

DETAILS OF OPERATION AND MAINTENANCE EXPENSES

Annexure VI

Name of the Company:

NTPC Ltd.

Name of the Power Station:

TTPS

(Rs. In Lakhs)

Sl. No.	Items	2008-09	2009-10	2010-11	2011-12	2012-13
1	Consumption of stores & spares	1807.96	1550.22	1803.07	2035.45	2003.59
2	Repair & Maintenance	1597.68	2055.78	2369.41	3038.73	2933.89
3	Insurance	68.25	109.77	124.69	124.17	123.80
4	Security	685.47	825.05	991.44	998.53	1055.08
5	Water Charges	76.65	76.65	365.17	653.68	653.68
6	Administrative Expenses					
6.1	Rent	0.00	0.00	0.00	0.00	0.00
6.2	Electricity charges	77.72	78.42	84.82	83.03	84.51
6.3	Travelling & Conveyance	293.77	256.76	303.30	361.18	344.40
6.4	Communication Expenses	44.46	51.41	52.33	60.00	59.08
6.5	Advertising	1.88	3.08	2.87	7.11	5.03
6.6	Foundation Laying & Inauguration	0.00	0.00	0.00	0.00	0.00
6.7	Donation	0.00	0.00	0.00	0.00	0.00
6.8	Entertainment	12.13	15.25	19.87	16.59	16.75
6.9	Filing fee	0.00	9.20	9.20	9.20	18.40
	Subtotal (Administrative Expenses)	429.96	414.12	472.39	537.12	528.17
7	Employee Cost					
7.1	- Salaries,Wages & Allowances	7649.32	11672.89	11571.59	11407.47	12914.30
7.2	- Staff Welfare expenses	400.56	996.94	774.62	763.58	989.09
7.3	- Incentive	345.25	376.41	445.59	367.86	381.30
7.4	- Expenditure on VRS	62.17	29.13	0.00	61.49	0.00
7.5	- Ex-gratia	0.00	290.22	290.74	292.87	290.95
7.6	- Performance Related Pay(PRP)	456.36	420.66	445.26	636.97	705.22
	Sub Total (Employee Cost)	8913.66	13786.25	13527.80	13530.24	15280.86
8	Loss of Store	0.00	0.00	0.00	1.01	0.00
9	Provisions	0.61	0.73	31.30	9.63	18.12
10	Prior Period Expenses	0.00	0.00	0.00	0.00	0.00
11	Corporate Office expenses allocation	1147.45	1041.13	1284.17	8571.86	1183.45
12	Others					
12.1	Rates & Taxes	11.27	7.31	6.91	8.04	8.81
12.2	Water cess	24.75	24.75	24.75	24.82	24.75
12.3	Training & recruitment expenses	30.26	39.93	66.30	63.55	36.20
12.4	Tender Expenses	65.70	35.23	55.26	68.74	42.58
12.5	Guest house expenses	45.12	46.54	50.26	58.39	61.69
12.6	Education expenses	130.35	137.15	245.91	47.92	41.92
12.7	Community Development Expenses	118.56	53.41	142.34	454.56	539.93
12.8	Ash utilisation expenses	11.85	0.11	0.09	0.00	0.00
12.9	Books & Periodicals	0.44	0.43	0.85	0.78	2.75
12.1	Professional Charges	8.06	19.72	76.95	35.37	17.70
12.11	Legal expenses	3.12	11.23	10.53	6.20	17.56
12.12	EDP Hire & other charges	33.03	51.49	39.44	32.35	45.57
12.13	Printing & Stationery	13.18	19.43	23.17	25.08	26.12
12.14	Misc and other Expenses	625.04	582.89	1031.48	462.59	508.45
	Sub Total (Others)	1120.73	1029.61	1774.24	1288.38	1374.04
13	(Total 1 to 12)	15848.42	20889.32	22743.68	30788.81	25154.69
14	Revenue / Recoveries	18.30	23.24	21.61	22.12	22.02
15	Net Expenses	15830.12	20866.07	22722.08	30766.69	25132.67
16	Capital spares consumed	378.18	248.31	1059.43	1483.41	427.30
	Total O&M Cost	16208.30	21114.38	23781.51	32250.10	25559.97
17	Expenditure of Capital nature as per accounting practice not claimed/ disallowed in capital cost	63.00				
	Total O&M Cost includng Sl No. 17 above	16271.30	21114.38	23781.51	32250.10	25559.97
	No. of Employee opting for VRS	7.00	3.00	0.00	0.00	0.00

Note:

- 1) Prior period expenses have been incuded in their natural head
- 2) Ex gratia has been included in PRP for the year 2008-09
- 3) Employee cost includes arrears
- 4) For 2009-14 period, Tariff order is yet to be issued

ANNEXURE-I

Pro-forma furnishing Actual annual performance/operational data for the coal /lignite based thermal generating stations for the 5 year period from 2008-09 to 2012-2013

