



REPORT
ON
FLY ASH GENERATION
AT
COAL / LIGNITE BASED THERMAL POWER STATIONS
AND
ITS UTILIZATION IN THE COUNTRY
FOR THE
1ST HALF OF THE YEAR 2021 – 2022
(April 2021 to September 2021)



CENTRAL ELECTRICITY AUTHORITY
NEW DELHI

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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 1ST HALF OF THE YEAR 2021-22 (APRIL 2021 TO SEPTEMBER 2021)

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 24-63 % in comparison to imported coal which has low ash content of the order of 2-18 %. Large quantity of ash is, thus being generated at coal / lignite based Thermal Power Stations in the country, which not only requires 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 since 1996-97 the fly ash generation and its utilization in the country at coal / lignite based Thermal Power Stations. Data on fly ash generation and utilization including modes of utilization is obtained from Thermal Power Stations on half yearly as well as 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. The said report is forwarded to the Ministry of Power, the Ministry of Science and Technology and the Ministry of Environment, Forests and Climate Change (MoEF & CC). It is also uploaded on the web site of CEA for bringing out the information in the public domain so that users of fly ash have access to the information on the availability of fly ash at different Thermal Power Stations (TPSs) in the country.

To reduce the requirement of land for disposal of fly ash in ash ponds and to address the problem of pollution caused by fly ash, Ministry of Environment, Forests and Climate Change has issued various Notifications on fly ash utilization, first Notification was issued on 14th September, 1999 which was subsequently amended in 2003, 2009 and 2016 vide Notifications dated 27th August, 2003, 3rd November, 2009 and 25th January, 2016 respectively.

Towards the efforts in the direction of enhancing gainful utilization of fly ash, the latest MoEF & CC's Notification of 25th January, 2016 stipulates mandatory uploading of details of fly ash available on TPSs' website and updating of stock position at least once in every month; increase in mandatory jurisdiction of area of application from 100 km to 300 km; cost of transportation of ash for road construction projects or for manufacturing of ash based products or use as soil conditioner in agricultural activity to be borne entirely by TPS up to 100 km and equally shared between user and TPP for more than 100 km and up to 300 km; cost of transportation of ash for road construction projects under Pradhan Mantri Gramin Sadak Yojna and asset creation programs of the Government involving construction of buildings, road, dam and embankment to be borne entirely by TPP within a radius of 300 Kms. and mandatory use of fly ash based products in all Government schemes or programs e.g.

Pradhan Mantri Gramin Sadak Yojana, Mahatma Gandhi National Rural Employment Guarantee Act, Swachh Bharat Abhiyan, etc.

The Notification of 3rd November, 2009 prescribes 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 First year; 60% in Second year; 75% in Third year; 90% in Fourth year and 100% in Fifth year. The new Thermal Power Stations coming into operation after the MoEF & CC's notification (i.e. 3rd November, 2009) are to achieve the target of fly ash utilization as 50% in the First year, 70% in Second Year, 90% during Third Year and 100% during Fourth Year from their date of commissioning.

The report on fly ash generation and its utilization at coal / lignite based Thermal Power Stations provides the status of fly ash generation as well as utilization in the country. The report also contains conclusion and recommendation for increasing the present rate of utilization of the fly ash.

2.0 ASH GENERATION & UTILIZATION DURING THE 1ST HALF OF THE YEAR 2021-22

2.1 A Brief Summary :

Fly ash generation & utilization data for the 1st half of the Year 2021-22 (April 2021 to September 2021) has been received from 197 (**One Hundred Ninety Seven**) coal / lignite based Thermal Power Stations of various power utilities in the country.

Data thus received has been analyzed 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

Description		1st Half of Year 2020-21	1st Half of Year 2021-22
No. of Thermal Power Stations from which data was received	:	199	197
Installed capacity (MW)	:	207220.50	211668.50
Coal consumed (Million tonnes)	:	312.99	376.22
Fly Ash Generation (Million tonnes)	:	106.37	133.90
Fly Ash Utilization (Million tons)	:	84.22	109.32
Percentage Utilization of Fly Ash (%)	:	79.18	81.65
Percentage Average Ash Content (%)	:	33.98	35.59

Power Station wise fly ash generation & its utilization status including modes of utilization for the 1st half of the Year 2021-22 for all the thermal power stations is given in the statement at **Annexure-I**.

2.2 Power Utility-wise Status of Fly Ash Generation & its Utilization during the 1st Half of the Year 2021-22

The status of fly ash generation & utilization for the 1st half of the year 2021-22 for various power utilities in the country has been assessed based on data received from Thermal Power Stations and the same is given in **Table-II** :

TABLE - II

POWER UTILITY WISE FLY ASH GENERATION AND UTILIZATION DURING THE 1st HALF OF THE YEAR 2021-22

Sl. No.	Name of Power Utility	No. of TPS	Installed Capacity (MW)	Fly Ash Generation (Million-tonnes)	Fly Ash Utilization (Million-tonnes)	Percentage Utilization %
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Aarti Steels Limited	1	90.00	0.1236	0.1236	100.00
2	APGENCO	2	3410.00	3.0105	2.6425	87.78
3	APPDCL	1	1600.00	0.5311	0.3773	71.04
4	ACB (INDIA) Ltd.	5	490.00	0.5966	0.5965	99.97
5	ARAVALI POWER COMPANY PRIVATE LIMITED	1	1500.00	0.7000	0.6420	91.71
6	ADANI POWER (Mundra) LIMITED	1	4620.00	0.2501	0.2536	101.42
7	Adani Power (Maharashtra) Ltd.	1	3300.00	2.1690	1.3930	64.22
8	Adani Power Rajasthan Ltd.	1	1320.00	0.7868	0.6825	86.75
9	Abhijeet MADC Nagpur Energy Pvt. Ltd.	1	246.00	0.0000	0.0000	-
10	ADANI ELECTRICITY MUMBAI LIMITED	1	500.00	0.3242	0.2904	89.58
11	Adhunik Power & Natural Resources Ltd	1	540.00	0.5432	0.5432	100.00
12	Bajaj Energy Private Ltd.	5	450.00	0.2665	0.2657	99.67
13	BHARATIYA RAIL BIJLEE COMPANY LTD	1	750.00	0.6781	0.2388	35.21
14	BHARAT ALUMINIUM COMPANY LTD (BALCO)	2	1740.00	1.6047	1.3484	84.03

Sl. No.	Name of Power Utility	No. of TPS	Installed Capacity (MW)	Fly Ash Generation (Million-tonnes)	Fly Ash Utilization (Million-tonnes)	Percentage Utilization %
15	BHADRESHWAR VIDYUT PVT LTD	1	300.00	0.0215	0.0215	100.41
16	C.E.S.C.	3	1125.00	0.6128	0.6128	100.00
17	C.S.P.G.C.L	3	2840.00	2.7719	0.8083	29.16
18	COASTAL ENERGEN PVT. LTD	1	1200.00	0.0498	0.0498	100.00
19	Coastal Gujarat Power Limited	1	4150.00	0.1500	0.1600	106.67
20	CHEMPLAST SANMAR LTD.	1	48.50	0.0102	0.0103	100.59
21	DB Power Ltd.	1	1200.00	1.5229	1.2018	78.92
22	Damodar Valley Corporation	7	6750.00	6.1241	4.2957	70.14
23	The Durgapur Projects Limited	1	550.00	0.3170	0.2437	76.86
24	Dhariwal Infrastructure Ltd. (Maharashtra)	1	600.00	0.4822	0.4696	97.38
25	ESSAR POWER (MP) LTD.	1	1200.00	0.3760	0.0847	22.53
26	Essar Power Gujarat Limited	1	1200.00	0.0000	0.0000	-
27	Gujarat Industrial Power Corporation Ltd	1	500.00	0.2239	0.2239	100.00
28	Gujarat Mineral Development Corporation Ltd	1	250.00	0.0575	0.1015	176.63
29	Gujarat State Electricity Corporation Ltd	6	5160.00	2.3177	2.4901	107.44
30	G.M.R. Warora Energy Ltd. (Maharashtra)	1	600.00	0.3186	0.4407	138.33
31	GMR Kamalanga Energy Ltd (Odisha)	1	1050.00	1.1544	1.5772	136.62
32	Haryana Power Generation Corporation Ltd	3	2510.00	0.9074	4.6041	507.39
33	HALDIA ENERGY LIMITED	1	600.00	0.5808	0.5808	100.00
34	HINDUJA NATIONAL POWER COPORATION LIMITED	1	1040.00	0.0000	0.0341	-
35	INDIAN METALS & FERRO ALLOYS LTD.	1	200.00	0.2532	0.2532	100.00
36	IL & FS TAMIL NADU POWER COMPANY Ltd	1	1200.00	0.0529	0.0529	100.00
37	IDEAL ENERGY PROJECTS Ltd.	1	270.00	0.0000	0.0000	-
38	JHAJJAR POWER LIMITED	1	1320.00	0.9902	0.9733	98.29

Sl. No.	Name of Power Utility	No. of TPS	Installed Capacity (MW)	Fly Ash Generation (Million-tonnes)	Fly Ash Utilization (Million-tonnes)	Percentage Utilization %
39	JINDAL POWER LIMITED	2	3400.00	2.5665	1.5537	60.54
40	JAIPRAKASH POWER VENTURES LIMITED	2	1820.00	1.1433	0.8216	71.86
41	JSW Energy Ltd.	2	2060.00	0.1232	0.1232	100.01
42	JINDAL INDIA THERMAL POWER LIMITED	1	1200.00	1.2617	0.6465	51.24
43	JINDAL STEEL AND POWER LIMITED	3	1685.00	1.2419	0.8488	68.35
44	JSW Energy (Barmer) Ltd.	1	1080.00	0.4944	0.4670	94.44
45	JSW STEEL LTD. Salem Works	1	90.00	0.0039	0.0039	99.67
46	JHABUA POWER LIMITED	1	600.00	0.5234	0.3207	61.27
47	Karnataka Power Corporation Ltd.	2	3420.00	1.6222	1.3023	80.28
48	KANTI BIJLEE UTPADAN NIGAM LIMITED (NTPC JV)	1	610.00	0.4108	0.5534	134.73
49	M/s KSK MAHANADI POWER COMPANY LIMITED	1	1800.00	0.9925	0.9987	100.63
50	LANCO AMARKANTAK POWER LIMITED	1	600.00	0.4745	0.3595	75.76
51	LALITPUR POWER GENERATION COMPANY LIMITED	1	1980.00	1.2553	1.1729	93.43
52	LANCO ANPARA POWER LTD	1	1200.00	0.8572	0.1089	12.70
53	Maithon Power Ltd. (DVC + Tata Power JV)	1	1050.00	1.0570	0.7840	74.17
54	Madhya Pradesh Power Generation Company Ltd.	4	5400.00	2.5429	1.7508	68.85
55	Maharashtra State Power Generation Company Ltd.	7	9750.00	6.5171	9.0349	138.63
56	MARUTI CLEAN COAL & POWER LTD.	1	300.00	0.3629	0.3629	100.00
57	MSELDC, Captive Consumers	1	540.00	0.1890	0.1890	100.00
58	MEENAKSHI ENERGY Ltd.	1	300.00	0.0171	0.0016	9.53
59	RAIGARH ENERGY GENERATION LTD	1	600.00	0.5440	0.2605	47.89
60	MB POWER (MP) LIMITED	1	1200.00	0.9740	0.9765	100.26

Sl. No.	Name of Power Utility	No. of TPS	Installed Capacity (MW)	Fly Ash Generation (Million-tonnes)	Fly Ash Utilization (Million-tonnes)	Percentage Utilization %
61	MEJA URJA NIGAM PVT LTD. (NTPC JV)	1	1320.00	1.0650	0.7345	68.97
62	N.L.C. LTD	5	3640.00	0.7294	1.5425	326.17
63	NLC TAMILNADU POWER LIMITED	1	1000.00	0.5892	0.5887	99.92
64	NSPCL	4	814.00	1.0342	0.6212	60.07
65	NTECL (NTPC JV)	1	1500.00	1.1256	1.1250	99.95
66	NTPC LTD.	24	48780.00	36.1422	23.6248	65.37
67	NABHA POWER LIMITED	1	1400.00	1.0182	1.0283	100.99
68	NATIONAL ALUMINIUM COMPANY LIMITED (NALCO)	1	1200.00	1.4850	1.1010	74.14
69	O.P.G.C.L.	1	1740.00	1.8679	0.4784	25.61
70	OPG POWER GENERATION PVT LTD	1	414.00	0.0652	0.0652	100.00
71	Punjab State Power Corporation Ltd.	4	2300.00	0.7908	1.2683	160.39
72	PRAYAGRAJ POWER GENERATION COMPANY LIMITED	1	1980.00	1.2785	0.9064	70.89
73	R K M POWERGEN PRIVATE LIMITED	1	1440.00	1.0802	1.0801	99.99
74	Rajasthan Rajya Vidyut Utpadan Nigam Ltd.	5	6260.00	2.3141	2.6939	116.41
75	Rosa Power Supply Company Ltd.	1	1200.00	0.8452	0.6966	82.42
76	RATTAN INDIA POWER LTD.	1	1350.00	1.1736	0.4604	39.23
77	RAICHUR POWER CORPORATION LIMITED	1	1600.00	0.4814	0.3844	79.85
78	RASHTRIYA ISPAT NIGAM LTD.	1	315.00	0.3028	0.4049	133.71
79	Raipur Energen Limited	1	1370.00	1.0997	0.9822	89.32
80	Reliance Power Ltd.,	1	3960.00	2.7036	1.9828	73.34
81	SAI LILAGARH POWER GENERATION LTD.	1	86.00	0.0000	0.0000	-
82	SEMBCORP ENERGY INDIA LIMITED	1	1320.00	0.8440	0.8438	99.99
83	SWASTIK POWER & MINERALS RESOURCES PVT. LTD	1	25.00	0.0000	0.0000	-

Sl. No.	Name of Power Utility	No. of TPS	Installed Capacity (MW)	Fly Ash Generation (Million-tonnes)	Fly Ash Utilization (Million-tonnes)	Percentage Utilization %
84	SKS POWER GENERATION (CHHATTISGARH) LTD.	1	600.00	0.3634	0.3516	96.76
85	THE SINGARENI COLLIERIES COMPANY LIMITED	1	1200.00	0.8820	0.9530	108.05
86	TAQA Neyveli Power Company Pvt. Ltd.	1	250.00	0.0330	0.1208	366.08
87	TATA POWER COMPANY LTD.	2	1297.50	0.5263	0.4863	92.41
88	TORRENT POWER LTD.	1	362.00	0.1917	0.1917	100.00
89	TAMIL NADU GENERATION & DISTRIBUTION CORPORATION LTD. (TANGEDCO)	5	4320.00	2.6678	3.0586	114.65
90	TELANGANA STATE POWER GENERATION CORPORATION LTD. (TSGENCO)	6	2962.50	2.1621	1.2543	58.01
91	TRN ENERGY PRIVATE LIMITED	1	600.00	0.1893	0.1130	59.68
92	TENUGHAT VIDYUT NIGAM LIMITED	1	420.00	0.1668	0.1377	82.56
93	TALWANDI SABO POWER LTD.	1	1980.00	0.9419	1.0937	116.11
94	Uttar Pradesh Rajya Vidyut Utpadan Nigam Ltd. (UPRVUNL)	4	5220.00	3.4813	0.8831	25.37
95	Udupi Power Corporation Limited	1	1200.00	0.0399	0.0405	101.42
96	VIDARBHA INDUSTRIES POWER LIMITED	1	600.00	0.0000	0.0000	-
97	VS LIGNITE PLOWER PVT LTD.	1	135.00	0.1091	0.1091	100.00
98	VEDANTA LTD.	2	3615.00	4.4958	4.2730	95.05
99	The West Bengal Power Development Corporation Ltd. (WBPDCCL)	5	4745.00	3.5186	2.2736	64.62
100	Zuari Cement Limited	1	43.00	0.0429	0.0429	100.00
	GRAND TOTAL	197	211668.50	133.9017	109.3248	81.65

Note: Percentage utilization of fly ash (i.e. Total Ash for Generation and Utilization purpose) more than 100% shows, that the ash utilization over and above 100% is the ash utilized from Ash Pond.

