0000	0.5441	1.2142
6	AMARKANTAK	MADHYA PRADESH POWER GENERATING COMPANY LIMITED	210.00	0.9988	33.64	0.3360	0.2160	64.29	0.0846	0.0999	0.0030	0.0000	0.0000	0.0285	0.0000	0.0000	0.0000	0.0000	0.2160
7	SHREE SINGAJI TPS	MADHYA PRADESH POWER GENERATING COMPANY LIMITED	2520.00	4.0493	36.59	1.4816	0.6456	43.58	0.0034	0.4590	0.0000	0.0000	0.0000	0.0195	0.0000	0.0000	0.0000	0.1637	0.6456
8	JHABUA POWER LIMITED	JHABUA POWER LIMITED	600.00	2.5835	40.00	1.0334	0.7220	69.87	0.0677	0.4334	0.0142	0.0000	0.0000	0.0000	0.2067	0.0000	0.0000	0.0000	0.7220
9	ANUPPUR TPS	MB POWER (MADHYA PRADESH) LIMITED	1200.00	4.6260	33.31	1.5410	1.7521	113.70	0.0103	1.1639	0.0000	0.0000	0.0000	0.0000	0.5762	0.0000	0.0000	0.0018	1.7521
10	VINDHYACHAL	NTPC LTD.	4760.00	25.0098	34.84	8.7137	3.2859	37.71	0.2284	0.1470	0.1777	0.0000	0.0000	1.2708	1.2877	0.0000	0.0000	0.1743	3.2859
11	GADARWARA SUPER	NTPC LTD.	1600.00	2.7372	34.49	0.9439	0.0778	8.24	0.0101	0.0677	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0778
12	SASAN UMPP TPP	REILIANCE POWER LIMITED	3960.00	18.2281	27.58	5.0270	2.2176	44.11	0.0014	0.0267	0.0000	0.0005	0.0000	2.0978	0.0000	0.0896	0.0014	0.0002	2.2176
13	KHARGONE SUPER THERMAL POWER STATION	NTPC LTD.	660.00	2.5534	35.27	0.9006	0.4622	51.31	0.0149	0.3932								0.0541	0.4622
		SUB TOTAL	21200.00	77.5539	33.37	25.8790	14.7990	57.19	0.8480	5.3616	0.2000	0.0370	0.0006	3.4165	2.8181	0.0896	0.0014	2.0262	14.7990
		MAHARASHTRA																	
1	TIRODA	ADANI POWER MAHARASHTRA LTD.	3300.00	11.4702	32.96	3.7800	4.5404	120.12	0.1492	1.0822	0.0860	0.0000	0.0000	0.0740	2.6986	0.0202	0.0032	0.4271	4.5404
2	MIHAN	Abhijeet MADC Nagpur Energy Pvt. Ltd.	246.00	0.0000	0.00	0.0000	0.0000	-											0.0000
3	ADANI DAHANU	ADANI ELECTRICITY MUMBAI LIMITED	500.00	1.7850	21.06	0.3760	0.4210	111.97	0.0000	0.0000	0.0000	0.2090	0.0000	0.0000	0.0000	0.0000	0.0000	0.2120	0.4210

Sl. no.	Name of TPS	Power Utility & State	Installed Capacity	Coal Consumed	Ash Content of Coal	Fly Ash Generation	Fly Ash Utilization	Percentage utilization	In the manufacture of Fly Ash based Bricks / Blocks / Tiles etc.	In the manufacture of Portland Pozzolana Cement	In the construction of Highways & Roads including Flyovers	Part Replacement of Cement in Concrete	In Hydro Power Sector in RCC Dams Construction	In Ash Dyke Raising	In the Reclamation of Low lying Area	In Mine Filling	In Agriculture Waste Land Development	Others	Total Utilization	
			(MW)	MT	%	MT	MT	%	MT	MT	MT	MT	MT	MT	MT	MT	MT	(MT) $\Sigma(10)$ to (19)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	
4	DHARIWAL INFRASTRUCTURE LTD.	DHARIWAL INFRASTRUCTURE LIMITED	600.00	2.7450	33.92	0.9310	0.9460	101.61	0.0670	0.7712	0.0098	0.0000	0.0000	0.0000	0.0980	0.0000	0.0000	0.9460		
5	GMR WARORA ENERGY LTD.	GMR WARORA ENERGY LTD.	600.00	2.4985	33.39	0.8342	1.1202	134.28	0.3008	0.3220	0.2757	0.0000	0.0000	0.0000	0.2217	0.0000	0.0000	0.0000	1.1202	
6	BELA TPS	IDEAL ENERGY PROJECTS LIMITED	270.00	0.0000	0.00	0.0000	0.0000	-											0.0000	
7	RATNAGIRI	JSW ENERGY LIMITED	1200.00	2.5448	10.40	0.2647	0.2650	100.13	0.0883	0.0777	0.0000	0.0991	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.2650	
