

Annexure-I

Pro-forma for furnishing Actual annual performance/operational data for the coal/lignite based thermal generating stations for the 5-year period from 2012-13 to 2016-17

Sl.No.	Particulars	Units	2012-13	2013-14	2014-15	2015-16	2016-17	Basis of Information/ Methodology/ Remarks
1	Name of Company		NTPC Ltd.					
2	Name of Station/ Pit head or Non- Pit head		Mouda Super Thermal Power Station Stage-I (non-pit-head)					
3	Installed Capacity and Configuration	MW	2 x 500 = 1000 MW					
4	Rated Steam Parameters (Also state the type of Steam turbine and Boiler)		MS 175ksc at 540 Deg C Boiler: Forced Circulation, Tangential Fired					
5	Type of BFP		2nos Steam Driven + 1nos Electric Driven					
6	Circulating water system		Closed Cycle					
7	Any other Site specific feature							
8	Fuels :							
8.1	Primary Fuel :		Coal/ Lignite					
8.1.1	Annual Allocation or/and Requirement		Annual allocation through FSA dated 24.03.2015 with SECL for Mauda-I- Unit-1- 1.917 MMT Annual allocation through Cost plus FSA dated 04.09.2013 with WCL for Mauda-I- Unit 2 - 1.7775 MMT Annual allocation through Cost plus FSA (Side agreement for FSA dated 04.09.2013) dated 10.01.2015 with WCL for Mauda- I- Unit 2 - 0.6 MMT Allocation through MOU dated 09.01.2014 with ECL - 5.0 MMT Allocation through MOU dated 22.07.2014 with NCL - 3.0 MMT Allocation through MOU dated 05.05.2016 with SCCL - 5.5 MMT Annual Requirement - 12.80					
8.1.2	Sources of supply/ procurement along with contracted quantity and grade of coal		WCL, SECL, SCCL, NCL, ECL					For the Station (2320 MW) Requirement has been worked out at 90% PLF
			2.31	2.91	2.91	2.91		
			SECL: All Grades(Korea Rewa fields), G10 to G12 (Korba fields) WCL: G9 (4832 Kcal/Kg)					
8.1.2.1	FSA	LOA	0.08	0.47	0.68	1.21	2.36	
		MoU	0.00	0.21	0.59	0.03	0.22	
8.1.2.2	Imported	MMT	0.000	0.00	0.69	0.11	0.00	
8.1.2.3	Spot Market/e-auction	MMT	0.07	0.12	0.06	0.00	0.00	
8.1.3	Transportation Distance of the station from the sources of supply	KM	SECL: Min. 494 Km (KUSMUNDA Colly Sdng), Max. 690 Km (Bhatgaon Colly Sdng, KARONJI) WCL: Min. 217 Km (Chargaon Colly Sdng, MAJRI Jn), Max.260 Km (Ballarpur colly sdng, Ballarshah)					
8.1.4	Mode of Transport		Indian Railways					
8.1.5	Maximum Station capability to stock primary fuel	Days & MMT	30 / 0.99					
8.1.6	Maximum stock maintained for primary fuel	MT	95654	190272	402000	614675	642395	
8.1.7	Minimum Stock maintained for primary fuel	MT	95654	86954	26000	237856	111349	
8.1.8	Average stock maintained for primary fuel	MT	95654	142502	175630	452090	370688	