It may be seen from the **Table-II** above that:

The data of fly ash generation and utilization for the 1st half of the year 2021-22 was received from **100** Power Utilities having **197** Thermal Power Stations, out of which **38** Power Utilities and **71** Thermal Power Stations have achieved 100% or more average fly ash utilization respectively. Further, **15** Power Utilities have achieved average fly ash utilization in the range of 90% to less than 100% in respect of their Thermal Power Stations numbering **29**.

The performance of power utilities during the 1st half of the year 2021-22 is tabulated below:

TABLE - III

POWER UTILITY-WISE RANGE OF PERCENTAGE FLY ASH UTILIZATION

Sl. No.	Level of Fly Ash utilization	No. of Power Utilities
		1 st Half of the Year 2021-22
(1)	(2)	(3)
1	100% and more than 100%	38
2	Less than 100% and up to 90%	15
3	Less than 90% and up to 70%	19
4	Less than 70% and up to 50%	12
5	Less than 50%	9
6	No Generation	7
	TOTAL	100

2.3 State wise Status of Fly Ash Generation & its Utilization during the 1st half of the Year 2021-22

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

TABLE-IV

**STATE WISE FLY ASH GENERATION AND ITS UTILIZATION DURING THE
1ST HALF OF THE YEAR 2021-22**

Sl. No.	Name of State	No. of TPSs	Installed Capacity (MW)	Fly Ash Generation (Million tonnes)	Fly Ash Utilization (Million tonnes)	Percentage Utilization (%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Andhra Pradesh	8	9985.00	6.3503	5.8313	91.83
2	ASSAM	1	750.00	0.3726	0.2203	59.13
3	BIHAR	6	7060.00	5.4267	4.2073	77.53
4	CHHATTISGARH	30	25720.00	22.4256	14.0361	62.59
5	GUJARAT	13	16542.00	3.2123	3.4423	107.16
6	HARYANA	5	5330.00	2.5976	6.2194	239.43
7	JHARKHAND	7	4557.50	4.1445	3.5994	86.85
8	KARNATAKA	6	9480.00	2.6656	2.1289	79.87
9	MADHYA PRADESH	13	21860.00	13.8422	7.8310	56.57
10	MAHARASHTRA	20	23346.00	13.3622	14.3721	107.56
11	ODISHA	12	14625.00	16.2451	11.4169	70.28
12	PUNJAB	6	5680.00	2.7509	3.3903	123.24
13	RAJASTHAN	9	9045.00	3.7893	4.0373	106.54
14	TAMIL NADU	17	13412.50	5.2421	6.5328	124.62
15	TELANGANA	9	6805.50	5.1050	4.3313	84.84
16	UTTAR PRADESH	19	23480.00	15.5558	9.4744	60.91
17	WEST BENGAL	16	13990.00	10.8139	8.2536	76.32
	GRAND TOTAL	197	211668.50	133.9017	109.3248	81.65

It may be seen from **Table-IV** above that:

- (i) **Six (6)** states namely Chhattisgarh, Madhya Pradesh, Maharashtra, Odisha, Uttar Pradesh and West Bengal each have generated more than 10 million-ton of fly ash during the 1st half of the Year 2021-22. Maximum fly ash of more than **20** million-ton was generated in Chhattisgarh during the aforesaid period.
- (ii) During the 1st half of the Year 2021-22, Out of **17** states, Gujarat, Haryana, Maharashtra, Punjab, Rajasthan and Tamil Nadu have achieved the fly ash

utilization level of more than 100% with Haryana reporting highest **239.43** % fly ash utilization.

3.0 PRESENT STATUS OF FLY ASH UTILIZATION AS PER MoEF & CC's NOTIFICATION OF 3rd NOVEMBER, 2009

Fly ash generation and utilization data received from Thermal Power Stations / Power Utilities in the country for the 1st half of the year 2021-22 has been compiled to see the fly ash utilization vis-à-vis the target of fly ash utilization as prescribed in MoEF & CC's notification of 3rd November, 2009.

During the 1st half of the Year 2021-22, all those thermal power stations which were in operation on the date of issuance of MoEF & CC'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. All those thermal power stations which have come into operation after the date of issuance of MoEF & CC's notification (i.e. 3rd November, 2009) should have achieved the target of fly ash utilization of 100% within four years depending upon their date of commissioning. However, it is seen that the target set by MoEF & CC's notification has not been achieved by most of the Thermal Power Stations.

3.1 Range of Fly Ash Utilization during the 1st Half of the Year 2021-22

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

TABLE – V

POWER STATION WISE RANGE OF PERCENTAGE FLY ASH UTILIZATION

Sl. No.	Level of Fly Ash utilization	1st Half of the Year 2021 - 22
(1)	(2)	(3)
1	100% and more than 100%	71
2	Less than 100% and up to 90%	29
3	Less than 90% and up to 70%	35
4	Less than 70% and up to 50%	26
5	Less than 50%	28
6	No Generation	8
	TOTAL	197

3.2 Thermal Power Stations that have achieved Fly Ash utilization level of 100% or more during the 1st half of the Year 2021-22

The following Thermal Power Stations, as given in **Table – VI**, have achieved the fly ash utilization level of 100% or more during the 1st half of the year 2021-22.

TABLE–VI

THERMAL POWER STATIONS WITH FLY ASH UTILIZATION LEVEL OF 100% OR MORE DURING THE 1st HALF OF THE YEAR 2021-22

Sl No.	Name of TPS	Power Utility	Installed Capacity	Fly ash Generation	Fly ash Utilization	% age
			(Mega Watts)	(Million Tonnes)	(Million Tonnes)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Aarti Steels Limited	Aarti Steels Limited	90.0	0.1236	0.1236	100.00
2	CHAKABURA TPP	ACB (INDIA) Ltd.	30.0	0.0187	0.0187	100.00
3	CHAKABURA TPP (EXTN)	ACB (INDIA) Ltd.	30.0	0.0193	0.0193	100.00
4	RATIJA TPS	ACB (INDIA) LIMITED	100.0	0.1823	0.1823	100.00
5	MUNDRA TPS	ADANI POWER (MUNDRA) LIMITED	4620.0	0.2501	0.2536	101.42
6	Adhunik PNR Ltd	Adhunik Power & Natural Resources Ltd	540.0	0.5432	0.5432	100.00
7	BARKHERA	Bajaj Energy Private Ltd.	90.0	0.0493	0.0493	100.12
8	BHADRESHWAR VIDYUT PVT LTD	BHADRESHWAR VIDYUT PVT LTD	300.0	0.0215	0.0215	100.41
9	Budge Budge Generating Station	C.E.S.C.	750.0	0.5921	0.5921	100.00
10	Southern Generating Station	C.E.S.C.	135.0	0.0207	0.0207	100.00
11	MUTIARA	COASTAL ENERGEN PVT. LTD	1200.0	0.0498	0.0498	100.00
12	MUNDRA UMPP	Coastal Gujarat Power Limited	4150.0	0.1500	0.1600	106.67
13	CHEMPLAST LTD TPS	CHEMPLAST SANMAR LTD	48.5	0.0102	0.0103	100.59
14	CHANDRAPURA	Damodar Valley Corporation	500.0	0.5270	0.5609	106.43
15	SURAT LIGNITE	Gujarat Industrial Power corporation Ltd	500.0	0.2239	0.2239	100.00
16	AKRIMOTA	Gujarat Mineral Development corporation Ltd	250.0	0.0575	0.1015	176.63
17	GANDHINAGAR	Gujarat State Electricity corporation Ltd	630.0	0.2937	0.7529	256.35

SI No.	Name of TPS	Power Utility	Installed Capacity	Fly ash Generation	Fly ash Utilization	% age
			(Mega Watts)	(Million Tonnes)	(Million Tonnes)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
18	KUTCH LIGNITE	Gujarat State Electricity corporation Ltd	150.0	0.0992	0.1589	160.18
19	SIKKA	Gujarat State Electricity corporation Ltd	500.0	0.0431	0.1889	438.28
20	GMR WARORA ENERGY Ltd.	GMR WARORA ENERGY Ltd.	600.0	0.3186	0.4407	138.33
21	GMR KAMALANGA TPP	GMR KAMALANGA ENERGY Ltd.	1050.0	1.1544	1.5772	136.62
22	RAJIV GANDHI TPP HISAR	Haryana Power Generation Corporation Ltd	1200.0	0.2962	0.4182	141.19
23	PANIPAT	Haryana Power Generation Corporation Ltd	710.0	0.2409	3.9550	1641.97
24	HALDIA ENERGY LIMITED	HALDIA ENERGY LIMITED	600.0	0.5808	0.5808	100.00
25	HINDUJA NATIONAL POWER COPORATION TPP (Vizag)	HINDUJA NATIONAL POWER COPORATION LIMITED	1040.0	0.0000	0.0341	100.00
26	INDIAN METALS & FERRO ALLOYS LTD.	INDIAN METALS & FERRO ALLOYS Ltd.	200.0	0.2532	0.2532	100.00
27	IL & FS TAMIL NADU POWER COMPANY Ltd	IL & FS TAMIL NADU POWER COMPANY Ltd	1200.0	0.0529	0.0529	100.00
28	JAYPEE BINA	JAIPRAKASH POWER VENTURES LIMITED	500.0	0.3215	0.3215	100.00
29	JSW Energy Ltd. (Ratnagiri)	JSW Energy Ltd	1200.0	0.0171	0.0172	100.04
30	JSW Energy Ltd, (Vijayanagar)	JSW Energy Limited	860.0	0.1060	0.1060	100.00
31	Kharsia CPP	JINDAL STEEL AND POWER LIMITED	299.0	0.1715	0.1715	100.00
32	KANTI BIJLEE UTPADAN NIGAM LIMITED	KANTI BIJLEE UTPADAN NIGAM LIMITED (NTPC JV)	610.0	0.4108	0.5534	134.73
33	KMPCL-Nariyara	M/s KSK MAHANADI POWER COMPANY LIMITED	1800.0	0.9925	0.9987	100.63
34	SATPURA	Madhya Pradesh Power Generation Company Ltd.	1330.0	0.4189	0.4313	102.98
35	BHUSAWAL - MSPGCL	Maharashtra State Power Generation Company Ltd.	1210.0	0.8605	0.8824	102.55
36	NASHIK	Maharashtra State Power Generation Company Ltd.	630.0	0.2848	1.6631	583.91
37	PARLI	Maharashtra State Power Generation Company Ltd.	750.0	0.3155	3.9171	1241.48
38	PARAS	Maharashtra State Power Generation Company Ltd.	500.0	0.3590	0.4833	134.62
39	MCCPL BANDHAKHAR	Maruti Clean Coal & Power Ltd	300.0	0.3629	0.3629	100.00

SI No.	Name of TPS	Power Utility	Installed Capacity	Fly ash Generation	Fly ash Utilization	% age
			(Mega Watts)	(Million Tonnes)	(Million Tonnes)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
40	SAI WARDHA POWER Ltd. WARORA	MSELDC, Captive Consumers,	540.0	0.1890	0.1890	100.00
41	ANUPPUR	MB POWER (MP) LIMITED	1200.0	0.9740	0.9765	100.26
42	NEYVELI -I EXPN	N.L.C.LTD	420.0	0.0860	0.0860	100.00
43	NEYVELI - II	N.L.C.LTD	1470.0	0.3402	1.1533	339.04
44	NEYVELI - II EXPN	N.L.C.LTD	500.0	0.0752	0.0752	100.00
45	NEYVELI NEW TPS	N.L.C.LTD	1000.0	0.1431	0.1431	100.00
46	BARSINGSAR LIGNITE	N.L.C.LTD	250.0	0.0849	0.0849	100.00
47	FEROZE GANDHI UNCHAHAR	N.T.P.C. LTD	1550.0	1.1199	1.4736	131.58
48	TANDA	N.T.P.C.LTD	1760.0	1.1446	1.2471	108.95
49	RAMAGUNDAM - NTPC	N.T.P.C.LTD	2600.0	2.0180	2.0810	103.12
50	FARAKKA	N.T.P.C.LTD	2100.0	1.4070	1.8532	131.72
51	BARH SUPER TPS	N.T.P.C.LTD	1320.0	1.0200	1.1429	112.04
52	Rajpura TPS	NABHA POWER LIMITED,	1400.0	1.0182	1.0283	100.99
53	OPG POWER GENERATION PVT LTD	OPG POWER GENERATION PVT LTD.,	414.0	0.0652	0.0652	100.00
54	Guru Nanakdev TPP, BATHINDA	Punjab State Power Corporation Ltd.	0.0	0.0000	0.1568	100.00
55	Guru Gobind Singh TPS, Ropar	Punjab State Power Corporation Ltd.	840.0	0.2430	0.7106	292.45
56	SURATGARH TPS	Rajasthan Rajya Vidyut Utpadan Nigam Ltd.	1500.0	0.2459	0.9142	371.85
57	Kota Super TPS	Rajasthan Rajya Vidyut Utpadan Nigam Ltd.	1240.0	0.6272	0.7096	113.14
58	RINL CAPTIVE TPP, VISAKHAPATNAM	RASHTRIYA ISPAT NIGAM LTD.,	315.0	0.3028	0.4049	133.71
59	SINGARENI	THE SINGARENI COLLIERIES COMPANY LIMITED	1200.0	0.8820	0.9530	108.05
60	CUDDALORE - TAQA	TAQA Neyveli Power Company Pvt. Ltd.	250.0	0.0330	0.1208	366.08
61	SABARMATI	TORRENT POWER LTD.	362.0	0.1917	0.1917	100.00
62	METTUR-II	Tamil Nadu Generation & Distribution Corporation Ltd. (TANGEDCO)	600.0	0.3785	0.3785	100.00
63	NORTH CHENNAI-I	Tamil Nadu Generation & Distribution Corporation Ltd. (TANGEDCO)	630.0	0.5605	1.1324	202.04

SI No.	Name of TPS	Power Utility	Installed Capacity	Fly ash Generation	Fly ash Utilization	% age
			(Mega Watts)	(Million Tonnes)	(Million Tonnes)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
64	NORTH CHENNAI-II	Tamil Nadu Generation & Distribution Corporation Ltd. (TANGEDCO)	1200.0	0.5315	0.6524	122.75
65	RAMAGUNDAM-B	Telangana State Power Generation Corporation Ltd.(TSGENCO)	62.5	0.0435	0.0502	115.28
66	TALWANDI SABO POWER LTD	TALWANDI SABO POWER LTD.,	1980.0	0.9419	1.0937	116.11
67	Harduaganj TPP	Uttar Pradesh Rajya Vidyut Utpadan Nigam Ltd. (UPRVUNL)	670.0	0.3250	0.3485	107.22
68	UDUPI	Udupi Power Corporation Limited	1200.0	0.0399	0.0405	101.42
69	VS LIGNITE POWER PVT LTD	VS LIGNITE POWER PVT LTD	135.0	0.1091	0.1091	100.00
70	KOLAGHAT	The West Bengal Power Development Corporation Ltd. (WBPDCCL)	1260.0	0.6087	0.6702	110.10
71	Sitapuram Power Plant	M/S Zuari Cement Limited	43.0	0.0429	0.0429	100.00

It may be seen from **Table - VI** above that:

During the 1st half of the Year 2021-22, **71** Thermal Power Stations have achieved the fly ash utilization level of 100 % or more, out of which **43** Thermal Power Stations have achieved fly ash utilization level of more than 100 %.

Fly ash utilization level of more than 100 % indicates full utilization of fly ash generated during the period of report along with that from ash pond.