8	BHUSAWAL	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	1210.00	3.7368	38.67	1.4450	1.5299	105.87	0.1255	0.6371	0.2918	0.0000	0.0000	0.0000	0.0000	0.0000	0.0007	0.4748	1.5299	
9	CHANDRAPUR	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	2920.00	12.7114	39.82	5.0617	0.8577	16.95	0.0649	0.7837	0.0000	0.0000	0.0000	0.0000	0.0091	0.0000	0.0000	0.0000	0.8577	
10	KHAPARKHEDA	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	1340.00	6.8565	41.91	2.8737	1.9686	68.51	0.6735	0.0000	0.0000	0.0000	0.0000	0.7974	0.4978	0.0000	0.0000	0.0000	1.9687	
11	KORADI	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	2400.00	6.7094	41.90	2.8115	2.2762	80.96	0.9534	0.0003	0.4385	0.0000	0.0000	0.8839	0.0001	0.0000	0.0000	0.0000	2.2762	
12	NASHIK	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	630.00	0.6435	38.75	0.2494	4.1892	1679.92	3.1678	0.1189	0.9025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.1892	
13	PARLI	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	750.00	1.7893	39.80	0.7121	4.3348	608.75	3.8853	0.0291	0.0000	0.0000	0.0000	0.0000	0.0000	0.0382	0.3822	4.3348		
14	PARAS	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	500.00	2.6273	38.62	1.0146	1.0064	99.19	0.9512	0.0552	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0064	
15	MOUDA TPS	NTPC LTD.	2320.00	4.4936	37.97	1.7062	2.1969	128.76	0.3919	0.2782	0.9970	0.0000	0.0000	0.3172	0.2126	0.0000	0.0000	0.0000	2.1969	
16	SOLAPUR	NTPC LTD.	1320.00	2.3666	32.03	0.7581	0.7436	98.08	0.2679	0.4130	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0626	0.7436	
17	AMARAVATI TPS	RATTANINDIA POWER LTD.	1350.00	1.6377	32.27	0.5286	0.6035	114.17	0.4497	0.0000	0.0655	0.0174	0.0000	0.0000	0.0708	0.0000	0.0000	0.0000	0.6035	
18	TROMBAY	THE TATA POWER COMPANY LIMITED	750.00	1.6760	2.48	0.0416	0.0422	101.44	0.0038	0.0000	0.0000	0.0294	0.0000	0.0000	0.0000	0.0077	0.0013	0.0000	0.0422	
19	BUTIBORI	VIDARBHA INDUSTRIES POWER LTD.	600.00	0.0000	-	0.0000	0.0213	-	0.0000	0.0000	0.0213	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0213	
20	SAI WARDHA POWER Ltd., WARORA	MSELDC, CAPTIVE CONSUMERS	540.00	1.3555	28.18	0.3820	0.4110	107.59	0.0295	0.2650	0.0060	0.0211	0.0000	0.0000	0.0894	0.0000	0.0000	0.0000	0.4110	
		SUB TOTAL	23346.00	67.6471	35.14	23.7703	27.4739	115.58	11.5697	4.8335	3.0942	0.3761	0.0000	2.0725	3.7106	0.2153	0.0434	1.5587	27.4739	
		ODISHA																		
1	Aarti Steels Limited	Aarti Steels Limited	90.00	0.3479	53.99	0.1878	0.1868	99.46	0.0824	0.0143	0.0165					0.0612		0.0125		0.1868
2	GMR KAMALANGA TPP	GMR KAMALANGA ENERGY LTD.	1050.00	5.1668	39.88	2.0606	2.3822	115.61	1.0333	0.0000	1.3489	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.3822
3	INDIAN METALS & FERRO ALLOYS LTD.	INDIAN METALS & FERRO ALLOYS LTD.	200.00	1.0614	45.91	0.4873	0.4873	100.00	0.1518	0.0909	0.0050	0.0000	0.0000	0.0000	0.2378	0.0000	0.0000	0.0019	0.4873	
4	DERANG TPP	JINDAL INDIA THERMAL POWER LIMITED	1200.00	4.3483	40.98	1.7821	1.0347	58.06	0.1334	0.0000	0.0000	0.0000	0.0000	0.4960	0.4035	0.0000	0.0018	0.0000	1.0347	
