

DETAILS OF OPERATION AND MAINTENANCE EXPENSES

Annexure VI

Name of the Company: NTPC Ltd.

Name of the Power Station: FGUTPS (Rs. In Lakhs)

Sl. No.	Items	2008-09	2009-10	2010-11	2011-12	2012-13
1	Consumption of stores & spares	3063.03	3204.34	4365.56	4697.09	4336.68
2	Repair & Maintenance	2601.18	2510.24	4058.01	3782.83	3304.18
3	Insurance	156.89	261.78	294.96	297.65	302.65
4	Security	722.74	849.41	967.15	1095.64	1303.57
5	Water Charges	111.17	112.44	160.54	346.15	359.19
6	Administrative Expenses					
6.1	Rent	0.00	0.00	0.00	0.00	0.00
6.2	Electricity charges	172.47	215.29	413.87	410.89	497.48
6.3	Travelling & Conveyance	375.21	363.88	410.40	483.48	541.43
6.4	Communication Expenses	66.35	74.45	75.73	86.64	93.87
6.5	Advertising	15.08	16.76	12.90	10.49	7.11
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	24.77	13.51	13.59	13.09	18.63
6.9	Filing fee	2.30	21.00	21.00	21.00	42.00
	Subtotal (Administrative Expenses)	656.18	704.89	947.51	1025.60	1200.52
7	Employee Cost					
7.1	- Salaries,Wages & Allowances	8555.51	8588.29	11077.42	10793.72	13226.46
7.2	- Staff Welfare expenses	952.59	906.95	556.03	840.93	1084.05
7.3	- Incentive	508.37	516.51	521.12	519.34	539.73
7.4	- Expenditure on VRS	0.00	0.00	0.00	0.00	0.00
7.5	- Ex-gratia	0.00	260.94	284.80	304.79	308.80
7.6	- Performance Related Pay(PRP)	660.05	665.66	625.07	982.00	972.45
	Sub Total (Employee Cost)	10676.52	10938.35	13064.45	13440.78	16131.49
8	Loss of Store	0.00	0.53	0.00	0.00	0.07
9	Provisions	17.63	10.83	85.37	2.30	40.98
10	Prior Period Expenses	0.00	0.00	0.00	0.00	0.00
11	Corporate Office expenses allocation	2619.20	2377.40	2926.12	2758.24	2701.46
12	Others					
12.1	Rates & Taxes	2.59	17.42	6.86	4.48	2.87
12.2	Water cess	127.27	138.76	133.26	129.49	133.50
12.3	Training & recruitment expenses	50.09	48.29	59.23	70.19	54.44
12.4	Tender Expenses	71.44	79.64	80.57	51.96	51.78
12.5	Guest house expenses	15.87	18.65	23.43	28.18	32.32
12.6	Education expenses	84.58	75.24	83.58	35.17	28.24
12.7	Community Development Expenses	35.83	22.34	234.10	194.21	360.28
12.8	Ash utilisation expenses	0.00	5.49	1.81	21.38	12.29
12.9	Books & Periodicals	4.63	3.24	8.55	2.80	2.47
12.1	Professional Charges	29.60	20.44	41.01	21.51	58.98
12.11	Legal expenses	1.28	7.29	9.57	9.83	19.22
12.12	EDP Hire & other charges	61.52	48.96	38.22	53.60	32.09
12.13	Printing & Stationery	41.56	39.83	37.00	33.65	39.44
12.14	Misc and other Expenses	280.75	698.74	1018.70	728.91	792.10
	Sub Total (Others)	807.01	1224.33	1775.89	1385.37	1620.03
13	(Total 1 to 12)	21431.55	22194.53	28645.55	28831.65	31300.81
14	Revenue / Recoveries	356.01	406.89	396.12	434.54	456.70
15	Net Expenses	21075.54	21787.64	28249.43	28397.12	30844.11
16	Capital spares consumed	236.13	576.37	816.04	943.77	686.45
	Total O&M Cost	21311.67	22364.01	29065.47	29340.89	31530.56
17	Expenditure of Capital nature as per accounting practice not claimed/ disallowed in capital cost	0.00	3320.65	421.67	1345.78	
	Total O&M Cost including SI No. 17 above	21311.67	25684.66	29487.14	30686.67	31530.56
	No. of Employee opting for VRS	0.00	0.00	0.00	0.00	0.00

Note:

- 1) Prior period expenses have been inculed in their natural head
- 2) Ex gratia has been included in PRP for the year 2008-09
- 3) Employee cost includes arrears
- 4) For 2012-13, data in respect of SI No.17 shall be submitted later