3.3 Thermal Power Stations with Fly Ash Utilization Level of 90% to less than 100% during the 1st half of the Year 2021-22

The names of Thermal Power Stations which have achieved the fly ash utilization in the range of 90% to less than 100% during the 1st half year 2021-22 along with fly ash utilization level achieved by each of these power stations are given in **Table - VII** below:

TABLE - VII**THERMAL POWER STATIONS WITH FLY ASH UTILIZATION LEVEL OF 90% TO LESS THAN 100% DURING THE 1st HALF OF THE YEAR 2021-22**

SI No.	Name of TPS	Power Utility	Installed Capacity (Mega Watts)	Fly ash Generation (Million Tonnes)	Fly ash Utilization (Million Tonnes)	% age
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Dr. N.T.R (Vijayawada)	APGENCO	1760.00	2.0705	1.9860	95.92
2	KASAI PALI	ACB (INDIA) LTD	270.00	0.3764	0.3762	99.96
3	INDIRA GANDHI SUPER TPP, JHAJJAR	ARAVALI POWER COMPANY PRIVATE LIMITED	1500.00	0.7000	0.6420	91.71
4	KHAMBARKHERA	Bajaj Energy Private Ltd.	90.00	0.0458	0.0456	99.45
5	KUNDARKI	Bajaj Energy Private Ltd.	90.00	0.0660	0.0658	99.77
6	MAQSOODAPUR	Bajaj Energy Private Ltd.	90.00	0.0499	0.0494	99.02
7	UTRAULA	Bajaj Energy Private Ltd.	90.00	0.0555	0.0555	99.92
8	BOKARO	Damodar Valley Corporation	500.00	0.3796	0.3426	90.25
9	DHARIWAL INFRASTRUCTURE Ltd.	Dhariwal Infrastructure Ltd. (Maharashtra)	600.00	0.4822	0.4696	97.38
10	UKAI	Gujarat State Electricity Corporation Ltd.	1110.00	0.5233	0.4796	91.65
11	MAHATMA GANDHI TPP	JHAJJAR POWER LIMITED	1320.00	0.9902	0.9733	98.29
12	DONGAMAHUA CAPTIVE POWER PLANT	JINDAL STEEL AND POWER LIMITED	576.00	0.4994	0.4993	99.98
13	JSW Energy (Barmer) Ltd.	JSW Energy (Barmer) Ltd.	1080.00	0.4944	0.4670	94.44
14	JSW STEEL LTD CPP-II	JSW STEEL LTD Salem Work	90.00	0.0039	0.0039	99.67
15	RAICHUR	Karnataka Power Corporation Ltd.	1720.00	0.7717	0.7557	97.92
16	LALITPUR TPS	LALITPUR	1980.00	1.2553	1.1729	93.43

SI No.	Name of TPS	Power Utility	Installed Capacity (Mega Watts)	Fly ash Generation (Million Tonnes)	Fly ash Utilization (Million Tonnes)	% age
(1)	(2)	(3)	(4)	(5)	(6)	(7)
		POWER GENERATION COMPANY LIMITED				
17	NLC TAMILNADU POWER LTD.	NLC TAMILNADU POWER LIMITED	1000.00	0.5892	0.5887	99.92
18	VALLUR	NTECL (NTPC JV)	1500.00	1.1256	1.1250	99.95
19	DADRI	N.T.P.C.LTD	1820.00	0.7075	0.7026	99.31
20	SIMHADRI	N.T.P.C.LTD	2000.00	1.6449	1.5272	92.84
21	MOUDA TPS	N.T.P.C.LTD	2320.00	1.7511	1.6862	96.30
22	SOLAPUR	N.T.P.C.LTD	1320.00	0.3919	0.3654	93.23
23	RKM Power Gen Pvt. Ltd.	R K M POWERGEN PRIVATE LIMITED	1440.00	1.0802	1.0801	99.99
24	SEMBCORP ENERGY INDIA LIMITED	SEMBCORP ENERGY INDIA LIMITED	1320.00	0.8440	0.8438	99.99
25	SKS POWER GENERATION (Chhattishgarh) LTD	SKS POWER GENERATION (Chhattisgarh) Ltd	600.00	0.3634	0.3516	96.76
26	JOJOBERA	Tata Power Company Ltd	547.50	0.4980	0.4610	92.58
27	METTUR-I	Tamil Nadu Generation & Distribution Corporation Ltd. (TANGEDCO)	840.00	0.6716	0.6136	91.37
28	VEDANTA TPP	VEDANTA LTD	2400.00	2.5175	2.3884	94.87
29	VEDANTA CPP	VEDANTA LTD	1215.00	1.9783	1.8847	95.27

It may be seen from **Table - VII** above that **29** Thermal Power Stations during the 1st half of the year 2021-22 have achieved fly ash utilization level in the range of 90% to less than 100%.

3.4 Thermal Power Stations with Fly Ash Utilization Level of 70% to less than 90% during the 1st half of the Year 2021-22

The Thermal Power Stations which have achieved the fly ash utilization in the range of 70% to less than 90% during the 1st half year 2021-22 along with fly ash utilization level achieved by each of these power stations are given in **Table - VIII** below:

TABLE - VIII

THERMAL POWER STATIONS WITH FLY ASH UTILIZATION LEVEL OF 70% TO LESS THAN 90% DURING THE 1st HALF OF THE YEAR 2021-22

SI No.	Name of TPS	Power Utility	Installed Capacity (Mega Watts)	Fly Ash Generation (Million Tonnes)	Fly Ash Utilization (Million Tonnes)	% age
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	SRI DAMODARAM SANJEEVAIAH	APPDCL	1600.00	0.5311	0.3773	71.04
2	KAWAI	ADANI POWER RAJASTHAN Ltd.	1320.00	0.7868	0.6825	86.75
3	ADANI DAHANU	ADANI ELECTRICITY MUMBAI LIMITED	500.00	0.3242	0.2904	89.58
4	BALCO CPP-II	Bharat Aluminium Company Ltd (BALCO)	540.00	0.5706	0.4678	82.00
5	BALCO TPP-III	Bharat Aluminium Company Ltd (BALCO)	1200.00	1.0341	0.8806	85.15
6	DB Power Ltd.	DB Power Ltd.,	1200.00	1.5229	1.2018	78.92
7	MEJIA	Damodar Valley Corporation)	2340.00	2.3450	1.7510	74.67
8	DURGAPUR STEEL	Damodar Valley Corporation	1000.00	1.0459	0.8053	77.00
9	KODERMA	Damodar Valley Corporation	1000.00	0.9729	0.7700	79.14
10	The Durgapur Projects Power Station	The Durgapur Projects Limited	550.00	0.3170	0.2437	76.86
11	BHAVNAGAR LIGNITE	Gujarat State Electricity Corporation Ltd.	500.00	0.0798	0.0599	75.06
12	AMARKANTAK - LANCO	LANCO AMARKANTAK POWER LIMITED	600.00	0.4745	0.3595	75.76
13	MAITHON Right Bank TPP	Maithan Power Ltd	1050.00	1.0570	0.7840	74.17

SI No.	Name of TPS	Power Utility	Installed Capacity (Mega Watts)	Fly Ash Generation (Million Tonnes)	Fly Ash Utilization (Million Tonnes)	% age
(1)	(2)	(3)	(4)	(5)	(6)	(7)
		(DVC+Tata Power JV)				
14	SANJAY GANDHI	Madhya Pradesh Power Generation Company Ltd.	1340.00	0.8780	0.7877	89.72
15	BHILAI PP-II	NSPCL	74.00	0.0948	0.0839	88.47
16	CPP-II ROURKELA	NSPCL ,	120.00	0.2086	0.1561	74.82
17	KAHALGAON	N.T.P.C.LTD	2340.00	2.4109	1.7139	71.09
18	KUDGI	N.T.P.C.LTD	2400.00	0.4161	0.2958	71.07
19	BARAUNI	N.T.P.C.LTD	720.00	0.2319	0.2083	89.81
20	NALCO, CPP ANGUL	NATIONAL ALUMINIUM COMPANY LIMITED (NALCO)	1200.00	1.4850	1.1010	74.14
21	Guru Hargobind, LEHRA MOHABAT	Punjab State Power Corporation Ltd.	920.00	0.2837	0.2069	72.92
22	GVK POWER (GOINDWALASAH IB) LTD	Punjab State Power Corporation Ltd.	540.00	0.2642	0.1940	73.45
23	PRAYAGRAJ	PRAYAGRAJ POWER GENERATION COMPANY LIMITED	1980.00	1.2785	0.9064	70.89
24	CHHABRA	Rajasthan Rajya Vidyut utpadan Nigam Ltd	1000.00	0.4931	0.3504	71.05
25	KALISINDH	Rajasthan Rajya Vidyut utpadan Nigam Ltd	1200.00	0.6219	0.5404	86.88
26	ROSA Thermal Power Plant	Rosa Power Supply Company Ltd	1200.00	0.8452	0.6966	82.42
27	YERAMARUS TPS	RAICHUR POWER CORPORATION LIMITED	1600.00	0.4814	0.3844	79.85
28	Raipur Energen Limited	Raipur Energen Limited	1370.00	1.0997	0.9822	89.32
29	Sasan UMPP	Reliance Power Ltd.	3960.00	2.7036	1.9828	73.34
30	TROMBAY	Tata Power Company Ltd.	750.00	0.0283	0.0253	89.40
31	KAKATIYA	Telangana	500.00	0.3771	0.2662	70.59

SI No.	Name of TPS	Power Utility	Installed Capacity (Mega Watts)	Fly Ash Generation (Million Tonnes)	Fly Ash Utilization (Million Tonnes)	% age
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	(Stage-I)	State Power Generation Corporation Ltd (TSGENCO)				
32	KAKATIYA (Stage-II)	Telangana State Power Generation Corporation Ltd (TSGENCO)	600.00	0.3762	0.2643	70.26
33	TENUGHAT TPS	TENUGHAT VIDHYUT NIGAM LIMITED	420.00	0.1668	0.1377	82.56
34	SAGARDIGHI	The West Bengal Power Development Corporation Ltd (WBPDC)	1600.00	1.0395	0.7508	72.22
35	BANDEL	The West Bengal Power Development Corporation Ltd (WBPDC)	335.00	0.2837	0.2187	77.10

It may be seen from **Table - VIII** above that **35** Thermal Power Stations during the 1st half of the year 2021-22 have achieved fly ash utilization level in the range of 70% to less than 90%.

3.5 Thermal Power Stations with Fly Ash Utilization Level of 50% to less than 70% during the 1st half of the Year 2021-22

The Thermal Power Stations which have achieved the fly ash utilization in the range of 50% to less than 70% during the 1st half of the year 2021-22 along with fly ash utilization level achieved by each of these power stations are given in **Table - IX** below:

TABLE - IX**THERMAL POWER STATIONS WITH FLY ASH UTILIZATION LEVEL OF 50% TO LESS THAN 70% DURING THE 1ST HALF OF THE YEAR 2021-22.**

SI No.	Name of TPS	Power Utility	Installed Capacity	Fly Ash Generation	Fly Ash Utilization	% age
			(Mega Watts)	(Million Tonnes)	(Million Tonnes)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	RAYALSEEMA	APGENCO	1650.00	0.9399	0.6565	69.84
2	TIRODA	ADANI POWER MAHARASHTRA LTD.	3300.00	2.1690	1.3930	64.22
3	WANAKBORI	Gujarat State Electricity Corporation Ltd.	2270.00	1.2786	0.8499	66.47
4	Deen Bandhu Chhotu Ram TPP (DCRTPP), Yamuna Nagar	Haryana Power Generation Corporation Ltd	600.00	0.3703	0.2309	62.35
5	O.P.Jindal Super TPP (Stage-I)	JINDAL POWER LIMITED	1000.00	0.9485	0.5762	60.75
6	O.P.Jindal Super TPP (Stage-II)	JINDAL POWER LIMITED	2400.00	1.6180	0.9775	60.41
7	JAYPEE NIGRIE SUPER	JAIPRAKASH POWER VENTURES LIMITED	1320.00	0.8218	0.5001	60.85
8	DERANG TPP	JINDAL INDIA THERMAL POWER LIMITED	1200.00	1.2617	0.6465	51.24
9	JHABUA POWER LIMITED	JHABUA POWER LIMITED	600.00	0.5234	0.3207	61.27
10	BALLARI	Karnataka Power Corporation Ltd.	1700.00	0.8505	0.5466	64.27
11	KHAPARKHEDA	Maharashtra State Power Generation Company Ltd.	1340.00	1.3174	0.8385	63.65
12	KORADI	Maharashtra State Power Generation Company Ltd.	2400.00	1.3070	0.8228	62.96
13	MEJA TPP	MEJA URJA NIGAM PVT LTD (NTPC JV)	1320.00	1.0650	0.7345	68.97
14	BHILAI PP-III	NSPCL	500.00	0.5978	0.3140	52.53

SI No.	Name of TPS	Power Utility	Installed Capacity	Fly Ash Generation	Fly Ash Utilization	% age
			(Mega Watts)	(Million Tonnes)	(Million Tonnes)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
15	DURGAPUR CAPTIVE POWER PLANT	NSPCL	120.00	0.1330	0.0672	50.56
16	KORBA SUPER - NTPC	N.T.P.C.LTD	2600.00	2.5800	1.6500	63.96
17	Nabinagar -NTPC Ltd	N.T.P.C.LTD	1320.00	0.6750	0.3500	51.86
18	TALCHER - KANIHA	N.T.P.C.LTD	3000.00	3.5489	2.2030	62.08
19	BONGAIGAON	N.T.P.C.LTD	750.00	0.3726	0.2203	59.13
20	CHHABRA SUPER CRITICAL TPS	Rajasthan Rajya Vidyut Utpadan Nigam Ltd.	1320.00	0.3260	0.1793	55.00
21	TUTICORIN	Tamil Nadu Generation & Distribution Corporation Ltd.(TANGEDCO)	1050.00	0.5258	0.2817	53.58
22	KOTHAGUEDEM-V	Telangana State Power Generation Corporation Ltd (TSGENCO)	500.00	0.4775	0.2442	51.14
23	KOTHAGUEDEM-VI	Telangana State Power Generation Corporation Ltd (TSGENCO)	500.00	0.3858	0.2225	57.68
24	TRN ENERGY PRIVATE LIMITED	TRN ENERGY PRIVATE LIMITED	600.00	0.1893	0.1130	59.68
25	PARICHHA	Uttar Pradesh Rajya Vidyut Utpadan Nigam Ltd (UPRVUNL)	920.00	0.6815	0.4284	62.86
26	SANTALDIH	The West Bengal Power Development Corporation Ltd (WBPDC)	500.00	0.7038	0.3595	51.08

It may be seen from **Table - IX** above that **26** Thermal Power Stations during the 1st half year 2021-22 have achieved fly ash utilization level of 50% to less than 70%.