5	ANGUL CAPTIVE POWER PLANT	JINDAL STEEL AND POWER LIMITED	810.00	2.2520	43.78	0.9860	0.5310	53.85	0.0480	0.0000	0.0000	0.0000	0.0000	0.2040	0.2790	0.0000	0.0000	0.0000	0.5310	
6	OURKELA CPP	NTPC - SAIL POWER COMPANY LIMITED	120.00	0.9042	39.75	0.3594	0.6551	182.28	0.0757	0.0023	0.5152	0.0186	0.0000	0.0000	0.0430	0.0000	0.0000	0.0004	0.6551	
7	TALCHER TPS	NTPC LTD.	460.00	3.0491	39.00	1.1892	1.1892	100.00	0.0116	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.1776	0.0000	0.0000	1.1892

Sl. no.	Name of TPS	Power Utility & State	Installed Capacity	Coal Consumed	Ash Content of Coal	Fly Ash Generation	Fly Ash Utilization	Percentage utilization	In the manufacture of Fly Ash based Bricks / Blocks / Tiles etc.	In the manufacture of Portland Pozzolana Cement	In the construction of Highways & Roads including Flyovers	Part Replacement of Cement in Concrete	In Hydro Power Sector in RCC Dams Construction	In Ash Dyke Raising	In the Reclamation of Low lying Area	In Mine Filling	In Agriculture Waste Land Development	Others	Total Utilization
			(MW)	MT	%	MT	MT	%	MT	MT	MT	MT	MT	MT	MT	MT	MT	(MT) Σ(10) to (19)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
8	TALCHER - KANHAI	NTPC LTD.	3000.00	16.4920	41.48	6.8412	4.8070	70.27	0.1225	0.0235	1.8191	0.0000	0.0000	2.7812	0.0606	0.0000	0.0000	0.0000	4.8070
9	NALCO, CPP ANGUL	NATIONAL ALUMINUM COMPANY LIMITED	1200.00	6.1869	46.74	2.8920	2.1888	75.69	0.6298	0.0001	0.6185	0.0000	0.0000	0.8922	0.0472	0.0010	0.0000	0.0000	2.1888
10	IB VALLEY	ODISHA POWER GENERATION CORPORATION LIMITED	1740.00	7.2301	44.56	3.2220	1.2156	37.73	0.0101	0.0000	0.0000	0.0000	0.0000	0.9821	0.2185	0.0000	0.0000	0.0049	1.2156
11	VEDANTA LTD TPP	VEDANTA LIMITED	2400.00	19.7574	24.66	4.8731	5.9989	123.10	0.0613	0.1487	0.0000	0.0255	0.0000	0.7904	4.4606	0.0000	0.0000	0.5122	5.9989
12	VEDANTA LTD CPP	VEDANTA LIMITED	1215.00	7.3451	44.25	3.2504	4.0119	123.43	0.0119	0.0929	0.0226	0.0000	0.0000	0.9075	2.6365	0.0000	0.0000	0.3404	4.0119
13	DARLIPALI TPS	NTPC LTD.	800.00	3.3300	44.74	1.4900	0.0546	3.67	0.0001	0.0065	0.0377				0.0103			0.0546	
		SUB TOTAL	14285.00	77.4713	38.23	29.6211	24.7430	83.53	2.3719	0.3793	4.3834	0.0441	0.0000	7.0534	8.4479	1.1889	0.0143	0.8598	24.7430
		PUNJAB																	
1	RAJPURA TPS	NABHA POWER LIMITED	1400.00	4.2368	33.52	1.4203	1.4270	100.47	0.0677	1.0018	0.0000	0.0098	0.0000	0.0000	0.0000	0.0000	0.0000	0.3476	1.4270
2	GURU NANAKDEV TPS, BATHINDA	PUNJAB STATE POWER CORPORATION LIMITED	460.00	0.0000	-	0.0000	0.3411	-	0.0570	0.2841	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.3411
3	GURU HARGOBIND TPP, LEHRA MOHABAT	PUNJAB STATE POWER CORPORATION LIMITED	920.00	0.6061	38.18	0.2314	0.2442	105.50	0.0196	0.2246	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.2442
4	GURU GOBIND SINGH TPP, ROPAR	PUNJAB STATE POWER CORPORATION LIMITED	840.00	0.6104	35.54	0.2170	1.7212	793.34	0.0244	0.7658	0.6416	0.0000	0.0000	0.0000	0.2858	0.0000	0.0035	0.0000	1.7212
5	GVK POWER (GOINDWALSAHI B) LTD.	PUNJAB STATE POWER CORPORATION LIMITED	540.00	0.8545	33.76	0.2885	0.2455	85.09	0.0000	0.2455	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.2455