Sl.No.	Particulars	Units	2012-13	2013-14	2014-15	2015-16	2016-17	Basis of Information/ Methodology/ Remarks	
8.2	Secondary Fuel :								
8.2.1	Annual Allocation/ Requirement	KL	9145					For the Station (2320 MW)	
8.2.2	Sources of supply		IOCL/HPCL/BPCL						
8.2.3	Transportation Distance of the station from the sources of	KM	1200 , 700 & 50 (Bongaigaon , Vishakhapatnam & Khapri)						
8.2.4	Mode of Transport		Indian Railways / Road						
8.2.5	Maximum Station capability to stock secondary fuels	KL	7500						
8.2.6	Maximum Stock of secondary oil actually maintained	KL	5028						
8.2.7	Minimum Stock of secondary oil actually maintained	KL	571						
8.2.8	Average Stock of secondary oil actually maintained	KL	1852						
9	Cost of Spares :								
9.1	Cost of Spares capitalized in the books of accounts	Rs. Lakhs	1523.93	1457.90	3202.39	2408.08	16528.30		
9.2	Cost of spares included in capital cost for the purpose of tariff	Rs. Lakhs		337.77	5674.32	5142.00	2000.00	For the period 2014-17 claimed and allowed on projected basis	
10	Generation :								
10.1	-Actual Gross Generation at generator terminals	MU	8.33	750.08	2310.91	1871.76	3689.88		
10.2	-Actual Net Generation Ex-bus	MU	2.68	664.03	2096.68	1717.83	3440.58		
10.3	-Scheduled Generation Ex-bus	MU	7.38	718.65	2406.88	1753.96	3520.81		
11	Average Declared Capacity (DC)	MW	0.33	234.35	786.54	918.20	895.19		
12	Actual Auxiliary Energy Consumption excluding colony consumption	MU	5.65	86.05	204.57	148.44	243.58		
13	Actual Energy supplied to Colony from the station	MU	0.00	0.00	9.67	5.48	5.72	For the Station (2320 MW)	
14	Primary Fuel :								
14.1	Consumption :	MT	9040	633746	1588524	1325693	2533765		
14.1.1	Domestic coal	From linked mines	MT	4520	503168	463466	961551	2278828	
		Non-linked mines	MT						
14.1.2	Imported coal	MT	0	0	468554	182681	87722		
14.1.3	Spot market/e-auction coal	MT	4520	130578	656504	181461	167215		
14.2	Gross Calorific Value (GCV) :								
14.2.1	Domestic Coal	(As Billed) (Eq. Basis)	kCal/kg	2512	4859	4177	4225	4083	
		(As Received) (TM Basis)	kCal/kg	NA	NA	3266	3282	3560	
		(As Fired) (TM Basis)	kCal/kg	NA	NA	NA	NA	NA	
14.2.2	Imported Coal	(As Billed) (ADB Basis)	kCal/kg	NA	NA	NA	5598	NA	
		(As Received)	kCal/kg	NA	NA	5671	4473	NA	
14.2.3	Spot market/e-auction coal	(As Billed)	kCal/kg	3005	6173	6128	NA	NA	
		(As Received)	kCal/kg	NA	NA	4865	NA	NA	

Sl.No.	Particulars	Units	2012-13	2013-14	2014-15	2015-16	2016-17	Basis of Information/ Methodology/ Remarks
14.2.4	Weighted Average Gross Calorific value (As Billed)	kCal/kg	2777	5385	5183	4338	4083	
14.2.5	Weighted Average Gross Calorific value (As Received)	kCal/kg	NA	NA	4690	3386	3560	
14.2.6	Weighted Average Gross Calorific value (As Fired)	kCal/kg	2304	2977	NA	NA	NA	
14.3	Price of coal :							
14.3.1	Weighted Average Landed price of Domestic coal		1596.23	2669.52	2257.29	3077.62	3242.50	
14.3.2	Weighted Average Landed Price of Imported coal		0.00	0.00	6056.58	5464.68	0.00	
14.3.3	Weighted Average Landed Price of Spot market/e-auction		3691.66	7603.05	7731.16	5744.41	4445.64	
14.3.4	Weighted Average Landed Price of all the Coals		2722.95	4642.76	5616.12	3334.16	3351.56	
14.4	Blending :	% and MT (of the total coal consumed)	0.00%	0.00%	29.50%	13.78%	3.46%	
14.4.1	Blending ratio of imported coal with domestic coal	Equivalent to domestic coal						
14.4.2	Proportion of e-auction coal in the blending		50.00	20.60	41.33	13.69	6.60	
14.5	Actual Average Coal stock maintained	MT	95654	142502	175630	452090	370688	
		Days	12	19.96	12.30	31.66	25.96	
14.5	Actual Transit & Handling Losses for coal/Lignite							
14.5.1	Pit- Head Station							
14.5.1.1	Transit loss from linked mines	%	NA	NA	NA	NA	NA	
14.5.1.2	Transit loss from non-linked mines including e-auction coal		NA	NA	NA	NA	NA	
14.5.1.3	Transit loss of imported coal		NA	NA	NA	NA	NA	