	Particulars	Units	2008-09	2009-10	2010-11	2011-12	2012-13	Basis of information/ methodology
1	Name of Company		NTPC LTD.					
2	Name of Station		TALCHER THERMAL POWER STATION,					
3	Installed Capacity and Configuration	MW	460 (Stage # I: 4 X 60 MW , Stage # II: 2X 110 MW)					
4	Rated Steam Parameters (Also state the type of Steam turbine and Boiler)		ST-I: Boiler (SH outlet Pr.-95 Kg/cm ² and Temp.-513±5°C, capacity 272 T/hr), Turbine- Single cylinder ST-II: Boiler(SH outlet Pr.-138 Kg/cm ² and Temp.-540°C) Turbine- Three cylinder, condensing steam turbine with reheating and non regulating extractions					
5	Type of BFP		Electrical Motor Driven					
6	Circulating Water System		Closed cycle					
7	Any other Site specific feature		1. Coal supply through approximately 8 km long Cross country Conveyor System as well as through Railway rakes through Track Hopper. 2. Ash slurry disposal through pipeline at mine voids at South Balanda Mines, MCL at a distance of 9-10 km.					
8	Fuels:							
8.1	Main Fuel:		Coal					
8.1.1	Annual Allocation or/ and Requirement	MT	Annual allocation through FSA =2.50 MMT (460MW), Annual requirement =2.97 MMT					Requirement has been worked out for 90% PLF
8.1.2	Sources of supply/ procurement along with contracted quantity and grade of coal		FSA signed with Mahanadi Coal fields Limited(MCL)					
			Annual contracted quantity of 2.50 MMT.					
			Grade of coal as per FSA is E- F					
8.1.2.1	FSA	MT	2.91	2.95	3.08	3.04	3.10	
8.1.2.2	Imported	MT	0.12	0.08	0.04	0.01	0.00	
8.1.2.3	Spot Market/e auction	MT	0.00	0.00	0.00	0.00	0.00	
8.1.3	Transportation Distance of the station from the sources of s	km	3.5					
8.1.4	Mode of Transport		Conveyor Belt/IR					
8.1.5	Maximum Station capability to stock main fuel	Days & MT	25 days & 2.5 LMT					
8.2	Secondary Fuel:							
8.2.1	Annual Requirement	klitre	3627					
8.2.2	Sources of supply		Indian Oil Corporation Limited					
8.2.3	Transportation Distance of the station from the sources of	Km	FO from Baleswar Depot at a distance of around 250 km &					
8.2.4	Mode of Transport		Road					
8.2.5	Maximum Station capability to stock secondary fuels	klitre	4500					
9	Cost of Spares:							
9.1	Cost of Spares capitalized in the books of accounts	(Rs. Lakh)	71	308	1006	801		2012-13 data to be submitted later
9.2	Cost of spares included in capital cost for the purpose of tariff	(Rs. Lakh)	71	0	0	0		

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1	Name of Company		NTPC LTD.					
2	Name of Station		TALCHER THERMAL POWER STATION,					
10	Generation							
10.1	Actual Gross Generation at generator terminals (Commercial Satge wise)		3734.7	3661.8	3796.7	3740.1	3879.3	
10.2	Actual Net Generation Ex-bus	MU	3364.6	3278.3	3394.6	3342.2	3471.7	
10.3	Scheduled Generation Ex-bus	MU	3339.2	3255.96	3374.97	3322.56	3451.95	Based on REA
11	Average Declared Capacity (DC)	MW	381.41	371.69	385.27	378.25	394.56	Based on REA
12	Actual Auxiliary Energy Consumption including colony consumption	MU	370.087	383.46	400.74	397.77	407.43	
13	Actual Energy supplied to Colony from the station	MU	7.86	8.14	8.33	7.95	7.67	
14	Main Fuel:							
14.1	Consumption :							
14.1.1	Domestic Coal (Linked miine/ Other mines/e-auction/spot)	MT	2906429	2887043	3052703	3037628	3166131	
14.1.2	Imported Coal*	MT	104965.4	85135.14	46071.33	6848.075	0	
14.2	Gross Calorific Value (GCV):							
14.2.1	Domestic Coal (As received)	kCal/kg						
	(As fired)	kCal/kg						
14.2.2	Imported Coal (As received)	kCal/kg	6201	6352	6137	6352	NA	
14.2.3	Spot market/e-auction coal (As received)	kCal/kg						
14.2.4	Weighted Average Gross Calorific value (As received)	kCal/kg						
14.2.5	Weighted Average Gross Calorific value (As fired)	kCal/kg	3552	3515	3487	3487	3455	
14.3	Price of Coal:							
14.3.1	Weighted Average price of Domestic coal	(Rs/MT)	677.52	732.57	820.2	957.75	1031.26	
14.3.2	Weighted Average price of imported coal	(Rs/MT)	6440.66	5573.49	6624.71	8830.63	8830.63	
14.3.3	Weighted Average price of spot market/ e-auction coal	(Rs/MT)	NIL	NIL	NIL	NIL	NIL	
14.3.4	Weighted Average price of all the Coals (as received)	(Rs/MT)	910.6	871.23	906.49	975.46	1031.26	
14.4	Blending:	% and MT						
14.4.1	Blending ratio of imported coal with domestic coal	%	3.5%	2.9%	1.5%	0.2%	0.0%	Imported/ Total Coal consumption
14.4.2	Proportion of e-Auction coal in the blending							
14.4.3	Actual Average stock maintained	MT	107653.8	147687.6	233256	138766	148368	Average of monthly closing stock
14.5	Actual Transit & Handling Losses for coal/Lignite							
14.5.1	Pit- Head Station							
14.5.1.1	Transit loss from linked mines	%	0.23	0.18	0.13	0.18	0.16	
14.5.1.2	Transit loss from non-linked mines including e-auction coal mines.							
14.5.1.3	Transit loss of imported coal	%	0.10	0.05	0.08	0.10	NA	
14.5.2	Non-Pit Head station							
14.5.2.1	Transit loss from linked mines							
14.5.2.2	Transit loss from non-linked mines including e-auction coal mines.							
14.5.2.3	Transit loss of imported coal							
15	Secondary Fuel Oil :							