6	TALWANDI SABO POWER LTD	TALWANDI SABO POWER LTD.	1980.00	4.8838	39.64	1.9360	1.1680	60.33	0.3159	0.5800	0.2598	0.0000	0.0000	0.0000	0.0123	0.0000	0.0000	0.0000	1.1680
		SUB TOTAL	6140.00	11.1916	36.57	4.0932	5.1469	125.74	0.4847	3.1017	0.9014	0.0098	0.0000	0.0000	0.2981	0.0000	0.0035	0.3476	5.1469
		RAJASTHAN																	
1	KAWAI	ADANI POWER RAJASTHAN LTD.	1320.00	4.8469	29.16	1.4134	1.6122	114.06	0.3731	1.1897	0.0065	0.0000	0.0000	0.0000	0.0428	0.0000	0.0000	0.0000	1.6122
2	JSW ENERGY (BARMER) LIMITED	JSW ENERGY (BARMER) LIMITED (Formerly Raj Westpower Ltd.)	1080.00	6.1338	14.50	0.8895	0.9154	102.91	0.1765	0.6622	0.0000	0.0000	0.0000	0.0000	0.0000	0.0767	0.0000	0.0000	0.9154
3	BARSINGSAR LIGNITE	NLC INDIA LIMITED	250.00	0.1259	14.64	0.0184	0.0184	100.00	0.0035	0.0110	0.0000	0.0000	0.0000	0.0000	0.0000	0.0040	0.0000	0.0000	0.0184
4	CHHABRA	RAJASTHAN RAJYA VIDYUT UTPADAN NGAM LIMITED	1000.00	4.0120	32.18	1.2910	1.1260	87.22	0.2050	0.7040	0.0000	0.0000	0.0000	0.0000	0.0660	0.0000	0.0000	0.1510	1.1260
5	SURATGARH	RAJASTHAN RAJYA VIDYUT UTPADAN NGAM LIMITED	1500.00	0.6560	35.97	0.2360	1.4143	599.38	0.0019	0.1511	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.2613	1.4143
6	KALISINDH	RAJASTHAN RAJYA VIDYUT UTPADAN NGAM LIMITED	1200.00	3.5395	30.81	1.0907	1.3248	121.46	0.1728	0.6731	0.3021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1767	1.3248
7	VS LIGNITE POWER PRIVATE LTD	VS LIGNITE POWER PRIVATE LIMITED	135.00	0.9394	23.05	0.2165	0.2165	100.00	0.0269	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1896	0.2165
8	KOTA SUPER THERMAL POWER STATION	RAJASTHAN RAJYA VIDYUT UTPADAN NGAM LIMITED	1240.00	3.6783	37.42	1.3766	1.7664	128.32	0.1173	1.0127	0.0802	0.0009						0.5553	1.7664

Sl. no.	Name of TPS	Power Utility & State	Installed Capacity	Coal Consumed	Ash Content of Coal	Fly Ash Generation	Fly Ash Utilization	Percentage utilization	In the manufacture of Fly Ash based Bricks / Blocks / Tiles etc.	In the manufacture of Portland Pozzolana Cement	In the construction of Highways & Roads including Flyovers	Part Replacement of Cement in Concrete	In Hydro Power Sector in RCC Dams Construction	In Ash Dyke Raising	In the Reclamation of Low lying Area	In Mine Filling	In Agriculture Waste Land Development	Others	Total Utilization	
			(MW)	MT	%	MT	MT	%	MT	MT	MT	MT	MT	MT	MT	MT	MT	(MT) $\Sigma(10)$ to (19)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	
9	CHHABRA SUPER CRITICAL TPP	RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED	1320.00	4.5087	32.94	1.4852	0.7415	49.93	0.0170	0.7245									0.7415	
		SUB TOTAL	9045.00	28.4405	28.19	8.0172	9.1355	113.95	1.0942	5.1283	0.3888	0.0009	0.0000	0.0000	0.1088	0.0807	0.0000	2.3339	9.1355	
		TAMIL NADU																		
1	MUTIARA	COASTAL ENERGEN PVT. LTD	1200.00	1.4578	4.33	0.0632	0.0666	105.35	0.0140	0.0367	0.0000	0.0000	0.0000	0.0000	0.0159	0.0000	0.0000	0.0000	0.0666	
2	CHEMPLAST LIMITED TPS	CHEMPLAST LIMITED	48.50	0.2155	8.53	0.0184	0.0185	100.65	0.0185	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0185	