Sl.No.	Particulars	Units	2012-13	2013-14	2014-15	2015-16	2016-17	Basis of Information/ Methodology/ Remarks
14.5.2	Non-Pit Head station							
14.5.2.1	Transit loss from linked mines	MT %	0.80	0.80	0.80	0.80	0.80	
14.5.2.2	Transit loss from non-linked mines including e-auction coal mines.		0.80	0.80	0.80	0.80	0.80	
14.5.2.3	Transit loss of imported coal		0.00	0.00	0.20	0.20	0.00	
15	Secondary Fuel Oil : (If more than one fuel used then give details of all the fuels)							
15.1	Consumption	KL	889	16404	9620	3425	2293	
15.2	Weighted Average Gross Calorific value (As received)	Kcal/Ltr	9800	8672	9486	9457	9476	
15.3	Weighted Average Price	Rs/KL	65157	69720	65153	36153	42243	
15.4	Actual Average Stock maintained	HFO						
		LDO	KL	1512	1789	1324	1100	
16	Weighted average duration of outages(unit-wise)							
16.1	Planned Outages	Days	0.00	0.00	7.56	8.85	9.00	
16.2	Forced Outages	Days	15.87	86.26	35.80	2.83	7.29	
16.3	Number of tripping	Nos	3	33	22	15	9	
16.4	Number of start-ups:	Nos	3	48	48	36	24	
16.4.1	Cold Start-up	Nos	0	7	17	19	17	
16.4.2	Warm Start-up	Nos	1	22	16	1	1	
16.4.3	Hot start-up	Nos	2	19	15	16	6	
17	NOx , SOx ,and other particulate matter emission in :							
17.1	Design value of emission control equipment	mg/Nm3	ESP design dust outlet Conc.: 50					
17.2	Actual emission	SPM	mg/Nm3		69	45	65	
		SOX	mg/Nm3		829	1095	1183	
		NOX	mg/Nm3		109	175	325	
19	Detail of Ash utilization % of fly ash produced	%	-	1.14	14.41	80.31	100.00	
19.1	Conversion of value added product	%	-	1.07	1.28	78.53	65.19	
19.2	For making roads & embarkment	%	-	0.00	12.92	0.00	33.92	
19.3	Land filling	%	-	0.06	0.06	1.76	0.00	
19.4	Used in plant site in one or other form or used in some other	%	-	0.00	0.15	0.02	0.89	
19.5	Any other use , Please specify	%	-	0.00	0.00	0.00	0.00	
20	Cost of spares actually consumed	Rs. Lakhs	304.36	878.12	1640.93	2507.89	3259.02	
21	Average stock of spares	Rs. Lakhs	753.10	3233.59	5942.51	7482.99	9437.16	
22	Number of employees deployed in O&M							
22.1	- Executives		379	388	379	361	342	
22.2	- Non Executives		42	52	50	77	80	
22.3	- Corporate office		3170	3051	2916	2973	2787	
23	Man-MW ratio		0.42	0.44	0.43	0.26	0.25	

Note: Allocation of stations attached at Appendix-I
Man-MW ratio computed excluding Corporate Employees
Average Coal stock computed based on monthly closing stock

DETAILS OF OPERATION AND MAINTENANCE EXPENSES

Name of the Company:
Name of the Power Station:

NTPC Ltd.
Mauda Super Thermal Power Station

Rs. Lakhs

Sl. No.	Items	2012-13	2013-14	2014-15	2015-16	2016-17
1	Consumption of stores & spares		878.12	1640.93	2507.89	3259.02
2	Repair & Maintenance		1160.29	2523.57	3354.48	3934.48
3	Insurance		139.25	308.72	273.86	286.45
4	Security		629.93	761.77	973.67	1543.50
5	Water Charges		240.21	793.23	1036.80	897.46
6	Administrative Expenses					
6.1	Rent		9.84	8.91	4.02	1.50
6.2	Electricity charges		111.88	191.06	249.91	233.23
6.3	Travelling & Conveyance		259.27	306.98	304.57	284.55
6.4	Communication Expenses		59.54	55.20	57.58	66.31
6.5	Advertising		5.79	106.59	11.31	13.20
6.6	Foundation Laying & Inaugration		0.00	0.00	0.00	0.00
6.7	Donation		0.00	0.00	0.00	0.00
6.8	Entertainment		6.43	13.05	15.19	17.02
6.9	Filing fee		13.04	44.12	44.00	44.00
	Subtotal (Administrative Expenses)		465.79	725.91	686.57	659.81
7.0	Employee Cost					
7.1.1	Salaries,Wages & Allowances		2529.91	2527.69	2684.00	3431.59
7.1.2	Pension		851.34	450.09	494.22	492.10
7.1.3	Gratuity		47.69	-20.60	-14.73	779.05
7.1.4	Provident Fund		404.91	426.70	457.92	485.93
7.1.5	Leave Encashment		401.39	490.76	526.22	818.99
7.2	Staff welfare expenses					
7.2.1	-Medical expenses on superannuated employees		3.50	6.86	36.47	0.00
7.2.2	-Medical expenses on regular employees & others		272.11	338.99	460.75	163.27
7.2.3	-Uniform/Livries & safety equipment		102.58	94.22	96.33	131.82
7.2.4	-Canteen expenses		60.09	93.08	116.18	119.76
7.2.5	-Other staff welwre expenses		95.12	80.85	53.55	111.90
	Subtotal (Staff welfare Expenses)		533.40	614.00	763.28	526.75
7.3	Productivity linked Incentive		54.68	8.99	11.27	0.00
7.4	Expenditure on VRS		0.00	148.30	0.00	0.00
7.5	Ex-gratia		27.86	49.51	38.85	46.54
7.6	Performance Related Pay(PRP)		538.42	623.19	680.86	836.18
	Sub Total (Employee Cost)		5389.59	5318.63	5641.89	7417.12
8	Loss of Store		0.00	0.00	0.00	0.00
9	Provisions		8.60	14.71	59.67	27.08
10	Prior Period Expenses		0.00	0.00	500.70	0.00
11	Corporate Office expenses allocation		1298.66	2766.77	2847.85	2993.47
12	Others					
12.1	Rates & Taxes		27.76	3.02	-60.35	-59.41
12.2	Water cess		19.63	152.67	205.97	214.23
12.3	Training & recruitment expenses		28.56	16.17	26.23	16.46
12.4	Tender Expenses		5.45	19.38	22.31	4.67
12.5	Guest house expenses		107.89	118.91	103.24	101.09

COD of 1st
Unit:
13.03.2013

Rs. Lakhs

Sl. No.	Items	2012-13	2013-14	2014-15	2015-16	2016-17
12.6	Education expenses		0.00	1.18	0.18	0.00
12.7	Community Development Expenses		0.00	0.00	37.08	87.59
12.8	Ash utilisation expenses		0.00	0.00	6.73	-27.28
12.9	Books & Periodicals		0.37	0.36	0.11	0.84
12.10	Professional Charges		13.56	13.05	2.73	10.19
12.11	Legal expenses		9.00	4.18	5.87	7.22
12.12	EDP Hire & other charges		10.11	24.52	29.78	29.35
12.13	Printing & Stationery		23.74	17.24	25.03	20.80
12.14	Misc Expenses		498.35	645.53	366.61	1081.85
	Sub Total (Others)		744.43	1016.21	771.53	1487.59
13	(Total 1 to 12)		10954.87	15870.43	18654.92	22505.98
14	Revenue / Recoveries		-2.54	-9.02	-21.61	-27.43
15	Net Expenses		10952.33	15861.41	18633.31	22478.55
16	Capital spares consumed		0.00	90.10	143.17	214.93
	Total O&M Cost		10952.33	15951.51	18776.48	22693.48
	No. of Emp. Applied for VRS	3	No. VRS scheme was in operational			

DETAILS OF WATER CHARGES

Name of the Company: NTPC Ltd.