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 LIMITED					
2	Name of Station		FGUTPP, UNCHAHAR					
3	Installed Capacity and Configuration	MW	1050 MW (210x5)					
4	Rated Steam Parameters (Also state the type of Steam turbine and Boiler)		Pr (All stage)-150 Ksc Temp(St-i-535, St-II-537,St-iii-537) Flow(St-i-630,St-II-627.7,St-III-537)					
5	Type of BFP		Electrical Driven					
6	Circulating Water System		Closed cycle					
7	Any other Site specific feature		Tube mills in stage-II					
8	Fuels:							
8.1	Main Fuel:		Coal					
8.1.1	Annual Allocation or/ and Requirement	MT	Annual allocation through FSA =5.70 MMT (1050MW), Annual requirement =6.0 MMT (1050MW)					Requirement has been worked out for 90% PLF
8.1.2	Sources of supply/ procurement along with contracted quantity and grade of coal		Central Coal fields Limited(CCL) & Bharat Coking Coal Limited(BCCL)					
			Annual contracted quantity of 5.70 MMT(CCL-3.9 MMT , BCCL-1.8					
			Grade of coal as per FSA is CCL:E- F , BCCL: C-E					
8.1.2.1	FSA	MT	5.42	5.51	5.90	5.20	5.97	
8.1.2.2	Imported	MT	0.20	0.25	0.13	0.26	0.20	
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 supply	km	BCCL-615, CCL- 606					
8.1.4	Mode of Transport		IR					
8.1.5	Maximum Station capability to stock main fuel	Days & MT	35 days & 6 Lakh MT					
8.2	Secondary Fuel:							
8.2.1	Annual Requirement	klitre	8278.2					
8.2.2	Sources of supply		IOCL					
8.2.3	Transportation Distance of the station from the sources of supply	Km	1000					
8.2.4	Mode of Transport		Rail					
8.2.5	Maximum Station capability to stock secondary fuels	klitre	12150					
9	Cost of Spares:							
9.1	Cost of Spares capitalized in the books of accounts (St-I)	(Rs. Lakh)	86	92	829	629		2012-13 data to be submitted later
	Cost of Spares capitalized in the books of accounts (St-II)	(Rs. Lakh)	0	401	355	235		
	Cost of Spares capitalized in the books of accounts (St-III)	(Rs. Lakh)	107	1930	641	930		
9.2	Cost of spares included in capital cost for the purpose of tariff (St-I)	(Rs. Lakh)	0	0	0	0		
	Cost of spares included in capital cost for the purpose of tariff (St-II)	(Rs. Lakh)	0	0	0	0		
	Cost of spares included in capital cost for the purpose of tariff (St-III)	(Rs. Lakh)	107	0	0	0		
10	Generation							
10.1	Actual Gross Generation at generator terminals (Commercial Satge wise)							
10.1.1	Stage-1	MU	3342.9	3582.6	3472.6	3292.7	3409.6	
10.1.2	Stage-2	MU	3593.0	3479.0	3475.4	3221.3	3404.1	
10.1.3	Stage-3	MU	1685.0	1890.8	1632.1	1765.3	1714.0	
10.2	Actual Net Generation Ex-bus	MU						
10.2.1	Stage-1	MU	3081.1	3298.2	3190.2	3017.5	3124.9	
10.2.2	Stage-2	MU	3288.6	3193.1	3161.0	2940.7	3109.9	
10.2.3	Stage-3	MU	1555.3	1745.2	1496.8	1620.4	1576.5	
10.3	Scheduled Generation Ex-bus							Based on REA
10.3.1	Stage-1	MU	3053.9	3277.9	3154.4	2998.6	3135.8	