3	IL & FS TAMIL NADU POWER COMPANY LTD.	IL & FS TAMIL NADU POWER COMPANY LIMITED	1200.00	2.3896	5.27	0.1260	0.1123	89.16	0.0000	0.1123	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1123	
4	JSW STEEL LIMITED CPP-II	JSW STEEL LIMITED	90.00	0.1270	8.41	0.0107	0.0107	100.53	0.0107	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0107	
5	NEYVELI - I	NLC INDIA LIMITED	600.00	0.8118	4.83	0.0392	0.0280	71.35	0.0037	0.0182	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0280	
6	NEYVELI - I EXPN	NLC INDIA LIMITED	420.00	2.8420	6.22	0.1767	0.1767	100.00	0.0364	0.1022	0.0000	0.0000	0.0000	0.0000	0.0074	0.0000	0.0201	0.0103	0.0003	0.1767
7	NEYVELI - II	NLC INDIA LIMITED	1470.00	7.6190	5.98	0.4557	1.6129	353.96	0.1207	0.1788	1.1571	0.0000	0.0000	0.0000	0.0916	0.0000	0.0646	0.0000	0.0002	1.6129
8	NEYVELI - II EXPN	NLC INDIA LIMITED	500.00	2.0314	6.68	0.1356	0.1356	100.00	0.0975	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0281	0.0000	0.0100	0.1356	
9	NLC TAMILNADU POWER Ltd	NLC TAMIL NADU POWER LIMITED	1000.00	3.5095	32.62	1.1449	1.1449	100.00	0.2007	0.9348	0.0094	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.1449	
10	VALLUR	NTPC TAMILNADU ENERGY COMPANY LTD (NTECL)	1500.00	3.2223	39.62	1.2767	1.5680	122.82	0.1731	0.2285	0.0000	0.2293	0.0000	0.0000	0.0000	0.0000	0.0000	0.9371	1.5680	
11	OPG POWER GENERATION PRIVATE LIMITED	OPG POWER GENERATION PRIVATE LIMITED	414.00	1.2380	6.80	0.0841	0.0841	100.00	0.0168	0.0673	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0841	
12	CUDDALORE - TAQA	TAQA NEYVELLY POWER CO.PVT. LTD.	250.00	0.8995	5.60	0.0503	0.1139	226.24	0.0126	0.0247	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0044	0.0721	0.1139
13	TUTICORIN	TAMIL NADU GENERATION AND DISTRIBUTION LIMITED	1050.00	3.4388	30.61	1.0525	0.7354	69.88	0.1241	0.6065	0.0000	0.0000	0.0000	0.0000	0.0048	0.0000	0.0000	0.0000	0.7354	
14	METTUR-I	TAMIL NADU GENERATION AND DISTRIBUTION LIMITED	840.00	2.7602	32.70	0.9026	1.3459	149.11	0.2166	0.0573	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.3459	
15	METTUR-II	TAMIL NADU GENERATION AND DISTRIBUTION LIMITED	600.00	1.0318	28.14	0.2904	0.2904	100.00	0.0213	0.2448	0.0000	0.0000	0.0000	0.0000	0.0121	0.0000	0.0000	0.0122	0.2904	
16	NORTH CHENNAI-I	TAMIL NADU GENERATION AND DISTRIBUTION LIMITED	630.00	2.3325	38.95	0.9085	2.3328	256.79	0.0180	0.0842	2.1709	0.0597	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.3328	
17	NORTH CHENNAI-II	TAMIL NADU GENERATION AND DISTRIBUTION LIMITED	1200.00	2.9456	36.79	1.0838	1.7759	163.86	0.1676	0.6207	0.9876	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.7759	
18	NEYVELI NEW THERMAL POWER STATION	NLC INDIA LIMITED	1000.00	3.3672	6.20	0.2089	0.2089	100.00	0.0617	0.1134					0.0121		0.0111		0.0105	0.2089
		SUB TOTAL	14012.50	42.2393	19.01	8.0281	11.7616	146.51	1.3141	3.4304	4.3250	0.2890	0.0000	0.1232	0.0207	0.1240	0.0147	2.1204	11.7616	
		TELANGANA																		
1	RAMAGUNDAM	NTPC LTD.	2600.00	10.5400	36.59	3.8570	4.2860	111.12	2.5600	0.8420	0.0830	0.0000	0.0000	0.1700	0.0780	0.5530	0.0000	0.0000	4.2860	