3.6 Power Stations with Fly Ash Utilization Level of less than 50% during the 1st half of the Year 2021-22

The Thermal Power Stations which have achieved the fly ash utilization level of less than 50% during the 1st half year 2021-22 along with fly ash utilization level achieved by each of these power stations are given in **Table – X** :

TABLE - X

THERMAL POWER STATIONS WITH FLY ASH UTILIZATION LEVEL OF LESS THAN 50% DURING THE 1st HALF OF THE YEAR 2021-22

SI No.	Name of TPS	Power Utility	Installed Capacity	Fly Ash Generation	Fly Ash Utilization	% age
			(Mega Watts)	(Million Tonnes)	(Million Tonnes)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	NABINAGAR - BRBCL	BHARATIYA RAIL BIJLEE COMPANY LTD	750.00	0.6781	0.2388	35.21
2	Atal Bihari Vajpayee TPS	C.S.P.G.C.L	1000.00	0.8072	0.3528	43.71
3	Dr. Shyama Prasad Mukherjee TPS (DSPM)	C.S.P.G.C.L	500.00	0.5543	0.0323	5.83
4	Hasdeo TPP (Korba West)	C.S.P.G.C.L	1340.00	1.4104	0.4232	30.00
5	DURGAPUR	Damodar Valley Corporation	210.00	0.0275	0.0077	27.85
6	RAGHUNATHPUR	Damodar Valley Corporation	1200.00	0.8263	0.0583	7.05
7	Essar Power MP Limited (MAHAN)	ESSAR POWER (MP) LTD.	1200.00	0.3760	0.0847	22.53
8	Angul CPP,JSPL	JINDAL STEEL AND POWER LIMITED	810.00	0.5710	0.1780	31.17
9	LANCO ANPARA POWER LTD	LANCO ANPARA POWER LTD	1200.00	0.8572	0.1089	12.70
10	AMARKANTAK MPPGCL	Madhya Pradesh Power Generation Company Ltd	210.00	0.1709	0.0412	24.13
11	SHREE SINGAJI TPS	Madhya Pradesh Power Generation Company Ltd	2520.00	1.0751	0.4905	45.62
12	CHANDRAPUR SUPER TPP	Maharashtra State Power	2920.00	2.0729	0.4276	20.63

Sl No.	Name of TPS	Power Utility	Installed Capacity	Fly Ash Generation	Fly Ash Utilization	% age
			(Mega Watts)	(Million Tonnes)	(Million Tonnes)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
		Generation Company Ltd.				
13	THAMMINAPATNAM TPS	MEENAKSHI ENERGY Ltd.	300.00	0.0171	0.0016	9.53
14	RAIGARH TPP (Formerly KWPC)	RAIGARH ENERGY GENERATION LTD	600.00	0.5440	0.2605	47.89
15	SINGRAULI	N.T.P.C.LTD	2000.00	1.4805	0.3338	22.55
16	RIHAND	N.T.P.C.LTD	3000.00	2.0542	0.9493	46.21
17	VINDHYACHAL	N.T.P.C.LTD	4760.00	4.2191	1.6081	38.11
18	SIPAT	N.T.P.C.LTD	2980.00	2.8507	0.8582	30.11
19	Darlipali	N.T.P.C.LTD	1600.00	1.2749	0.4268	33.48
20	GADARWARA	N.T.P.C.LTD	1600.00	0.8380	0.0338	4.03
21	Lara Super TPP	N.T.P.C LTD.,	1600.00	1.4625	0.4420	30.22
22	KHARGONE SUPER TPS	N.T.P.C.LTD	1320.00	0.5220	0.2521	48.30
23	IB VALLEY	O.P.G.C.L.	1740.00	1.8679	0.4784	25.61
24	AMARAVATI TPS	RATTAN INDIA POWER LTD.	1350.00	1.1736	0.4604	39.23
25	KOTHAGUDEM-VII	Telangana State Power Generation Corporation Ltd (TSGENCO)	800.00	0.5020	0.2070	41.23
26	ANPARA 'A' & 'B'	Uttar Pradesh Rajya Vidyut Utpadan Nigam Ltd (UPRVUNL)	2630.00	1.7618	0.0701	3.98
27	OBRA	Uttar Pradesh Rajya Vidyut Utpadan Nigam Ltd (UPRVUNL)	1000.00	0.7131	0.0362	5.08

Sl No.	Name of TPS	Power Utility	Installed Capacity	Fly Ash Generation	Fly Ash Utilization	% age
			(Mega Watts)	(Million Tonnes)	(Million Tonnes)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
28	BAKRESWAR	The West Bengal Power Development Corporation Ltd (WBPDC)	1050	0.8829	0.2744	31.08

It may be seen from **Table - X** above that:

During the 1st half of the year 2021-22, out of **197** Thermal Power Stations, **28** stations achieved the level of fly ash utilization to less than 50%.

3.7 Power Stations with NO FLY ASH Generation during the 1st half of the Year 2021-22

The Thermal Power Stations, which have **NO FLY ASH GENERATION** during the 1st half year 2021-22 along with the details of these power stations are given in **Table – XI** :

TABLE - XI

LIST OF THERMAL POWER STATIONS WITH NO FLY ASH GENERATION DURING THE 1st HALF OF THE YEAR 2021-22

Sl. No.	Name of TPS	Power Utility	Installed Capacity	Fly Ash Generation	Fly Ash Utilization	% age
			(Mega Watts)	(Million Tonnes)	(Million Tonnes)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	SVPPL Renki	ACB (India) Limited	60.00	TPS is under shut down condition since 5.11.2013		
2	MIHAN	Abhijeet MADC Nagpur Energy Pvt. Ltd.	246.00	Plant is under shut down since 29.3.2020		
3	Titagarh Generating Station	C.E.S.C.	240.00	TPS is not operational		
4	Essar Power Gujarat Limited (SALAYA)	Essar Power Gujarat Limited	1200.00	TPS is under shut down condition since 9.1.2016		

Sl. No.	Name of TPS	Power Utility	Installed Capacity	Fly Ash Generation	Fly Ash Utilization	% age
			(Mega Watts)	(Million Tonnes)	(Million Tonnes)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
5	Ideal Energy Project Ltd, (Bela TPS)	IDEAL ENERGY PROJECTS Ltd.	270.00	TPS is not operational since 21.5.2015		
6	SAI LILAGARH POWER GENERATION LTD	SAI LILAGARH POWER GENERATION LTD	86.00	TPS is not operational		
7	SWASTIK POWER & MINERALS RESOURCES PVT. LTD.	SWASTIK POWER & MINERALS RESOURCES PVT. LTD	25.00	Plant under shutdown from May 2018 to December 2020		
8	BUTIBORI	VIDARBHA INDUSTRIES POWER LIMITED	600.00	Plant under shut down condition		

4.0 MODES OF FLY ASH UTILIZATION DURING THE 1st HALF OF THE YEAR 2021-22

The data on fly ash utilization received from Thermal Power Stations / Power Utilities for the 1st half of the year 2021-22 has been compiled 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 1st half year 2021-22 along with utilization in each mode are given in **Table – XII** :

TABLE – XII**MODES OF FLY ASH UTILIZATION DURING THE 1st HALF OF THE YEAR 2021-22**

Sl.	Mode of utilization	Quantity of Fly Ash utilized in the mode of utilization	
No.		Million Tonnes	Percentage (%)
(1)	(2)	(3)	(4)
1	Cement	32.4888	24.26
2	Mine filling	7.5153	5.61
3	Bricks & Tiles	13.3457	9.97
4	Reclamation of low lying area	15.4140	11.51
5	Ash Dyke Raising	7.1710	5.36
6	Roads & flyovers	21.3965	15.98
7	Agriculture	0.0347	0.03
8	Concrete	1.0295	0.77
9	Hydro Power Sector	0.0003	0.00
10	Others	10.9289	8.16
11	Unutilized Fly Ash	24.5769	18.35
	Total	133.9017	100.00

The PIE diagram showing the modes of utilization of fly ash during the 1st half of the Year 2021-22 is given in Figure-1 below:

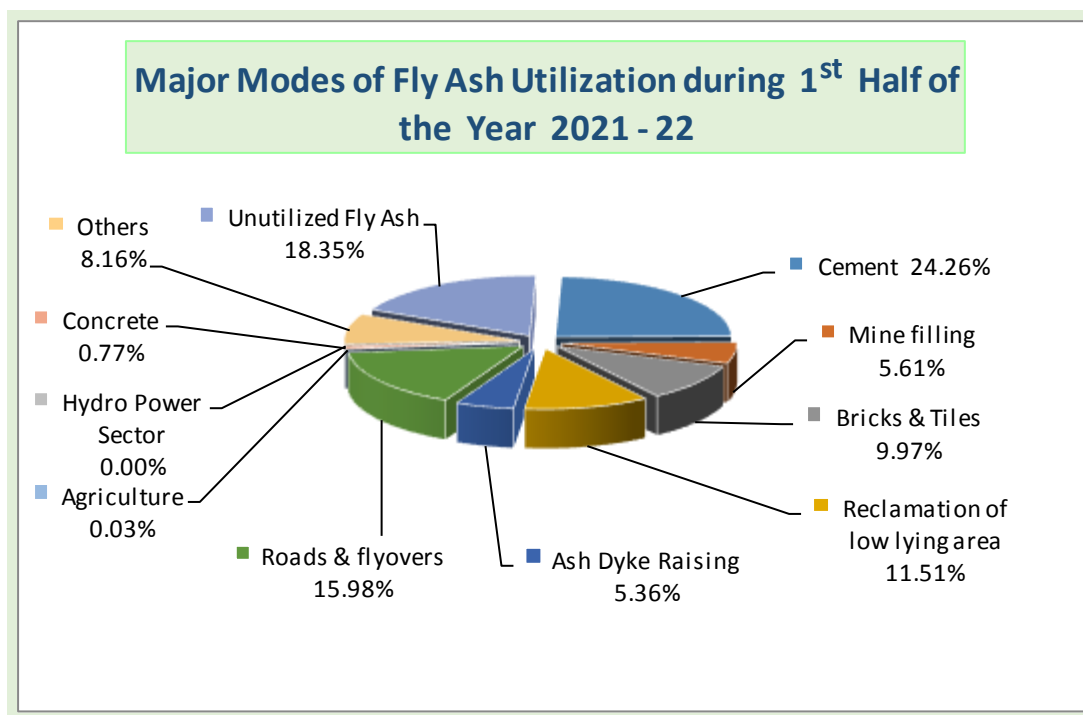


Figure - 1

It may be seen from **Table - XII** and **Figure -1** above that:

During the 1st half of the Year 2021-22, the maximum utilization of fly ash to the extent of 24.26 % of total fly ash utilized was in the Cement sector, followed by 15.98 % in Roads & flyovers, 11.51% in Reclamation of low laying area, 9.97 % in Bricks & Tiles, 5.61 % in Mine Filling, 5.36 % in Ash Dyke Raising, 0.77 % in concrete, 0.03 % in Agriculture, 8.16 % in others and 18.35 % Fly Ash remain Unutilized.

4.1 LEGACY ASH

The Ash Stock Position (Legacy Ash) in the Thermal Power Plants as on 30.9.2021 is shown below:

SI No.	Name of TPS	Power Utility	State	Installed Capacity	Ash Stock as on 31.3.2021	Ash stock as on 30.9.2021
				(Mega Watts)	Million Tonnes	Million Tonnes
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Aarti Steels Ltd.	Aarti Steels Ltd	Odisha	90.00	0.0012	0.0000
2	Dr. N.T.R (Vijayawada)	APGENCO	Andhra Pradesh	1760.00	42.1770	42.1089
3	RAYALSEEMA	APGENCO	Andhra Pradesh	1650.00	15.6520	15.8310
4	SRI DAMODARAM SANJEEVAIAH	APPDCL	Andhra Pradesh	1600.00	2.7930	2.9706
5	KASAI PALI	ACB (INDIA) LTD	Chhattisgarh	270.00	0.6872	0.6872

SI No.	Name of TPS	Power Utility	State	Installed Capacity	Ash Stock as on 31.3.2021	Ash stock as on 30.9.2021
				(Mega Watts)	Million Tonnes	Million Tonnes
6	SVPL Renki	ACB (INDIA) LTD	Chhattisgarh	60.00	0.0000	0.0000
7	CHAKABURA TPP	ACB (INDIA) LTD	Chhattisgarh	30.00	0.0000	0.0000
8	CHAKABURA TPP (EXTN)	ACB (INDIA) LTD	Chhattisgarh	30.00	0.0000	0.0000
9	RATIJA TPS	ACB (INDIA) LTD	Chhattisgarh	100.00	0.4110	0.4100
10	INDIRA GANDHI SUPER TPP, JHAJJAR	ARAVALI POWER COMPANY PRIVATE LIMITED	Haryana	1500.00	4.0413	4.0900
11	MUNDRA TPS	ADANI POWER (MUNDRA) LIMITED	Gujarat	4620.00	0.0443	0.0400
12	TIRODA	ADANI POWER MAHARASHTRA LTD.	Maharashtra	3300.00	6.8922	7.6682
13	KAWAI	ADANI POWER RAJASTHAN Ltd.	Rajasthan	1320.00	0.1536	0.2578
14	MIHAN	Abhijeet MADC Nagpur Energy Pvt. Ltd.	Maharashtra	246.00	0.0000	0.0580
15	ADANI DAHANU	ADANI ELECTRICITY MUMBAI LIMITED	Maharashtra	500.00	2.4460	2.2210
16	ADHUNIK PNR LTD	ADHUNIK POWER & NATURAL RESOURCE LIMITED	Jharkhand	540.00	0.0000	0.0000
17	BARKHERA	Bajaj Energy Private Ltd.	Uttar Pradesh	90.00	0.0002	0.0001
18	KHAMBERKHERA	Bajaj Energy Private Ltd.	Uttar Pradesh	90.00	0.0000	0.0004
19	KUNDARKI	Bajaj Energy Private Ltd.	Uttar Pradesh	90.00	0.0002	0.0003
20	MAQSOODAPUR	Bajaj Energy Private Ltd.	Uttar Pradesh	90.00	0.0001	0.0006
21	UTRAULA	Bajaj Energy Private Ltd.	Uttar Pradesh	90.00	0.0001	0.0001
22	NABINAGAR - BRBCL	BHARATIYA RAIL BIJLEE COMPANY LTD.	Bihar	750.00	1.6436	2.0858
23	BALCO CPP-II	Bharat Aluminium Company Ltd(BALCO)	Chhattisgarh	540.00	10.0384	10.1412
24	BALCO TPP-III	Bharat Aluminium	Chhattisgarh	1200.00	2.6220	2.7753

SI No.	Name of TPS	Power Utility	State	Installed Capacity	Ash Stock as on 31.3.2021	Ash stock as on 30.9.2021
				(Mega Watts)	Million Tonnes	Million Tonnes
		Company Ltd (BALCO)				
25	BHADRESHWAR VIDYUT PVT LTD	BHADRESHWAR VIDYUT PVT LTD.	Gujarat	300.00	0.0083	0.0046
26	Budge Budge Generating Station	C.E.S.C.	West Bengal	750.00	0.0000	0.0000
27	Southern Generating Station	C.E.S.C.	West Bengal	135.00	0.0000	0.0000
28	Titagarh Generating Station	C.E.S.C.	West Bengal	240.00	0.0000	0.0000
29	Atal Bihari Vajpayee TPS	C.S.P.G.C.L	Chhattisgarh	1000.00	4.1340	4.5880
30	Dr. Shyama Prasad Mukherjee TPS (DSPM)	C.S.P.G.C.L	Chhattisgarh	500.00	18.0990	18.6276
31	Hasdeo TPP (Korba west)	C.S.P.G.C.L	Chhattisgarh	1340.00	56.4160	57.4030
32	MUTIARA	COASTAL ENERGEN PVT. LTD.	Tamil Nadu	1200.00	0.0030	0.0030
33	MUNDRA UMPP	Costal Gujarat Power Ltd.	Gujarat	4150.00	1.7600	1.7500
34	CHEMPLAST LTD TPS	CHEMPLAST SANMAR LTD.	Tamil Nadu	48.50	0.0002	0.0001
35	DB Power Ltd.	DB Power Ltd.	Chhattisgarh	1200.00	2.3289	2.6511
36	BOKARO	Damodar Valley Corporation	Jharkhand	500.00	0.7974	0.8700
37	CHANDRAPURA	Damodar Valley Corporation	Jharkhand	500.00	4.2394	4.2054
38	DURGAPUR	Damodar Valley Corporation	West Bengal	210.00	3.1280	3.1481
39	MEJIA	Damodar Valley Corporation	West Bengal	2340.00	18.3070	18.9010
40	DURGAPUR STEEL	Damodar Valley Corporation	West Bengal	1000.00	5.2330	5.4740
41	KODERMA	Damodar Valley Corporation	Jharkhand	1000.00	1.1096	1.3108