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1	Name of Company		NTPC LTD.					
2	Name of Station		TALCHER THERMAL POWER STATION,					
15.1	Consumption	klitre	1234	2291	1958	1649	1465	
15.2	Weighted Average Gross Calorific value (As received)	kCal/kg(litre)	9491	9436	9468	9437	9445	
15.3	Weighted Average Price	Rs/Kl	39361	33685	37418	43186	50266	
15.4	Actual Average stock maintained	klitre	1165	1112	1095	1215	1072	Average of monthly closing stock
16	Weighted average duration of outages							
16.1	Scheduled Outages	MU	201.9	264.3	228.9	338.7	193.3	
16.2	Forced Outages	MU	69.8	111.5	91.5	54.5	64.0	
16.3	Number of trippings	No	37	71	46	37	43	
16.4	Number of start-ups :	No	44	77	52	43	48	
16.4.1	Cold Start-up	No	14	14	14	7	8	
16.4.2	Warm Start-up	No	19	30	30	26	22	
16.4.3	Hot start-up	No	11	33	8	10	18	
17	NOx , SOx ,and other particulate emission in :							
17.1	Design value of emission- NOx	mg/Nm ³	NA					No norm; not considered in design
	Design value of emission- SOx	mg/Nm ³	NA					No norm; not considered in design
	Design value of emission- SPM (St-I)	mg/Nm ³	150					
	Design value of emission- SPM (St-II)	mg/Nm ⁴	130					
17.2	Actual emission (SPM)- St-I	mg/Nm ³	97-140	93-147	101-147	96-145	112-148	
17.3	Actual emission (SOx)-St-I	mg/Nm ³	838-955	797-910	817-925	880-999	889-1061	
17.4	Actual emission (NOx)- St-I	mg/Nm ³	358-663	329-402	276-377	305-384	292-374	
17.2	Actual emission (SPM)- St-II	mg/Nm ³	259-368	209-359	111-268	130-148	131-149	
17.3	Actual emission (SOx)- St-II	mg/Nm ³						
17.4	Actual emission (NOx)- St-II	mg/Nm ³						
19	Detail of Ash utilization % of fly ash produced	Quantity Produced (Lakh MT)	11.61	11.43	11.93	11.93	12.35	
19.1	Conversion of value added product(Issue to Cement, RMC & Brick /block industries)	%	1.56	1.30	1.10	2.05	3.01	
19.2	For making roads & embarkment	%	0.00	0.00	0.00	0.00	0.00	
19.3	Land filling	%	0.00	0.00	0.00	0.04	0.00	
19.4	Used in plant site in one or other form or used in some other site (Mine filling & Ash dyke raising)	%	98.44	98.69	98.90	97.92	96.99	
19.5	Any other use , Please specify (Agriculture, Bottom ash cover etc.)	Qty. (Lakh M T) and usage	0.00	0.00	0.00	0.00	0.00	
20	Cost of spares actually consumed	Rs Lakhs	2127.71	1737.38	2804.11	3449.97	2356.52	
21	Average stock of spares	Rs Lakhs	4634.9	4987.1	4795.0	5011.1	4965.8	
22	Number of employees deployed in O&M							
22.1	Executives		231	237	247	233	223	

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1	Name of Company		NTPC LTD.					
2	Name of Station		TALCHER THERMAL POWER STATION,					
22.2	Non Executives		771	721	671	635	580	
22.3	Corporate office		3205	3272	3298	3354	3170	Total Corporate Man Power
23	Man-MW ratio		2.18	2.08	2	1.89	1.75	Excluding Corporate Man Power

Note:

From Oct/ Nov 2012 onwards payment to coal companies is being made on the basis of GCV as received at plant boundary. As per FSA, payment is to be made as per the quality assessed at mine end . Accordingly substantial amount billed by Coal companies are yet to be paid.

Prices indicated above reflect the payment being made to Coal Companies.

GCV of Domestic Coal as received is being measured only from Oct/Nov 2012