2	SINGARENI TPP	THE SINGARENI COLLIERIES COMPANY LIMITED	1200.00	4.3042	36.51	1.5713	1.6865	107.33	0.2416	0.5173	0.0274	0.2823	0.0000	0.0000	0.0649	0.4331	0.0000	0.1198	1.6865	
3	RAMAGUNDAM	TELANGANA STATE POWER GENERATION CORPORATION LIMITED	62.50	0.2104	42.28	0.0890	0.1015	114.09	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1015	0.1015	
4	KOTHAGUDEM-V	TELANGANA STATE POWER GENERATION CORPORATION LIMITED	500.00	2.1513	46.72	1.0051	0.4566	45.43	0.2467	0.0981	0.1118	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.4566	

Sl. no.	Name of TPS	Power Utility & State	Installed Capacity	Coal Consumed	Ash Content of Coal	Fly Ash Generation	Fly Ash Utilization	Percentage utilization	In the manufacture of Fly Ash based Bricks / Blocks / Tiles etc.	In the manufacture of Portland Pozzolana Cement	In the construction of Highways & Roads including Flyovers	Part Replacement of Cement in Concrete	In Hydro Power Sector in RCC Dams Construction	In Ash Dyke Raising	In the Reclamation of Low lying Area	In Mine Filling	In Agriculture Waste Land Development	Others	Total Utilization
			(MW)	MT	%	MT	MT	%	MT	MT	MT	MT	MT	MT	MT	MT	MT	(MT) $\Sigma(10)$ to (19)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
5	KOTHAGUDEM-VI	TELANGANA STATE POWER GENERATION CORPORATION LIMITED	500.00	1.9332	35.41	0.6846	0.5083	74.25	0.3786	0.0511	0.0786	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.5083	
6	KOTHAGUDEM-VII	TELANGANA STATE POWER GENERATION CORPORATION LIMITED	800.00	2.7943	29.14	0.8142	0.4426	54.37	0.2013	0.2413	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.4426	
7	KAKATIYA (Stage-I)	TELANGANA STATE POWER GENERATION CORPORATION LIMITED	500.00	1.3227	34.32	0.4539	0.3590	79.08	0.2185	0.1243	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0162	0.3590	
8	KAKATIYA (Stage-II)	TELANGANA STATE POWER GENERATION CORPORATION LIMITED	600.00	1.9830	34.00	0.6741	0.5247	77.83	0.3064	0.1974	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0210	0.5247	
9	SITAPURAM TPS	ZIARI CEMENT LIMITED	43.00	0.1600	43.35	0.0693	0.0693	100.00		0.0606					0.0087		0.0000	0.0693	
		SUB TOTAL	6805.50	25.3990	36.29	9.2185	8.4345	91.50	4.1531	2.1320	0.3009	0.2823	0.0000	0.1700	0.1517	0.9861	0.0000	0.2585	8.4345
		UTTAR PRADESH																	
1	BARKHERA	Bajaj Energy Private Limited	90.00	0.1392	33.01	0.0459	0.0458	99.61	0.0144	0.0159	0.0000	0.0000	0.0000	0.0002	0.0152	0.0000	0.0000	0.0000	0.0458
2	KHAMBHAR KHERA	Bajaj Energy Private Limited	90.00	0.1390	31.31	0.0435	0.0434	99.72	0.0051	0.0356	0.0000	0.0000	0.0000	0.0001	0.0025	0.0000	0.0000	0.0000	0.0434
3	KUNDARKI	Bajaj Energy Private Limited	90.00	0.1794	32.42	0.0582	0.0579	99.55	0.0048	0.0512	0.0000	0.0000	0.0000	0.0002	0.0017	0.0000	0.0000	0.0000	0.0579
4	MAQSOODAPUR	Bajaj Energy Private Limited	90.00	0.1432	31.27	0.0448	0.0446	99.67	0.0000	0.0228	0.0000	0.0000	0.0000	0.0001	0.0217	0.0000	0.0000	0.0000	0.0446
5	UTRAULA	Bajaj Energy Private Limited	90.00	0.1956	31.93	0.0625	0.0625	100.00	0.0098	0.0486	0.0000	0.0000	0.0000	0.0000	0.0041	0.0000	0.0000	0.0000	0.0625
6	LALITPUR	LALITPUR POWER GENERATION COMPANY LIMITED	1980.00	4.2211	34.12	1.4402	1.7430	121.03	0.0000	0.7794	0.0011	0.0000	0.0000	0.9626	0.0000	0.0000	0.0000	1.7430	