SI No.	Name of TPS	Power Utility	State	Installed Capacity	Ash Stock as on 31.3.2021	Ash stock as on 30.9.2021
				(Mega Watts)	Million Tonnes	Million Tonnes
42	RAGHUNATHPUR	Damodar Valley Corporation	West Bengal	1200.00	3.7304	4.8965
43	The Durgapur Projects Power Station (DPPS)	The Durgapur Projects Limited.	West Bengal	550.00	0.7675	0.8392
44	DHARIWAL INFRASTRUCTURE Ltd.	Dhariwal Infrastructure Ltd (Maharashtra)	Maharashtra	600.00	0.0000	0.0126
45	Essar Power MP Limited (MAHAN)	ESSAR POWER (MP) LTD.	Madhya Pradesh	1200.00	0.5280	0.8200
46	Essar Power Gujarat (SALAYA)	ESSAR POWER GUJARAT LIMITED	Gujarat	1200.00	0.0000	0.0000
47	SURAT LIGNITE	Gujarat Industrial Power Corporation Ltd.	Gujarat	500.00	0.0000	0.0000
48	AKRIMOTA	Gujarat Minerals Development Corporation Ltd.	Gujarat	250.00	0.0001	0.0006
49	GANDHINAGAR	Gujarat State Electricity Corporation Ltd.	Gujarat	630.00	5.7000	5.2870
50	KUTCH LIGNITE	Gujarat State Electricity Corporation Ltd.	Gujarat	150.00	1.2000	0.9060
51	SIKKA	Gujarat State Electricity Corporation Ltd.	Gujarat	500.00	0.9600	0.8140
52	UKAI	Gujarat State Electricity Corporation Ltd.	Gujarat	1110.00	13.0000	12.9980
53	WANAKBORI	Gujarat State Electricity Corporation Ltd.	Gujarat	2270.00	38.1000	38.5580
54	BHAVNAGAR LIGNITE	Gujarat State Electricity Corporation Ltd.	Gujarat	500.00	0.0060	0.0254
55	GMR WARORA ENERGY Ltd.	GMR WARORA ENERGY Ltd.	Maharashtra	600.00	0.2630	0.2967
56	GMR KAMALANGA TPP	GMR KAMALANGA ENERGY Ltd.	Odisha	1050.00	1.0740	0.6520
57	RAJIV GANDHI TPP (HISSAR)	Haryana Power Generation Corporation Ltd.	Haryana	1200.00	4.8010	4.6780

SI No.	Name of TPS	Power Utility	State	Installed Capacity	Ash Stock as on 31.3.2021	Ash stock as on 30.9.2021
				(Mega Watts)	Million Tonnes	Million Tonnes
58	Deen Bandhu Chhotu Ram TPP Plant (DCRTPP) Yamunanagar	Haryana Power Generation Corporation Ltd.	Haryana	600.00	1.8008	1.5790
59	PANIPAT	Haryana Power Generation Corporation Ltd.	Haryana	710.00	29.9000	26.1900
60	HALDIA ENERGY LIMITED	HALDIA ENERGY LIMITED.	West Bengal	600.00	0.0000	0.0000
61	HINDUJA NATIONAL POWER CORPORATION Ltd., (Vizag)	HINDUJA NATIONAL POWER COPORATION LIMITED.	Andhra Pradesh	1040.00	1.1945	1.1330
62	INDIAN METALS & FERRO ALLOYS LTD.	INDIAN METALS & FERRO ALLOYS Ltd.	Odisha	200.00	0.0000	0.0000
63	IL & FS Tamil Nadu Power Company Ltd.	IL & FS TAMIL NADU POWER COMPANY Ltd.	Tamil Nadu	1200.00	0.0347	0.0347
64	IDEAL ENERGY PROJECT LTD, (BELA TPS)	IDEAL ENERGY PROJECTS Ltd.	Maharashtra	270.00	0.1168	0.0584
65	MAHATMA GANDHI TPP,Jhajjar	JHAJJAR POWER LIMITED	Haryana	1320.00	0.0003	0.0172
66	O.P. Jindal Super TPP (Stage-I)	JINDAL POWER LIMITED	Chhattisgarh	1000.00	10.1420	10.5140
67	O.P. Jindal Super TPP (Stage-II)	JINDAL POWER LIMITED	Chhattisgarh	2400.00	5.3570	5.9980
68	JAYPEE BINA	JAIPRAKASH POWER VENTURES LIMITED	Madhya Pradesh	500.00	2.0000	0.3808
69	JAYPEE NIGRIE SUPER	JAIPRAKASH POWER VENTURES LIMITED	Madhya Pradesh	1320.00	0.2185	0.5401
70	JSW ENERGY LTD (RATNAGIRI)	JSW Energy Ltd.	Maharashtra	1200.00	0.0479	0.0478
71	JSW ENERGY LTD (VIJAYANAGAR)	JSW Energy Ltd.	Karnataka	860.00	0.1197	0.1197
72	DERANG TPP	JINDAL INDIA THERMAL POWER LIMITED	Odisha	1200.00	9.1548	5.1926

SI No.	Name of TPS	Power Utility	State	Installed Capacity	Ash Stock as on 31.3.2021	Ash stock as on 30.9.2021
				(Mega Watts)	Million Tonnes	Million Tonnes
73	DONGAMAHUA CAPTIVE POWER PLANT	JINDAL STEEL AND POWER LIMITED	Chhattisgarh	576.00	0.0011	0.0012
74	ANGUL CPP	JINDAL STEEL AND POWER LIMITED	Odisha	810.00	0.4550	1.0200
75	JSW Energy (Barmer) Ltd.	JSW Energy (Barmer) Ltd.	Rajasthan	1080.00	0.1416	0.1690
76	JSW STEEL LTD, CPP-II	JSW STEEL LTD, Salem works	Tamil Nadu	90.00	0.0001	0.0001
77	KHARSIA CPP	JINDAL STEEL AND POWER LIMITED	Chhattisgarh	299.00	12.9830	13.1463
78	JHABUA POWER LIMITED	JHABUA POWER LIMITED	Madhya Pradesh	600.00	0.8926	1.0953
79	BALLARI	Karnataka Power Corporation Ltd.	Karnataka	1700.00	6.2540	6.4764
80	RAICHUR	Karnataka Power Corporation Ltd.	Karnataka	1720.00		39.9441
81	KANTI BIJLEE UTPADAN NIGAM LIMITED	KANTI BIJLEE UTPADAN NIGAM LIMITED (NTPC JV)	Bihar	610.00	1.9440	1.8020
82	KMPCL-NARIYARA	M/s KSK MAHANADI POWER COMPANY LIMITED	Chhattisgarh	1800.00	0.4856	0.4794
83	AMARKANTAK - LANCO	LANCO AMARKANTAK POWER LIMITED	Chhattisgarh	600.00	6.4730	6.5866
84	LALITPUR TPS	LALITPUR POWER GENERATION COMPANY LIMITED	Uttar Pradesh	1980.00	0.0719	0.1543
85	LANCO ANPARA POWER LTD	LANCO ANPARA POWER LTD.	Uttar Pradesh	1200.00	13.5845	14.3329
86	MAITHON RIGHT BANK TPP	Maithon Power Ltd. (DVC + Tata Power JV)	Jharkhand	1050.00	0.0893	0.3633
87	SANJAY GANDHI	Madhya Pradesh Power Generation Company Ltd.	Madhya Pradesh	1340.00	15.6467	15.7370

SI No.	Name of TPS	Power Utility	State	Installed Capacity	Ash Stock as on 31.3.2021	Ash stock as on 30.9.2021
				(Mega Watts)	Million Tonnes	Million Tonnes
88	SATPURA	Madhya Pradesh Power Generation Company Ltd.	Madhya Pradesh	1330.00	85.0450	85.0325
89	AMARKANTAK MPPGCL	Madhya Pradesh Power Generation Company Ltd.	Madhya Pradesh	210.00	3.3176	3.4470
90	SHREE SINGAJI TPS	Madhya Pradesh Power Generation Company Ltd.	Madhya Pradesh	2520.00	7.7184	8.3032
91	BHUSAWAL TPS	Maharashtra State Power Generation Company Ltd.	Maharashtra	1210.00	6.7496	6.7277
92	CHANDRAPUR SUPER TPP	Maharashtra State Power Generation Company Ltd.	Maharashtra	2920.00	77.3275	78.9750
93	KHAPARKHEDA	Maharashtra State Power Generation Company Ltd.	Maharashtra	1340.00	26.8896	27.5350
94	KORADI	Maharashtra State Power Generation Company Ltd.	Maharashtra	2400.00	31.2103	31.6945
95	NASHIK	Maharashtra State Power Generation Company Ltd.	Maharashtra	630.00	10.3792	9.0009
96	PARLI TPS	Maharashtra State Power Generation Company Ltd.	Maharashtra	750.00	20.4196	0.0000
97	PARAS	Maharashtra State Power Generation Company Ltd.	Maharashtra	500.00	1.7653	1.6290
98	MCCPL BANDHAKHAR	Maruti Clean Coal & Power Ltd.	Chhattisgarh	300.00	0.3286	0.3286
99	SAI WARDHA POWER Ltd. WARORA	MSELDC, Captive Consumers	Maharashtra	540.00	0.0000	0.0000
100	THAMMINAPATNAM TPS	MEENAKSHI ENERGY Ltd.	Andhra Pradesh	300.00	0.0000	0.0213
101	RAIGARH TPP	RAIGARH ENERGY GENERATION LTD.	Chhattisgarh	600.00	1.5320	1.9070

SI No.	Name of TPS	Power Utility	State	Installed Capacity	Ash Stock as on 31.3.2021	Ash stock as on 30.9.2021
				(Mega Watts)	Million Tonnes	Million Tonnes
102	ANUPPUR	MB POWER (MP) LIMITED	Madhya Pradesh	1200.00	1.4233	1.4209
103	MEJA TPP	MEJA URJA NIGAM PVT LTD (NTPC JV)	Uttar Pradesh	1320.00	0.6972	1.0231
104	NEYVELI - I EXPN	N.L.C. LTD.	Tamil Nadu	420.00	0.0000	0.0000
105	NEYVELI - II	N.L.C. LTD.	Tamil Nadu	1470.00	8.1900	7.3570
106	NEYVELI - II EXPN	N.L.C. LTD.	Tamil Nadu	500.00	0.0000	0.0030
107	NEYVELI NEW TPS	N.L.C. LTD.	Tamil Nadu	1000.00	0.0000	0.0000
108	BARSINGSAR LIGNITE	N.L.C. LTD.	Rajasthan	250.00	0.0000	0.0000
109	NLC TAMIL NADU POWER LTD. (Tuticorin)	NLC TAMIL NADU POWER LIMITED	Tamil Nadu	1000.00	0.0000	0.0005
110	BHILAI PP-II	NSPCL	Chhattisgarh	74.00	0.9225	0.9341
111	BHILAI PP-III	NSPCL	Chhattisgarh	500.00	3.6705	3.9556
112	DURGAPUR CAPTIVE POWER PLANT	NSPCL	West Bengal	120.00	4.1177	4.1834
113	ROURKELA CPP-II	NSPCL	Odisha	120.00	1.8200	1.8196
114	VALLUR	NTECL (NTPC JV)	Tamil Nadu	1500.00	3.6470	3.6470
115	DADRI	N.T.P.C. LTD	Uttar Pradesh	1820.00	0.0185	0.0080
116	SINGRAULI	N.T.P.C. LTD	Uttar Pradesh	2000.00	75.6100	76.7600
117	RIHAND	N.T.P.C. LTD	Uttar Pradesh	3000.00	38.6310	39.7329
118	FEROZE GANDHI UNCHAHR	N.T.P.C. LTD	uttar Pradesh	1550.00	7.2040	6.8510
119	TANDA	N.T.P.C. LTD	Uttar Pradesh	1760.00	3.5826	3.4771
120	KORBA SUPER NTPC	N.T.P.C. LTD	Chhattisgarh	2600.00	53.5900	54.5440
121	VINDHYACHAL	N.T.P.C. LTD	Madhya Pradesh	4760.00	80.1700	82.6340
122	SIPAT	N.T.P.C. LTD	Chhattisgarh	2980.00	37.2840	39.2765
123	RAMAGUNDAM	N.T.P.C. LTD	Telangana	2600.00	69.2280	69.1400
124	SIMHADRI	N.T.P.C. LTD	Andhra Pradesh	2000.00	15.1500	2.0960
125	FARAKKA	N.T.P.C. LTD	West Bengal	2100.00	39.2847	38.8387

SI No.	Name of TPS	Power Utility	State	Installed Capacity	Ash Stock as on 31.3.2021	Ash stock as on 30.9.2021
				(Mega Watts)	Million Tonnes	Million Tonnes
126	KAHALGAON	N.T.P.C. LTD	Bihar	2340.00	66.5000	58.1000
127	BARH SUPER TPS	N.T.P.C. LTD	Bihar	1320.00	6.2111	6.1875
128	NABINAGAR - NTPC	N.T.P.C. LTD	Bihar	1320.00	0.8173	1.1418
129	TALCHER - KANIHA	N.T.P.C. LTD	Odisha	3000.00	88.0565	89.4240
130	DARLIPALI	N.T.P.C. LTD	Odisha	1600.00	1.4014	2.4540
131	MOUDA TPS	N.T.P.C. LTD	Maharashtra	2320.00	1.0400	1.1050
132	BONGAIGAON	N.T.P.C. LTD	Assam	750.00	1.3583	1.5100
133	SOLAPUR	N.T.P.C. LTD	Maharashtra	1320.00	0.0150	0.0400
134	KUDGI	N.T.P.C. LTD	Karnataka	2400.00	1.3529	1.4732
135	GADARWARA	N.T.P.C. LTD	Madhya Pradesh	1600.00	1.1543	1.9580
136	BARAUNI	N.T.P.C. LTD	Bihar	720.00	0.1957	0.2150
137	Lara Super TPP	N.T.P.C. LTD	Chhattisgarh	1600.00	0.9134	1.9316
138	KHARGONE SUPER TPS	N.T.P.C. LTD	Madhya Pradesh	1320.00	0.5479	0.8180
139	RAJPURA TPS	NABHA POWER LIMITED	Punjab	1400.00	0.0140	0.0040
140	NALCO, CPP ANGUL	NATIONAL ALUMINIUM COMPANY LIMITED (NALCO)	Odisha	1200.00	18.7750	19.1590
141	IB VALLEY	O.P.G.C.L.	Odisha	1740.00	23.6780	25.1270
142	OPG POWER GENERATION PVT LTD	OPG POWER GENERATION PVT LTD.	Tamil Nadu	414.00	0.0000	0.0000
143	GURU NANAKDEV TPP, BATHINDA	Punjab State Power Corporation Ltd.	Punjab	0.00	20.6786	20.5217
144	GURU HARGOBIND, LEHRA MOHABAT	Punjab State Power Corporation Ltd.	Punjab	920.00	6.6315	6.7080
145	GURU GOBIND SINGH TPS, ROPAR	Punjab State Power Corporation Ltd.	Punjab	840.00	20.6207	20.1531
146	GVK POWER, (GOINDWALA SAHIB) LTD.	Punjab State Power Corporation Ltd.	Punjab	540.00	0.3320	0.4030

SI No.	Name of TPS	Power Utility	State	Installed Capacity	Ash Stock as on 31.3.2021	Ash stock as on 30.9.2021
				(Mega Watts)	Million Tonnes	Million Tonnes
147	PRAYAGRAJ	PRAYAGRAJ POWER GENERATION COMPANY LTD.	Uttar Pradesh	1980.00	1.9572	2.3293
148	RKM POWER GEN PVT. LTD. (UCHPINDA)	R K M POWERGEN PRIVATE LIMITED	Chhattisgarh	1440.00	0.0000	0.0000
149	CHHABRA	Rajasthan Rajya Vidyut Utpadan Nigam Ltd.	Rajasthan	1000.00	0.4386	0.5813
150	CHHABRA SUPER CRITICAL TPS	Rajasthan Rajya Vidyut Utpadan Nigam Ltd.	Rajasthan	1320.00	1.5594	1.7061
151	SURATGARH TPS	Rajasthan Rajya Vidyut Utpadan Nigam Ltd.	Rajasthan	1500.00	7.8970	7.2296
152	KALISINDH	Rajasthan Rajya Vidyut Utpadan Nigam Ltd.	Rajasthan	1200.00	0.0544	0.1406
153	KOTA SUPER TPS	Rajasthan Rajya Vidyut Utpadan Nigam Ltd.	Rajasthan	1240.00	1.0006	0.9760
154	ROSA PHASE-I	Rosa Power Supply Company Ltd.	Uttar Pradesh	1200.00	1.0054	1.1540
155	AMARAVATI TPS	RATTAN INDIA POWER LTD.	Maharashtra	1350.00	0.6704	1.3837
156	YERAMARUS TPS	RAICHUR POWER CORPORATION LTD.	Karnataka	1600.00	0.0036	0.7773
157	RINL CAPTIVE TPP, VISAKHAPATNAM	RASHTRIYA ISPAT NIGAM LTD.	Andhra Pradesh	315.00	0.7100	7.0028
158	RAIPUR TPP	Raipur Energen Limited	Chhattisgarh	1370.00	0.1275	1.8487
159	SASAN UMPP	Reliance Power Ltd.	Madhya Pradesh	3960.00	22.1585	22.8793
160	SAI LILAGARH POWER GENERATION LTD	SAI LILAGARH POWER GENERATION LTD.	Chhattisgarh	86.00	0.0000	0.0000
161	SEMBCORP ENERGY INDIA LIMITED	SEMBCORP ENERGY INDIA LIMITED	Andhra Pradesh	1320.00	2.8320	2.8320
162	SWASTIK POWER & MINERALS RESOURCES PVT. LTD.	SWASTIK POWER & MINERALS RESOURCES PVT. LTD.	Chhattisgarh	25.00	0.0000	0.0000