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10.3.2	Stage-2	MU	3261.3	3168.4	3068.2	2887.2	3105.7	
10.3.3	Stage-3	MU	1541.1	1730.2	1478.4	1598.6	1568.5	
11	Average Declared Capacity (DC)							Based on REA
11.1	Stage-1	MW	351.6	377.6	381.3	362.0	377.6	
11.2	Stage-2	MW	376.1	366.2	383.6	356.3	382.5	
11.3	Stage-3	MW	177.9	200.3	182.6	194.8	191.2	
12	Actual Auxiliary Energy Consumption including colony consumption							
12.1	Stage-1	MU	261.8	276.1	274.0	268.0	277.7	
12.2	Stage-2	MU	304.4	285.9	314.4	280.6	294.2	
12.3	Stage-3	MU	129.7	145.6	135.3	144.9	137.5	
13	Actual Energy supplied to Colony from the station	MU	12.4	13.3	14.0	14.1	14.9	
14	Main Fuel:		COAL	COAL	COAL	COAL	COAL	
14.1	Consumption :							
14.1.1	Domestic Coal (Linked mine/ Other mines/e-auction/spot)	MT	5405486	5339966	5642026	5684443	5678203	
14.1.2	Imported Coal*	MT	132110	297507	143023	260706	221104	
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	5160	5500	5530	5600	5650	
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	3712	3782	3559	3356	3470	
14.3	Price of Coal:							
14.3.1	Weighted Average price of Domestic coal	(Rs/MT)	1778.9	1958.1	2279.7	2489.0	2923.6	
14.3.2	Weighted Average price of imported coal	(Rs/MT)	7598.7	7613.2	8052.8	9262.4	8338.5	
14.3.3	Weighted Average price of spot market/ e-auction coal	(Rs/MT)	0.0	0.0	0.0	0.0	0.0	
14.3.4	Weighted Average price of all the Coals (as received)	(Rs/MT)	1918.0	2256.0	2422.4	2786.1	3126.6	
14.4	Blending:	% and MT						
14.4.1	Blending ratio of imported coal with domestic coal	%	2.39%	5.28%	2.47%	4.39%	3.75%	Imported/ Total Coal Consumption
14.4.2	Proportion of e-Auction coal in the blending							
14.4.3	Actual Average stock maintained	MT	109189	166510	327620	151041	83308	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	MT						
14.5.1.2	Transit loss from non-linked mines including e-auction coal mines.	MT						
14.5.1.3	Transit loss of imported coal	MT						
14.5.2	Non-Pit Head station	MT						
14.5.2.1	Transit loss from linked mines	MT	0.60%	0.74%	0.80%	0.72%	0.81%	
14.5.2.2	Transit loss from non-linked mines including e-auction coal mines.	MT						
14.5.2.3	Transit loss of imported coal	MT	0.25%	0.16%	0.17%	0.18%	0.17%	
15	Secondary Fuel Oil :							
15.1	Consumption	klitre	2352.9	1566.6	2807.3	6280.1	3453.5	
15.1.1	HFO	klitre	980.4	899.1	1701.3	3710.6	793.7	
15.1.2	LDO	klitre	1372.5	667.5	1106.0	2569.5	2659.8	
15.2	Weighted Average Gross Calorific value (As received)	kCal/kg(litre)	9990.0	9990.0	9990.0	9990.0	9990.0	
15.3	Weighted Average Price of HFO	(Rs/KL)	29273.5	28236.0	36198.8	47652.5	55270.8	
	Weighted Average Price of LDO	(Rs/KL)	54726.4	46380.9	49953.4	62347.4	70750.8	
	Weighted Average Price	(Rs Per MT of	44963.5	35967.0	41617.6	53664.9	67193.2	
15.4	Actual Average stock maintained	klitre	3535.0	2919.3	3154.8	3687.4	6116.1	Average of monthly closing stock

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16	Weighted average duration of outages							
16.1	Scheduled Outages	MU	536.4	460.1	294.1	447.3	285.1	
16.2	Forced Outages	MU	249	84	188	124	145	
16.3	Number of trippings	No	43	24	42	33	38	
16.4	Number of start-ups :	No	48	28	42	37	41	
16.4.1	Cold Start-up	No	24	13	16	11	12	
16.4.2	Warm Start-up	No	1	2	4	4	8	
16.4.3	Hot start-up	No	23	13	22	22	21	
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	298					
	Design value of emission- SPM (St-II)	mg/Nm ⁴	150					
	Design value of emission- SPM (St-III)	mg/Nm ⁵	50					
17.2	Actual emission (SPM)-St-I	mg/Nm ³	123-148	123-146	132-146	121-148	130-148	
17.3	Actual emission (SOx)	mg/Nm ³	795-1598	601-1052	513-789	632-780	712-1589	
17.4	Actual emission (NOx)	mg/Nm ³	205-403	215-382	263-324	282-336	279-380	
17.2	Actual emission (SPM)-St-II	mg/Nm ³	83-139	95-147	93-128	71-143	99-138	
17.3	Actual emission (SOx)	mg/Nm ³	770-1467	599-1003	599-786	625-810	608-936	
17.4	Actual emission (NOx)	mg/Nm ³	201-363	276-314	279-329	276-336	282-329	
17.2	Actual emission (SPM)-St-III	mg/Nm ³	73-96	53-98	38-96	34-93	48-95	
17.3	Actual emission (SOx)	mg/Nm ³	710-920	580-782	629-734	621-772	610-820	
17.4	Actual emission (NOx)	mg/Nm ³	230-390	292-385	297-327	289-322	250-336	
19	Detail of Ash utilization % of fly ash produced	Quantity Produced (Lakh MT)	21.73	22.09	23.21	25.73	24.54	
19.1	Conversion of value added product(Issue to Cement, RMC & Brick /block industries)	%	66.01	85.16	75.21	62.44	52.22	
19.2	For making roads & embarkment	%	12.43	0.00	0.00	0.31	0.20	
19.3	Land filling	%	0.18	1.29	0.00	1.93	1.36	
19.4	Used in plant site in one or other form or used in some other site (Mine filling & Ash dyke raising)	%	0.00	0.00	0.00	0.00	0.00	
19.5	Any other use , Please specify (Agriculture, Bottom ash cover etc.)	Qty. (Lakh M T) and usage	1.72	1.39	2.81	2.68	2.14	
20	Cost of spares actually consumed	Rs Lakhs	3080.9	3656.8	5037.26	5479.694324	4886.19431	
21	Average stock of spares	Rs Lakhs	7805.3	8767.7	9131.8	9392.2	10125.6	
22	Number of employees deployed in O&M							
22.1	Executives		370	376	375	386	398	
22.2	Non Executives		661	652	635	629	611	
22.3	Corporate office		3205	3272	3298	3354	3170	Total Corporate Man Power
23	Man-MW ratio		0.98	0.98	0.96	0.97	0.96	Excluding Corporate Man Power

Note:

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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