7	ANPARA 'C' TPS	LANCO ANPARA POWER LIMITED	1200.00	5.3948	32.43	1.7493	0.2953	16.88	0.0099	0.2854	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.2953	
8	MEJA TPP	MEJA URJA NIGAM PRIVATE LIMITED	1320.00	2.7327	37.51	1.0249	0.5722	55.83	0.0055	0.3818	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1849	0.5722	
9	DADRI	NTPC LTD.	1820.00	2.7016	34.81	0.9405	0.9413	100.08	0.1380	0.6565	0.0504	0.0000	0.0000	0.0000	0.0383	0.0000	0.0000	0.0582	0.9413
10	SINGRAULI	NTPC LTD.	2000.00	9.4837	31.47	2.9843	0.9971	33.41	0.0057	0.0000	0.5156	0.0000	0.0000	0.3600	0.1158	0.0000	0.0000	0.9971	
11	RIHAND	NTPC LTD.	3000.00	14.0233	27.97	3.9218	2.0399	52.02	0.1662	0.0790	0.2897	0.0000	0.0000	0.5099	0.7098	0.0000	0.0000	0.2853	2.0399
12	FEROZE GANDHI UNCHAHAR	NTPC LTD.	1550.00	5.1800	38.17	1.9772	3.2903	166.41	0.0440	0.7855	2.4607	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.2903
13	TANDA	NTPC LTD.	1760.00	4.0118	41.73	1.6742	2.8103	167.85	0.0089	0.4564	2.1478	0.0000	0.0000	0.0000	0.1971	0.0000	0.0000	0.0000	2.8103
14	PRAYAGRAJ TPS	PRAYAGRAJ POWER GENERATION COMPANY LTD.	1980.00	6.3843	31.36	2.0022	2.0079	100.29	0.0004	1.3935	0.0000	0.0000	0.0000	0.3445	0.2694	0.0000	0.0000	2.0079	
15	ROSA TPP	ROSA POWER SUPPLY COMPANY LIMITED	1200.00	4.0168	35.01	1.4061	5.0125	356.49	0.0059	1.0376	0.0000	0.0000	0.0000	0.3738	0.0000	0.0000	3.5953	5.0125	
16	ANPARA 'A' & 'B'	UTTAR PRADESH RAJYA VIDYUT UTPADAN NGAM LIMITED	2630.00	9.8953	33.97	3.3609	0.9190	27.34	0.0004	0.1437	0.0000	0.0000	0.0000	0.4466	0.3283	0.0000	0.0000	0.9190	
17	HARDUAGANJ	UTTAR PRADESH RAJYA VIDYUT UTPADAN NGAM LIMITED	610.00	1.4007	39.91	0.5590	1.3909	248.83	0.0686	0.2513	0.0000	0.0000	0.0000	1.0711	0.0000	0.0000	0.0000	1.3909	
18	OBRA	UTTAR PRADESH RAJYA VIDYUT UTPADAN NGAM LIMITED	1000.00	3.4739	40.56	1.4089	0.0807	5.73	0.0032	0.0775	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0807	
19	PANKI	UTTAR PRADESH RAJYA VIDYUT UTPADAN NGAM LIMITED	0.00	0.0000	0.00	0.0000	0.0000	-										0.0000	
20	PARICHHA	UTTAR PRADESH RAJYA VIDYUT UTPADAN NGAM LIMITED	920.00	2.6220	41.36	1.0844	1.0852	100.08	0.0746	0.6205	0.2502	0.0000	0.0000	0.0000	0.1399	0.0000	0.0000	0.0000	1.0852

Sl. no.	Name of TPS	Power Utility & State	Installed Capacity	Coal Consumed	Ash Content o f Coal	Fly Ash Generation	Fly Ash Utilization	Percentage utilization	In the manufacture of Fly Ash based Bricks / Blocks / Tiles etc.	In the manufacture of Portland Pozzolana Cement	In the construction of Highways & Roads including Flyovers	Part Replacement of Cement in Concrete	In Hydro Power Sector in RCC Dams Construction	In Ash Dyke Raising	In the Reclamation of Low lying Area	In Mine Filling	In Agriculture Waste Land Development	Others	Total Utilization
			(MW)	MT	%	MT	MT	%	MT	MT	MT	MT	MT	MT	MT	MT	MT	(MT) Σ(10) to (19)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	SUB TOTAL		23420.00	76.3385	33.78	25.7889	23.4399	90.89	0.5653	7.1223	5.7156	0.0000	0.0000	1.3171	4.3265	0.2694	0.0000	4.1236	23.4399
	WEST BENGAL																		