SI No.	Name of TPS	Power Utility	State	Installed Capacity	Ash Stock as on 31.3.2021	Ash stock as on 30.9.2021
				(Mega Watts)	Million Tonnes	Million Tonnes
163	SKS POWER GENERATION (CHHATTISGARH) Ltd.	SKS POWER GENERATION (CHHATTISGARH) Ltd.	Chhattisgarh	600.00	0.3840	0.3950
164	SINGARENI	THE SINGARENI COLLIERIES COMPANY LTD.	Telangana	1200.00	0.4000	0.3760
165	CUDDALORE - TAQA	TAQA Neyveli Power Co. Pvt. Ltd.	Tamil Nadu	250.00	0.2450	0.1572
166	JOJOBERA	Tata Power Company Ltd.	Jharkhand	547.50	0.0447	0.4836
167	TROMBAY	Tata Power Company Ltd.	Maharashtra	750.00	0.0000	0.0028
168	SABARMATI	TORRENT POWER LTD.	Gujarat	362.00	1.0033	1.0536
169	TUTICORIN	Tamil Nadu Generation & Distribution Corporation Ltd. (TANGEDCO)	Tamil Nadu	1050.00	40.9380	41.1820
170	METTUR-I	Tamil Nadu Generation & Distribution Corporation Ltd. (TANGEDCO)	Tamil Nadu	840.00	18.7484	18.8055
171	METTUR-II	Tamil Nadu Generation & Distribution Corporation Ltd. (TANGEDCO)	Tamil Nadu	600.00	0.0000	0.0000
172	NORTH CHENNAI-I	Tamil Nadu Generation & Distribution Corporation Ltd. (TANGEDCO)	Tamil Nadu	630.00	11.4960	5.7769
173	NORTH CHENNAI-II	Tamil Nadu Generation & Distribution Corporation Ltd. (TANGEDCO)	Tamil Nadu	1200.00	6.3690	0.8439
174	RAMAGUNDAM-B-TSGENCO	Telangana State Power Generation Corporation Ltd. (TSGENCO)	Telangana	62.50	0.8870	0.8810

SI No.	Name of TPS	Power Utility	State	Installed Capacity	Ash Stock as on 31.3.2021	Ash stock as on 30.9.2021
				(Mega Watts)	Million Tonnes	Million Tonnes
175	KOTHAGUEDEM-V	Telangana State Power Generation Corporation Ltd. (TSGENCO)	Telangana	500.00	77.7000	78.0940
176	KOTHAGUEDEM-VI	Telangana State Power Generation Corporation Ltd. (TSGENCO)	Telangana	500.00	0.0000	0.0000
177	KOTHAGUEDEM-VII	Telangana State Power Generation Corporation Ltd. (TSGENCO)	Telangana	800.00	1.1746	1.4696
178	KAKATIYA (Stage - I)	Telangana State Power Generation Corporation Ltd. (TSGENCO)	Telangana	500.00	3.4720	3.4720
179	KAKATIYA (Stage - II)	Telangana State Power Generation Corporation Ltd. (TSGENCO)	Telangana	600.00	1.1040	1.1040
180	TRN ENERGY PRIVATE LIMITED	TRN ENERGY PRIVATE LIMITED	Chhattisgarh	600.00	1.3643	1.4131
181	TENUGHAT TPS	TENUGHAT VIDHYUT NIGAM LIMITED	Jharkhand	420.00	0.0000	0.0291
182	TALWANDI SABO POWER LTD	TALWANDI SABO POWER LTD.	Punjab	1980.00	3.2670	3.1153
183	ANPARA 'A' & 'B'	Uttar Pradesh Rajya Vidyut Utpadan Nigam Ltd. (UPRVUNL)	Uttar Pradesh	2630.00	57.3283	59.0200
184	HARDUAGANJ TPP	Uttar Pradesh Rajya Vidyut Utpadan Nigam Ltd. (UPRVUNL)	Uttar Pradesh	670.00	7.7542	7.7308
185	OBRA	Uttar Pradesh Rajya Vidyut Utpadan Nigam Ltd. (UPRVUNL)	Uttar Pradesh	1000.00	12.8651	13.5390
186	PARICHHA	Uttar Pradesh Rajya Vidyut Utpadan Nigam Ltd. (UPRVUNL)	Uttar Pradesh	920.00	8.5667	8.8198
187	UDUPI	Udupi Power Corporation Limited	Karnataka	1200.00	0.0327	0.0356

SI No.	Name of TPS	Power Utility	State	Installed Capacity	Ash Stock as on 31.3.2021	Ash stock as on 30.9.2021
				(Mega Watts)	Million Tonnes	Million Tonnes
188	BUTIBORI	VIDARBHA INDUSTRIES POWER LIMITED	Maharashtra	600.00	0.0000	0.0000
189	VS LIGNITE POWER PVT LTD	VS LIGNITE POWER PVT LTD.	Rajasthan	135.00	0.0000	0.0000
190	VEDANTA TPP	VEDANTA LTD.	Odisha	2400.00	5.6000	6.5300
191	VEDANTA CPP	VEDANTA LTD.	Odisha	1215.00	9.2000	6.2200
192	KOLAGHAT	The West Bengal Power Development Corporation Ltd. (WBPDC)	West Bengal	1260.00	0.0111	1.1723
193	SAGARDIGHI	The West Bengal Power Development Corporation Ltd. (WBPDC)	West Bengal	1600.00	7.4166	7.7054
194	BANDEL	The West Bengal Power Development Corporation Ltd. (WBPDC)	West Bengal	335.00	0.1958	0.2420
195	SANTALDIH	The West Bengal Power Development Corporation Ltd. (WBPDC)	West Bengal	500.00	3.8047	3.6511
196	BAKRESWAR	The West Bengal Power Development Corporation Ltd. (WBPDC)	West Bengal	1050.00	8.5700	9.1784
197	SITAPURAM POWER PLANT	M/S ZUARI CEMENT LIMITED	Telangana	43.00	0.0000	0.0000
		Grand Total		211668.50	1701.9803	1718.2577

5.0 CONCLUSIONS & RECOMMENDATIONS

1. The Half Yearly Fly Ash Utilisation (in %) for the last few years is as shown below :

Year	Fly Ash Utilization (in % Percentage)
2014-2015	53.01
2015-2016	56.04
2016-2017	57.93
2017-2018	60.38
2018-2019	68.72
2019-2020	78.19
2020-2021	79.18
2021-2022	81.65

2. The utilization of fly ash is in the range of 1 to 24 % in making fly ash based Building Products, in Mine filling it is less than 6 %, in the Construction of Roads & Flyovers it is around 16 %. These areas have large potential of fly ash utilization which needs to be explored for increasing the overall utilization of fly ash in the country.
3. A Web page has been developed for Fly Ash Generation & its Utilization and Mobile App 'ASH TRACK' has been launched by Ministry of Power as an interface between TPS and potential users.
4. A few strategies which need to be adopted to further increase the utilization level of fly ash are given below:
 - Renovation and modernization of coal / lignite based Thermal Power Station needs to include the technological advancement required to ensure development of dry fly ash collection, storage and disposal facilities so that fly ash in dry form could be made available to its users. Renovation and modernization should also include a marketing strategy for the development of fly ash based industries and making available fly ash and fly ash based building products in the nearby markets.

- The states and districts where Thermal Power Stations are located need to be sensitized to the need for utilization of fly ash and fly ash based building products and take necessary measures to promote them in the construction of buildings, highways / roads / flyovers and other infrastructure projects. Measures can include policy intervention, planning strategies, fiscal incentives, recognizing specific efforts etc.
- Use of fly ash based building products like fly ash based bricks, blocks, tiles etc. by both Govt. and Public & Private Construction agencies at Central and State levels is required to be ensured especially in construction works within a radius of 300 km of any coal / lignite based Thermal Power Station as mandated in MoEF & CC's Notification of 25th January, 2016. The government agencies responsible for approval of building plans may have to ensure stipulation of a condition in their approval to the effect that only fly ash based building products like bricks / blocks / tiles etc. shall be used in the construction of buildings as prescribed in MoEF & CC's Notification of 25th January, 2016 within a prescribed distance from any Thermal Power Station especially in the construction of large office / commercial buildings and housing projects being developed both in government and private sectors.
- Use of fly ash in the construction of roads, road embankments and flyovers is well established and is slowly picking up. However, its potential is yet to be fully utilized. The use of fly ash in these projects within a radius of 300 km of any Thermal Power Station as mandated in MoEF & CC's Notification of 25th January, 2016 has to be ensured right from project formulation stage and included in tender documents by having a prior tie up with the concerned Thermal Power Station for their requirement. There is a need to sensitize National Highway Authority of India, CPWD, State PWDs and other agencies both at Central and State levels that are involved in the construction of highways, roads, flyovers etc. in this regard.

- Use of fly ash in backfilling / stowing of closed / abandoned / running open cast and underground mines has large potential for utilization of fly ash, especially for pit head Thermal Power Stations which otherwise have limited avenues for fly ash utilization. However, its potential is yet to be fully utilized. The use of fly ash in back filling/stowing of open cast and underground mines within a radius of 50 km of any Thermal Power Station as mandated in MoEF & CC's Notification of 3rd November, 2009 has to be ensured right from initial stage of preparation of mine development plan. Inclusion of fly ash and bottom ash as backfill materials in the guidelines for preparation of mine closure plan is required for which Ministry of Coal and other concerned Ministries / Authorities have to take necessary action. There are environmental and safety concerns for use of fly ash along with overburden (OB) material for back filling of operating open cast mines. These concerns need to be addressed.
- 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 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 Railway Design & Standards Organization (RDSO), a research organization under the Ministry of Railways.
- Thermal Power Stations may 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, the raising of ash dyke etc.
- The use of fly ash in Agriculture and waste land development has large potential but the utilization is below expectation. This may be attributed mainly to reservations in various quarters for use of fly ash in agriculture because of presence of heavy metals and radioactive elements in fly ash however, findings of research projects funded by Fly Ash Unit under Ministry of Science & Technology and studies carried out by other organizations indicate that there are no adverse effects in using fly ash in agriculture.

Therefore, these concerns are required to be addressed for increasing the fly ash utilization.

- Thermal Power Stations may 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 & CC's notifications of 3rd November, 2009 and 25th January 2016.
- There is a need to encourage 'Industry–Institute Interactions' for entrepreneur development, creating awareness and organizing training programmes and workshops.
- New emerging areas such as Light Weight Aggregates and Geo-polymers, Coal Beneficiation- Blending and Washing, etc. needs to focus for higher utilization of fly ash in the country.
- In view of large quantity of fly ash generation, utilization of fly ash may be introduced as construction material in academic curriculum of Engineering, Architecture, Mining, Agriculture etc.

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ABBREVIATIONS

1. CEA : Central Electricity Authority
2. MoEF & CC : Ministry of Environment, Forest & Climate Change
3. MW : Mega Watt
4. MoP : Ministry of Power
5. MT : Million-Tonnes
6. TPS : Thermal Power Station
7. APGENCO : Andhra Pradesh generation Corporation Ltd.
8. ACBPL : Aryan Coal Beneficiation Private Ltd.
9. APL : Adani Power Ltd.,
10. APCPL : Aravali Power Corporation Pvt. Ltd.
11. AMNEPL : Abhijeet MADC Nagpur energy Pvt. Ltd.
12. BEPL : Bajaj Energy Pvt. Ltd.
13. BSEB : Bihar State Electricity Supply Company
14. BRBCL : Bhartiya Rail Bijlee Company Limited
15. CESC : Calcutta Electric Supply Company
16. CGPL : Coastal Gujarat Power Ltd.
17. CSPGCL : Chhattisgarh State Power Generation Company Ltd.
18. DVC : Damodar Valley Corporation
19. DPL : The Durgapur Projects Ltd.
20. DPSC : Dishengarh Power Supply Company Ltd.
21. EPGL : Essar Power Gujarat Ltd.
22. GIPCL : Gujarat Industries Power Corporation Ltd.
23. GMDCL : Gujarat Mineral Development Corporation Ltd.

24. GSECL : Gujarat State Electric Corporation Ltd.
25. HPGCL : Haryana Power Generation Company Ltd.
26. IPGCL : Indraprastha Power Generation Company Ltd.
27. JSEB : Jharkhand State Electricity Board.
28. JHPL : Jhajjar Power Ltd.
29. JPL : Jindal Power Ltd.
30. JSW : Jindal Steel Works
31. KPCL : Karnataka Power Corporation Ltd.
32. KBUNL : Kanti Bijlee Utpadan Nigam Ltd.
33. MPPGCL : Madhya Pradesh Power Generating Company Ltd.
34. MPL : Maithon Power Ltd.
35. MSPGCL : Maharashtra State Power Generating Company Ltd.
36. NLC : Neyveli Lignite Corporation
37. NSPCL : NTPC - SAIL Power Corporation Ltd.
38. NTPC : National Thermal Power Corporation
39. NTECL : NTPC – Tamilnadu Electric Company Ltd.
40. OPGCL : Odisha Power Generation Corporation Ltd.
41. PSPCL : Punjab State Power Corporation Ltd.
42. RRVUNL : Rajasthan Rajya Vidyut Utpadan Nigam Ltd.
43. RIL : Reliance Infrastructure Ltd.
44. RPSCCL : Rosa Power Supply Company Ltd.
45. RWPL : Raj West Power Ltd.
46. SEL : Sterlite Energy Ltd.
47. SVPPL : Shri Vardhman Power Pvt. Ltd.

48. ST-CMS	:	ST-CMS
49. TPCO	:	Tata Power Company Ltd.
50. TUNL	:	Tenunghat Vidyut Nigam Ltd.
51. TNG&D	:	Tamil Nadu Generating and Distribution Corporation Ltd.
52. UPCL	:	Udupi Power Company Ltd.
53. UPRVUNL	:	Uttar Pradesh Rajya Vidyut Utpadan Nigam Ltd.
54. VESPL	:	Vandana Energy Supply Power Ltd.
55. WBPDC	:	West Bengal Power Development Corporation Ltd.
56. WPCL	:	Wardha Power Company Ltd.
57. GEPL	:	Gupta Power Company Ltd.
58. VIP	:	Vidharbha Industries Power Ltd.
59. EPL	:	Essar Power Ltd.
60. ACB	:	Aryan Coal Beneficiary Ltd.
61. AP	:	Andhra Pradesh
62. MP	:	Madhya Pradesh
63. TN	:	Tamil Nadu
64. UP	:	Uttar Pradesh
65. WB	:	West Bengal
66. OB	:	Overburden
67. RDSO	:	Research Designs & Standards Organization

SI 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 making 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 Dam Construction	In Ash Dyke Raising	In the Reclamation of Low Lying Area	In Mine filling	In the 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)
58	Deen Bandhu Chhotu Ram,TPP Plant (DCRTPP),Yamuna Nagar	Haryana Power Generation Corporation Ltd	Haryana	600	0.8581	43.16	0.3703	0.2309	62.35	0.0190	0.2041					0.0000			0.0079	0.2309
59	PANIPAT	Haryana Power Generation Corporation Ltd	Haryana	710	0.6023	39.99	0.2409	3.9550	1641.97	0.0243	0.7147	3.1937				0.0000			0.0223	3.9550
60	HALDIA ENERGY LIMITED	HALDIA ENERGY LIMITED	West Bengal	600	1.5921	36.48	0.5808	0.5808	100.00	0.0222	0.5148	0.0000				0.0438			0.0000	0.5808
61	HINDUJA NATIONAL POWER COPORATION TPP (Vizag)	HINDUJA NATIONAL POWER COPORATION LIMITED	Andhra Pradesh	1040	0.0000	-	0.0000	0.0341	100.00	0.0341	0.0000	0.0000							0.0000	0.0341
62	INDIAN METALS & FERRO ALLOYS LTD.	INDIAN METALS & FERRO ALLOYS Ltd.	Odisha	200	0.5468	46.31	0.2532	0.2532	100.00	0.0706	0.0588	0.0000				0.1238			0.0001	0.2532
63	IL & FS TAMIL NADU POWER COMPANY Ltd	IL & FS TAMIL NADU POWER COMPANY Ltd	Tamil Nadu	1200	1.1836	4.47	0.0529	0.0529	100.00	0.0000	0.0529									0.0529
64	Ideal Energy Project Ltd,(Bela TPS)	IDEAL ENERGY PROJECTS Ltd.	Maharashtra	270	0.0000	-	0.0000	0.0000	-	0.0000										0.0000
65	MAHATMA GANDHI,TPP,Jhajjar	JHAJJAR POWER LIMITED	Haryana	1320	2.5804	38.37	0.9902	0.9733	98.29	0.0926	0.7884	0.0000	0.0137						0.0786	0.9733
66	O.P.Jindal Super TPP (Stage-I)	JINDAL POWER LIMITED	Chhattisgarh	1000	2.1470	44.18	0.9485	0.5762	60.75	0.0000	0.0727				0.0000	0.0344	0.4691			0.5762
67	O.P.Jindal Super TPP (Stage-II)	JINDAL POWER LIMITED	Chhattisgarh	2400	3.5339	45.79	1.6180	0.9775	60.41	0.0010	0.0009				0.0000	0.0000	0.9755			0.9775
68	JAYPEE BINA	JAIPRAKASH POWER VENTURES LIMITED	Madhya Pradesh	500	0.8180	39.31	0.3215	0.3215	100.00	0.0152	0.1377					0.1686				0.3215
69	JAYPEE NIGRIE SUPER	JAIPRAKASH POWER VENTURES LIMITED	Madhya Pradesh	1320	2.5697	31.98	0.8218	0.5001	60.85	0.0138	0.4322					0.0540			0.0000	0.5001
70	JSW Energy Ltd. (Ratnagiri)	JSW Energy Ltd	Maharashtra	1200	0.1413	12.14	0.0171	0.0172	100.04	0.0053	0.0051		0.0052		0.0016					0.0172
71	JSW Energy Ltd, (Vijayanagar)	JSW Energy Limited	Karnataka	860	0.5845	18.14	0.1060	0.1060	100.00	0.0137	0.0612				0.0251				0.0060	0.1060
72	DERANG TPP	JINDAL INDIA THERMAL POWER LIMITED	Odisha	1200	3.0773	41.00	1.2617	0.6465	51.24	0.0823	0.0017	0.0000	0.0000	0.0000	0.2064	0.3561	0.0000	0.0000	0.0000	0.6465
73	DONGAMAHUA CAPTIVE POWER PLANT	JINDAL STEEL AND POWER LIMITED	Chhattisgarh	576	1.0133	49.29	0.4994	0.4993	99.98	0.0001	0.0000						0.4992			0.4993
74	Angul CPP	JINDAL STEEL AND POWER LIMITED	Odisha	810	1.3190	43.29	0.5710	0.1780	31.17	0.0190					0.0000	0.1590				0.1780
75	JSW Energy (Barmer) Ltd	JSW Energy (Barmer) Ltd	Rajasthan	1080	3.0884	16.01	0.4944	0.4670	94.44	0.1042	0.3108						0.0519			0.4670
76	JSW STEEL LTD CPP-II	JSW STEEL LTD Salem Work	Tamil Nadu	90	0.0756	5.22	0.0039	0.0039	99.67	0.0039										0.0039
77	Kharsia CPP	JINDAL STEEL AND POWER LIMITED	Chhattisgarh	299	0.3602	47.61	0.1715	0.1715	100.00	0.0504	0.0076					0.1135				0.1715
78	JHABUA POWER LIMITED	JHABUA POWER LIMITED	Madhya Pradesh	600	1.3084	40.00	0.5234	0.3207	61.27	0.0283	0.1829	0.0048				0.1047			0.0000	0.3207
79	BALLARI	Karnataka Power Corporation Ltd.	Karnataka	1700	2.2285	38.16	0.8505	0.5466	64.27	0.1361	0.4105									0.5466
80	RAICHUR	Karnataka Power Corporation Ltd.	Karnataka	1720	1.9068	40.47	0.7717	0.7557	97.92	0.2013	0.5543	0.0000			0.0000					0.7557
81	KANTI BIJLEE UTPADAN NIGAM LIMITED	KANTI BIJLEE UTPADAN NIGAM LIMITED (NTPC JV)	Bihar	610	1.0705	38.37	0.4108	0.5534	134.73	0.0253	0.0000	0.0743	0.0305			0.2017			0.2217	0.5534

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 making 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 Dam Construction	In Ash Dyke Raising	In the Reclamation of Low Lying Area	In Mine filling	In the Agriculture / Waste Land Development	Others	Total Utilization	
				(MW)	(MT)	%	(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)	
82	KMPCL-Nariyara	M/s KSK MAHANADI POWER COMPANY LIMITED	Chhattisgarh	1800	2.8282	35.09	0.9925	0.9987	100.63	0.0120	0.5165	0.0002				0.1907	0.1900		0.0893	0.9987	
83	AMARKANTAK - LANCO	LANCO AMARKANTAK POWER LIMITED	Chhattisgarh	600	1.2477	38.03	0.4745	0.3595	75.76	0.0000	0.1489	0.0000			0.0000	0.2106				0.3595	
84	LALITPUR TPS	LALITPUR POWER GENERATION COMPANY LIMITED	Uttar Pradesh	1980	3.5398	35.46	1.2553	1.1729	93.43	0.0000	0.7322	0.0000				0.4407				1.1729	
85	LANCO ANPARA POWER LTD	LANCO ANPARA POWER LTD	Uttar Pradesh	1200	2.6515	32.33	0.8572	0.1089	12.70	0.0096	0.0993									0.1089	
86	MAITHON RIGHT BANK TPP	Maithon Power Ltd (DVC+Tata Power JV)	Jharkhand	1050	2.6180	40.37	1.0570	0.7840	74.17	0.0540	0.2880					0.0130	0.4290			0.7840	
87	SANJAY GANDHI	Madhya Pradesh Power Generation Company Ltd.	Madhya Pradesh	1340	2.2599	38.85	0.8780	0.7877	89.72	0.0135	0.3822	0.0089		0.0003		0.0000			0.3828	0.7877	
88	SATPURA	Madhya Pradesh Power Generation Company Ltd.	Madhya Pradesh	1330	1.0364	40.42	0.4189	0.4313	102.98	0.0894	0.0609		0.0130		0.0861	0.0000	0.0000		0.1820	0.4313	
89	AMARKANTAK MPPGCL	Madhya Pradesh Power Generation Company Ltd.	Madhya Pradesh	210	0.4811	35.52	0.1709	0.0412	24.13	0.0150	0.0216	0.0015			0.0032					0.0412	
90	SHREE SINGAJI TPS	Madhya Pradesh Power Generation Company Ltd.	Madhya Pradesh	2520	2.7461	39.15	1.0751	0.4905	45.62	0.0012	0.3461				0.0771	0.0000			0.0661	0.4905	
91	BHUSAWAL - MSPGCL	Maharashtra State Power Generation Company Ltd.	Maharashtra	1210	2.1921	39.26	0.8605	0.8824	102.55	0.0739	0.4129	0.1496			0.0000			0.0004	0.2456	0.8824	
92	CHANDRAPUR SUPER TPP	Maharashtra State Power Generation Company Ltd.	Maharashtra	2920	5.4247	38.21	2.0729	0.4276	20.63	0.0357	0.3916					0.0000			0.0004	0.4276	
93	KHAPARKHEDA	Maharashtra State Power Generation Company Ltd.	Maharashtra	1340	3.0717	42.89	1.3174	0.8385	63.65	0.3033		0.2141			0.3212	0.0000		0.0000		0.8385	
94	KORADI	Maharashtra State Power Generation Company Ltd.	Maharashtra	2400	3.4363	38.03	1.3070	0.8228	62.96	0.2638	0.0152	0.2718			0.2651	0.0068				0.8228	
95	NASHIK	Maharashtra State Power Generation Company Ltd.	Maharashtra	630	0.7553	37.71	0.2848	1.6631	583.91	1.4149	0.1248	0.1234								1.6631	
96	PARLI	Maharashtra State Power Generation Company Ltd.	Maharashtra	750	0.7512	42.00	0.3155	3.9171	1241.48	0.0546	0.0599	0.0000	0.0527	0.0000	0.0000	0.0000	0.0000	0.0000	0.0274	3.7226	3.9171
97.00	PARAS	Maharashtra State Power Generation Company Ltd.	Maharashtra	500	0.8924	40.23	0.3590	0.4833	134.62	0.4447	0.0116	0.0270							0.0000	0.4833	
98	MCCPL BANDHAKHAR	Maruti Clean Coal & Power Ltd	Chhattisgarh	300	0.8216	44.17	0.3629	0.3629	100.00	0.0000		0.3629				0.0000				0.3629	
99	SAI WARDHA POWER Ltd. WARORA	MSELDC, Captive Consumers,	Maharashtra	540	0.6811	27.75	0.1890	0.1890	100.00	0.0071	0.1407	0.0000	0.0083		0.0000		0.0328			0.1890	
100	THAMMINAPATNAM TPS	MEENAKSHI ENERGY Ltd.	Andhra Pradesh	300	0.3050	5.61	0.0171	0.0016	9.53	0.0016					0.0000					0.0016	
101	RAIGARH TPP	RAIGARH ENERGY GENERATION LTD	Chhattisgarh	600	1.4773	36.82	0.5440	0.2605	47.89	0.0000					0.0000	0.2605				0.2605	
102	ANUPPUR	MB POWER (MP) LIMITED	Madhya Pradesh	1200	2.5897	37.61	0.9740	0.9765	100.26	0.0072	0.4266	0.0000	0.0000		0.0000	0.5426			0.0000	0.9765	
103	MEJA TPP	MEJA URJA NIGAM PVT LTD (NTPC JV)	Uttar Pradesh	1320	2.8749	37.04	1.0650	0.7345	68.97	0.0007	0.4455								0.2883	0.7345	
104	NEYVELI -I EXPN	N.L.C.LTD	Tamil Nadu	420	1.6199	5.31	0.0860	0.0860	100.00	0.0136	0.0475				0.0077	0.0001	0.0112	0.0059	0.0000	0.0860	
105	NEYVELI - II	N.L.C.LTD	Tamil Nadu	1470	5.7101	5.96	0.3402	1.1533	339.04	0.1268	0.1062	0.8065			0.0175		0.0962		0.0000	1.1533	
106	NEYVELI - II EXPN	N.L.C.LTD	Tamil Nadu	500	1.1112	6.76	0.0752	0.0752	100.00	0.0582	0.0016				0.0030		0.0113		0.0011	0.0752	
107	NEYVELI NEW TPS	N.L.C.LTD	Tamil Nadu	1000	3.1451	4.55	0.1431	0.1431	100.00	0.0333	0.0817				0.0102		0.0179		0.0000	0.1431	
108	BARSINGSAR LIGNITE	N.L.C.LTD	Rajasthan	250	0.6265	13.55	0.0849	0.0849	100.00	0.0183	0.0518						0.0148			0.0849	
109	NLC TAMILNADU POWER LTD.(Tuticorin)	NLC TAMILNADU POWER LIMITED	Tamil Nadu	1000	1.7254	34.15	0.5892	0.5887	99.92	0.1322	0.4509	0.0050			0.0005				0.0000	0.5887	
110	BHILAI PP-II	NSPCL	Chhattisgarh	74	0.2335	40.59	0.0948	0.0839	88.47	0.0054	0.0181				0.0000	0.0604				0.0839	

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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)
111	BHILAI PP-III	NSPCL	Chhattisgarh	500	1.3680	43.70	0.5978	0.3140	52.53	0.0576	0.1872	0.0650				0.0042				0.3140
112	DURGAPUR CAPTIVE POWER PLANT	NSPCL	West Bengal	120	0.3484	38.17	0.1330	0.0672	50.56	0.0579	0.0094									0.0672
113	ROURKELA CPP-II	NSPCL ,	Odisha	120	0.4366	47.78	0.2086	0.1561	74.82	0.0396	0.0000	0.0732	0.0088			0.0000	0.0346			0.1561
114	VALLUR	NTECL (NTPC JV)	Tamil Nadu	1500	2.8361	39.69	1.1256	1.1250	99.95	0.1782	0.2060		0.2060			0.0000			0.5348	1.1250
115	DADRI	N.T.P.C.LTD	Uttar Pradesh	1820	2.0270	34.91	0.7075	0.7026	99.31	0.1710	0.4773	0.0000				0.0245			0.0298	0.7026
116	SINGRAULI	N.T.P.C.LTD	Uttar Pradesh	2000	4.5978	32.20	1.4805	0.3338	22.55	0.0043	0.0000	0.2745			0.0550	0.0000				0.3338
117	RIHAND	N.T.P.C.LTD	Uttar Pradesh	3000	6.8808	29.85	2.0542	0.9493	46.21	0.0392	0.0615	0.4225	0.0000	0.0000	0.0000	0.3121			0.1140	0.9493
118	FEROZE GANDHI UNCHAHAHAR	N.T.P.C. LTD	Uttar Pradesh	1550	2.8752	38.95	1.1199	1.4736	131.58	0.0340	0.3630	0.9936	0.0830	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.4736
119	TANDA	N.T.P.C.LTD	Uttar Pradesh	1760	2.7355	41.84	1.1446	1.2471	108.95	0.0030	0.2150	0.9412				0.0879				1.2471
120	KORBA SUPER - NTPC	N.T.P.C.LTD	Chhattisgarh	2600	7.0195	36.75	2.5800	1.6500	63.96	0.0287	0.0008	0.5063			0.7320	0.1366	0.2458		0.0000	1.6500
121	VINDHYACHAL	N.T.P.C.LTD	Madhya Pradesh	4760	12.4199	33.97	4.2191	1.6081	38.11	0.1133	0.1224	0.1719			0.6890	0.4910	0.0048		0.0157	1.6081
122	SIPAT	N.T.P.C.LTD	Chhattisgarh	2980	7.7214	36.92	2.8507	0.8582	30.11	0.1272	0.0213	0.3476			0.2773	0.0846		0.0000	0.0003	0.8582
123	RAMAGUNDAM - NTPC	N.T.P.C.LTD	Telangana	2600	5.6490	35.72	2.0180	2.0810	103.12	0.6980	0.4390	0.6670	0.0000		0.0460	0.0070	0.2240		0.0000	2.0810
124	SIMHADRI	N.T.P.C.LTD	Andhra Pradesh	2000	4.0550	40.56	1.6449	1.5272	92.84	0.3105	0.1394	1.0347	0.0425		0.0000	0.0000			0.0000	1.5272
125	FARAKKA	N.T.P.C.LTD	West Bengal	2100	3.9095	35.99	1.4070	1.8532	131.72	0.0267	0.1388	1.5705			0.0000	0.0000			0.1172	1.8532
126	KAHALGAON	N.T.P.C.LTD	Bihar	2340	6.4835	37.18	2.4109	1.7139	71.09	0.1133	0.3780	0.8753		0.0000	0.2860	0.0330		0.0000	0.0283	1.7139
127	BARH SUPER TPS	N.T.P.C.LTD	Bihar	1320	2.6843	38.00	1.0200	1.1429	112.04	0.1321	0.1858	0.5913			0.0000	0.2336			0.0000	1.1429
128	Nabinagar -NPGC Ltd	N.T.P.C.LTD	Bihar	1320	1.9709	34.25	0.6750	0.3500	51.86	0.0035	0.3465									0.3500
129	TALCHER - KANIHA	N.T.P.C.LTD	Odisha	3000	8.5390	41.56	3.5489	2.2030	62.08	0.0660	0.0000	0.9650			1.1460	0.0260				2.2030
130	Darlipali	N.T.P.C.LTD	Odisha	1600	2.8331	45.00	1.2749	0.4268	33.48	0.0000	0.0015	0.4027					0.0227			0.4268
131	MOUDA TPS	N.T.P.C.LTD	Maharashtra	2320	4.5181	38.76	1.7511	1.6862	96.30	0.1590	0.1721	1.1957			0.0685	0.0910			0.0000	1.6862
132	BONGAIGAON	N.T.P.C.LTD	Assam	750	1.2107	30.78	0.3726	0.2203	59.13	0.0286	0.1917									0.2203
133	SOLAPUR	N.T.P.C.LTD	Maharashtra	1320	1.1577	33.86	0.3919	0.3654	93.23	0.1479	0.2138		0.0037		0.0000				0.0000	0.3654
134	KUDGI	N.T.P.C.LTD	Karnataka	2400	1.2239	34.00	0.4161	0.2958	71.07	0.0018	0.2055		0.0113						0.0772	0.2958
135	GADARWARA	N.T.P.C.LTD	Madhya Pradesh	1600	2.4771	33.83	0.8380	0.0338	4.03	0.0016	0.0322					0.0000				0.0338
136	BARAUNI	N.T.P.C.LTD	Bihar	720	0.5992	38.70	0.2319	0.2083	89.81	0.0045	0.0934	0.1098							0.0005	0.2083
137	Lara Super TPP	N.T.P.C.LTD.,	Chhattisgarh	1600	3.6994	39.53	1.4625	0.4420	30.22	0.0027		0.3480			0.0580	0.0104			0.0229	0.4420
138	KHARGONE SUPER TPS	N.T.P.C.LTD	Madhya Pradesh	1320	1.3769	37.91	0.5220	0.2521	48.30	0.0070	0.2083								0.0368	0.2521
139	Rajpura TPS	NABHA POWER LIMITED,	Punjab	1400	2.9377	34.66	1.0182	1.0283	100.99	0.0501	0.7490		0.0099			0.0000			0.2193	1.0283
140	NALCO, CPP ANGUL	NATIONAL ALUMINIUM COMPANY LIMITED (NALCO)	Odisha	1200	3.0582	48.56	1.4850	1.1010	74.14	0.2890	0.0000	0.1290			0.1680	0.4030	0.1120			1.1010
141	IB VALLEY	O.P.G.C.L.	Odisha	1740	4.0766	45.82	1.8679	0.4784	25.61	0.1400	0.0000	0.0000			0.2451	0.0906		0.00000	0.0027	0.4784