1	Budge Budge Generating Station	Calcutta Electric Supply Corporation Limited	750.00	3.1670	32.93	1.0430	1.0430	100.00	0.0890	0.7900	0.0000	0.0000	0.0000	0.1640	0.0000	0.0000	0.0000	1.0430	
2	Southern Generating Station	Calcutta Electric Supply Corporation Limited	135.00	0.0650	32.31	0.0210	0.0210	100.00	0.0020	0.0110	0.0000	0.0060	0.0000	0.0000	0.0020	0.0000	0.0000	0.0210	
3	Titagarh Generating Station	Calcutta Electric Supply Corporation Limited	240.00	0.0000	0.00	0.0000	0.0000	-										0.0000	
4	DURGAPUR	Damodar Valley Corporation	210.00	0.1086	49.35	0.0536	0.1067	199.04	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1067	0.0000	0.0000	0.1067	
5	MEJIA	Damodar Valley Corporation	2340.00	8.4702	46.69	3.9548	2.7253	68.91	0.1498	1.0193	0.0000	0.0000	0.0000	0.0000	1.5562	0.0000	0.0000	2.7253	
6	DURGAPUR STEEL	Damodar Valley Corporation	1000.00	3.7463	46.04	1.7248	1.5073	87.39	0.2259	0.6428	0.0000	0.0000	0.0000	0.2682	0.0000	0.0000	0.3704	1.5073	
7	RAGHUNATHPUR	Damodar Valley Corporation	1200.00	3.1675	43.99	1.3933	0.1936	13.89	0.0121	0.1814	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1936	
8	THE DURGAPUR POWER PROJECTS STATION	THE DURGAPUR PROJECTS LIMITED	550.00	1.7327	36.56	0.6335	0.5650	89.19	0.0002	0.4967	0.0000	0.0000	0.0000	0.0681	0.0000	0.0000	0.0000	0.5650	
9	HALDIA ENERGY LIMITED	HALDIA ENERGY LIMITED	600.00	2.8110	34.08	0.9580	0.9580	100.00	0.0270	0.7930	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1380	0.9580	
10	DISHERGARH POWER STATION	INDIA POWER CORPORATION LTD.	12.00	0.0306	52.67	0.0161	0.0161	100.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0161	0.0000	0.0161	
11	DURGAPUR CPP	NTPC - SAI POWER COMPANY LIMITED	120.00	0.6385	25.29	0.1615	0.1925	119.20	0.0234	0.0598	0.0000	0.0000	0.0000	0.1093	0.0000	0.0000	0.0000	0.1925	
12	FARAKKA	NTPC LTD.	2100.00	8.2039	34.73	2.8496	3.6162	126.90	0.1149	0.2621	2.5419	0.0000	0.0000	0.0000	0.4154	0.0000	0.0000	0.2818	3.6162
13	KOLAGHAT	WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED	1260.00	1.3871	42.69	0.5921	0.9542	161.15	0.0579	0.3139	0.0000	0.0000	0.0000	0.5824	0.0000	0.0000	0.0000	0.9542	
14	SAGARDIGHI	WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED	1600.00	6.0665	35.58	2.1582	1.4987	69.44	0.0522	0.6532	0.0000	0.0000	0.0000	0.7933	0.0000	0.0000	0.0000	1.4987	
15	BANDEL	WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED	335.00	0.8082	40.21	0.3250	0.3299	101.50	0.0030	0.1873	0.0365	0.0000	0.0000	0.0000	0.1031	0.0000	0.0000	0.0000	0.3299
16	SANTALDIH	WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED	500.00	2.2790	45.73	1.0423	1.2079	115.89	0.0353	0.5841	0.0000	0.0000	0.0000	0.5824	0.0000	0.0000	0.0061	1.2079	
17	BAKRESWAR	WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED	1050.00	4.6883	37.33	1.7501	1.4685	83.90	0.0448	0.6860	0.0000	0.0000	0.0000	0.5163	0.2213	0.0000	0.0000	1.4685	
	SUB TOTAL		14002.00	47.3704	39.43	18.6768	16.4036	87.83	0.8375	6.6808	2.5785	0.0060	0.0000	0.0000	3.7111	1.7935	0.0000	0.7962	16.4036
	GRAND TOTAL		209990.50	686.3420	33.88	232.5595	214.9125	92.41	30.1832	60.0229	34.9851	1.9189	0.0611	18.4722	36.2463	14.4187	0.0773	18.5267	214.9125