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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)
142	OPG POWER GENERATION PVT LTD	OPG POWER GENERATION PVT LTD.,	Tamil Nadu	414	0.7710	8.46	0.0652	0.0652	100.00	0.0130	0.0522									0.0652
143	Guru Nanakdev TPP, BATHINDA	Punjab State Power Corporation Ltd.	Punjab	0	0.0000	-	0.0000	0.1568	100.00	0.0469	0.1100	0.0000	0.0000			0.0000		0.0000		0.1568
144	Guru Hargobind, LEHRA MOHABAT	Punjab State Power Corporation Ltd.	Punjab	920	0.7721	36.74	0.2837	0.2069	72.92	0.0220	0.1848	0.0000				0.0000				0.2069
145	Guru Gobind Singh TPS, Ropar	Punjab State Power Corporation Ltd.	Punjab	840	0.6562	37.02	0.2430	0.7106	292.45	0.0088	0.4606	0.0825	0.0000			0.1576		0.0011		0.7106
146	GVK POWER (GOINDWALASAHIB) LTD	Punjab State Power Corporation Ltd.	Punjab	540	0.7873	33.55	0.2642	0.1940	73.45	0.0470	0.1418								0.0052	0.1940
147	PRAYAGRAJ	PRAYAGRAJ POWER GENERATION COMPANY LIMITED	Uttar Pradesh	1980	3.8141	33.52	1.2785	0.9064	70.89	0.0001	0.6021				0.0000	0.1303	0.1738		0.0000	0.9064
148	RKM Power Gen Pvt. Ltd.(Uchpinda)	R K M POWERGEN PRIVATE LIMITED	Chhattisgarh	1440	2.3355	46.25	1.0802	1.0801	99.99	0.0000	0.1210	0.0911			0.0000	0.0602	0.3205		0.4873	1.0801
149	CHHABRA	Rajasthan Rajya Vidyut Utpadan Nigam Ltd.	Rajasthan	1000	1.5639	31.53	0.4931	0.3504	71.05	0.0715	0.2350	0.0000		0.0000		0.0000			0.0439	0.3504
150	CHHABRA SUPER CRITICAL TPS	Rajasthan Rajya Vidyut Utpadan Nigam Ltd.	Rajasthan	1320	1.1490	28.37	0.3260	0.1793	55.00	0.0409	0.1384									0.1793
151	SURATGARH TPS	Rajasthan Rajya Vidyut Utpadan Nigam Ltd.	Rajasthan	1500	0.6398	38.42	0.2459	0.9142	371.85	0.0000	0.0776								0.8366	0.9142
152	KALISINDH	Rajasthan Rajya Vidyut Utpadan Nigam Ltd.	Rajasthan	1200	1.9364	32.12	0.6219	0.5404	86.88	0.1581	0.1806	0.0000	0.0000		0.0000	0.0177			0.1840	0.5404
153	Kota Super TPS	Rajasthan Rajya Vidyut Utpadan Nigam Ltd.	Rajasthan	1240	1.8338	34.20	0.6272	0.7096	113.14	0.0694	0.4925	0.0779	0.0004		0.0000				0.0694	0.7096
154	ROSA Phase -I	Rosa Power Supply Company Ltd.	Uttar Pradesh	1200	2.2452	37.64	0.8452	0.6966	82.42	0.0062	0.4921		0.0001		0.0000	0.1928		0.0000	0.0055	0.6966
155	AMARAVATI TPS	RATTAN INDIA POWER LTD.,	Maharashtra	1350	2.9883	39.27	1.1736	0.4604	39.23	0.1707	0.0125		0.0179		0.0000	0.2593				0.4604
156	YERAMARUS TPS	RAICHUR POWER CORPORATION LIMITED	Karnataka	1600	1.2257	39.27	0.4814	0.3844	79.85	0.1333	0.2510									0.3844
157	RINL CAPTIVE TPP, VISAKHAPATNAM	RASHTRIYA ISPAT NIGAM LTD.,	Andhra Pradesh	315	0.7996	37.87	0.3028	0.4049	133.71	0.0000	0.0786					0.3263				0.4049
158	Raipur TPP	Raipur Energen Limited	Chhattisgarh	1370	3.3696	32.64	1.0997	0.9822	89.32	0.0168	0.4482	0.0540				0.0581	0.4051			0.9822
159	Sasan UMP	Reliance Power Ltd.,	Madhya Pradesh	3960	8.9614	30.17	2.7036	1.9828	73.34	0.0004	0.0079		0.0003	0.0000	1.9742	0.0000				1.9828
160	SAI LILAGARH POWER GENERATION LTD	SAI LILAGARH POWER GENERATION LTD	Chhattisgarh	86	0.0000	-	0.0000	0.0000	-	0.0000										0.0000
161	SEBICORP ENERGY INDIA LIMITED	SEBICORP ENERGY INDIA LIMITED	Andhra Pradesh	1320	2.9257	28.85	0.8440	0.8438	99.99	0.0830	0.6457		0.0133		0.0959	0.0059				0.8438
162	SWASTIK POWER & MINERALS RESOURCES PVT. LTD.	SWASTIK POWER & MINERALS RESOURCES PVT. LTD	Chhattisgarh	25	0.0000	-	0.0000	0.0000	-	0.0000										0.0000
163	SKS POWER GENERATION (CHHATTISGARH) LTD	SKS POWER GENERATION (CHHATTISGARH) LTD	Chhattisgarh	600	0.8014	45.35	0.3634	0.3516	96.76	0.0055	0.0392	0.0011				0.0000	0.3059			0.3516
164	SINGARENI	THE SINGARENI COLLIERIES COMPANY LIMITED	Telangana	1200	2.5460	34.64	0.8820	0.9530	108.05	0.1160	0.3150	0.0110	0.1400			0.0200	0.2290		0.1220	0.9530
165	CUDDALORE - TAQA	TAQA Neyveli Power Company Pvt. Ltd.	Tamil Nadu	250	0.7549	4.37	0.0330	0.1208	366.08	0.0058	0.0187				0.0000		0.0043		0.0919	0.1208
166	JOJOBERA	Tata Power Company Ltd.	Jharkhand	547.5	1.3107	38.00	0.4980	0.4610	92.58	0.0076	0.2963		0.0349			0.1223				0.4610
167	TROMBAY	Tata Power Company Ltd.	Maharashtra	750	1.2660	2.24	0.0283	0.0253	89.40	0.0035			0.0218				0.0000			0.0253
168	SABARMATI	TORRENT POWER LTD.	Gujarat	362	0.6939	27.63	0.1917	0.1917	100.00	0.0000	0.1413	0.0000			0.0504			0.0000		0.1917

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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)
169	TUTICORIN	Tamil Nadu Generation & Distribution Corporation Ltd. (TANGEDCO)	Tamil Nadu	1050	2.1573	24.37	0.5258	0.2817	53.58	0.0702	0.2111					0.0004	0.0000			0.2817
170	METTUR-I	Tamil Nadu Generation & Distribution Corporation Ltd. (TANGEDCO)	Tamil Nadu	840.0	1.8463	36.38	0.6716	0.6136	91.37	0.1211	0.0561								0.4364	0.6136
171	METTUR-II	Tamil Nadu Generation & Distribution Corporation Ltd. (TANGEDCO)	Tamil Nadu	600	1.1191	33.82	0.3785	0.3785	100.00	0.0183	0.2350				0.1252				0.0000	0.3785
172	NORTH CHENNAI-I	Tamil Nadu Generation & Distribution Corporation Ltd. (TANGEDCO)	Tamil Nadu	630	1.3669	41.00	0.5605	1.1324	202.04	0.0150	0.0538	1.0234	0.0402							1.1324
173	NORTH CHENNAI-II	Tamil Nadu Generation & Distribution Corporation Ltd. (TANGEDCO)	Tamil Nadu	1200	1.2982	40.94	0.5315	0.6524	122.75	0.0895	0.2579	0.3050								0.6524
174	RAMAGUNDAM-B	Telangana State Power Generation Corporation Ltd.(TSGENCO)	Telangana	62.5	0.1025	42.49	0.0435	0.0502	115.28	0.0000									0.0502	0.0502
175	KOTHAGUDEM-V	Telangana State Power Generation Corporation Ltd.(TSGENCO)	Telangana	500	0.9891	48.27	0.4775	0.2442	51.14	0.0172	0.0901								0.1369	0.2442
176	KOTHAGUDEM-VI	Telangana State Power Generation Corporation Ltd.(TSGENCO)	Telangana	500	1.0248	37.65	0.3858	0.2225	57.68	0.0249	0.1719								0.0257	0.2225
177	KOTHAGUDEM-VII	Telangana State Power Generation Corporation Ltd.(TSGENCO)	Telangana	800	1.4802	33.91	0.5020	0.2070	41.23	0.0478	0.1591									0.2070
178	KAKATIYA (Stage-I)	Telangana State Power Generation Corporation Ltd.(TSGENCO)	Telangana	500	1.0103	37.32	0.3771	0.2662	70.59	0.1573	0.0984				0.0000	0.0000			0.0104	0.2662
179	KAKATIYA (Stage-II)	Telangana State Power Generation Corporation Ltd.(TSGENCO)	Telangana	600	0.9942	37.84	0.3762	0.2643	70.26	0.1322	0.1081				0.0000	0.0000			0.0240	0.2643
180	TRN ENERGY PRIVATE LIMITED	TRN ENERGY PRIVATE LIMITED	Chhattisgarh	600	0.4555	41.56	0.1893	0.1130	59.68	0.0236						0.0000	0.0893			0.1130
181	TENUGHAT TPS	TENUGHAT VIDHYUT NIGAM LIMITED	Jharkhand	420	0.5202	32.07	0.1668	0.1377	82.56	0.0000					0.0000	0.1377				0.1377
182	TALWANDI SABO POWER LTD	TALWANDI SABO POWER LTD.,	Punjab	1980	2.4415	38.58	0.9419	1.0937	116.11	0.3386	0.2724	0.3158	0.0073			0.1596				1.0937
183	ANPARA 'A' & 'B'	Uttar Pradesh Rajya Vidyut Utpadan Nigam Ltd. (UPRVUNL)	Uttar Pradesh	2630	5.1400	34.28	1.7618	0.0701	3.98	0.0001	0.0557				0.0098	0.0044			0.0000	0.0701
184	Harduaganj TPP	Uttar Pradesh Rajya Vidyut Utpadan Nigam Ltd. (UPRVUNL)	Uttar Pradesh	670	0.7478	43.46	0.3250	0.3485	107.22	0.0296	0.1085					0.2104				0.3485
185	OBRA	Uttar Pradesh Rajya Vidyut Utpadan Nigam Ltd. (UPRVUNL)	Uttar Pradesh	1000	1.7815	40.03	0.7131	0.0362	5.08	0.0004	0.0358	0.0000				0.0000				0.0362
186	PARICHAHA	Uttar Pradesh Rajya Vidyut Utpadan Nigam Ltd. (UPRVUNL)	Uttar Pradesh	920	1.6345	41.69	0.6815	0.4284	62.86	0.0548	0.3497	0.0071			0.0000	0.0168				0.4284
187	UDUPI	Udupi Power Corporation Limited	Karnataka	1200	0.5442	7.33	0.0399	0.0405	101.42	0.0077	0.0183		0.0144						0.0000	0.0405
188	BUTIBORI	VIDARBHA INDUSTRIES POWER LIMITED	Maharashtra	600	0.0000	-	0.0000	0.0000	-	0.0000	0.0000	0.0000	0.0000							0.0000
189	VS LIGNITE POWER PVT LTD	VS LIGNITE POWER PVT LTD	Rajasthan	135	0.4438	24.58	0.1091	0.1091	100.00	0.0187									0.0904	0.1091
190	VEDANTA TPP	VEDANTA LTD	Odisha	2400	5.8294	43.19	2.5175	2.3884	94.87	0.0149	0.0634	0.0144			0.0000	1.7496			0.5461	2.3884
191	VEDANTA CPP	VEDANTA LTD	Odisha	1215	4.3710	45.26	1.9783	1.8847	95.27	0.0110	0.0312	0.0104			0.0000	1.4718			0.3603	1.8847
192	KOLAGHAT	The West Bengal Power Development Corporation Ltd. (WBPDCL)	West Bengal	1260	1.4496	41.99	0.6087	0.6702	110.10	0.0337	0.2106				0.0000	0.4260				0.6702
193	SAGARDIGHI	The West Bengal Power Development Corporation Ltd. (WBPDCL)	West Bengal	1600	3.2664	31.83	1.0395	0.7508	72.22	0.0299	0.3919	0.0000				0.3291				0.7508

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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)
194	BANDEL	The West Bengal Power Development Corporation Ltd. (WBPDCCL)	West Bengal	335	0.6786	41.80	0.2837	0.2187	77.10	0.0054	0.1600					0.0533				0.2187
195	SANTALDIH	The West Bengal Power Development Corporation Ltd. (WBPDCCL)	West Bengal	500	1.4301	49.21	0.7038	0.3595	51.08	0.0131	0.2690				0.0774	0.0000		0.0000	0.0000	0.3595
196	BAKRESWAR	The West Bengal Power Development Corporation Ltd. (WBPDCCL)	West Bengal	1050	2.5570	34.53	0.8829	0.2744	31.08	0.0235	0.1972					0.0429	0.0107			0.2744
197	Sitapuram Power Plant	M/S Zuari Cement Limited	Telangana	43	0.0979	43.83	0.0429	0.0429	100.00	0.0326	0.0104									0.0429
		Grand Total		211668.50	376.2232	35.59	133.9017	109.3248	81.65	13.3457	32.4888	21.3965	1.0295	0.0003	7.1710	15.4140	7.5153	0.0347	10.9289	109.3248