Name of the Power Station and Stage/Phase: Mauda Super Thermal Power Station (1000 MW)

(Rs. In Lakhs)

Sl.No.	ITEM	2012-13	2013-14	2014-15	2015-16	2016-17
1	2	3	4	5	6	7
(A)	Plant					
1	Type of Plant	Coal Fired Thermal Power Plant				
2	Type of Cooling Tower	Induced Draft Cooling Tower				
3	Type of Cooling Water System	Closed cycle				
4	Any Special Features which may increase/reduce water consumption					
(B)	Quantum of Water : (Cubic Meter)					
5	Contracted Quantum	100 MCM				
6	Allocation of Water	40 MCM	50 MCM	12.5 MCM*	30 MCM	16 MCM
7	Actual water Consumption	2.348 MCM	13.96 MCM	1.946 MCM	8.213 MCM	16.04 MCM
8	Rate of Water Charges (Rs./Cubic meter)	3.2				
9	Other charges/Fees , if paid as part of Water Charges Rs lakhs	@20 % local tax	@20 % local tax	@20 % local tax	@20 % local tax & royalty@5% of water charges of difference of 100 MCM and yearly sub agreement qty)	20 % local tax & royalty@5% of water charges of difference of 100 MCM and yearly sub agreement qty)
	Total water Charges Paid Rs lakhs	52.36	240.21	793.23	1036.80	897.46

Details of capital Spares

Name of Company : NTPC Limited

Name of Power station : Mauda Super Thermal Power Station

Rs.

Sl. No.	ITEM	2012-13	2013-14	2014-15	2015-16	2016-17
(A)	Details of capital spares in Opening stock	-	15,23,93,113.38	29,81,83,418.20	60,94,12,555.40	83,59,03,908.89
(B)	Details of capital spares procured during the year	15,23,93,113.38	14,57,90,304.82	32,02,39,240.49	24,08,08,324.56	1,65,28,30,492.78
(C)	Details of capital spares consumed during the year	-	-	90,10,103.29	1,43,16,971.07	2,14,92,719.76
(D)	Details of capital spares closing at the end of the year	15,23,93,113.38	29,81,83,418.20	60,94,12,555.40	83,59,03,908.89	2,46,72,41,681.91

Note: Details of spares being provided in soft copy as voluminous

Name of the Utility: NTPC Ltd															
Name of the Generating Station: MoudaSTPS Stage-I															
Station/ Stage/ Unit: 2 X 500 (Stage-I)															
Fuel Type (Coal/ Lignite/ Gas/ Liquid Fuel/ Nuclear/ Hydro): Coal															
Capacity of Plant (MW): 1000 MW															
COD : 30.03.2014															
		2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13 (13.03.2013- 31.03.2013)	2013-14 (01.04.2013- 29.03.2014)	2013-14 (29.03.2014- 31.03.2014)	2014-15	2015-16	2016-17
	Rate (%)	Not Applicable													
	(f) Compensation Allowances (in Rs Cr)														
25	AFC (Rs. Kwh)									0.98	1.08	2.00	1.77	1.87	1.92
26	Energy Charge (Rs./Kwh)									1.90	1.90	4.37	2.15	1.87	1.92
27	Total tariff (Rs. Kwh)									2.88	2.98	6.37	3.92	3.74	3.84
28	Revenue realisation before tax (Rs. Crore)														
29	Revenue realisation after tax (Rs. Crore)														
30	Profit/ loss (Rs. Crore)									-31.95	-181.26		164.96	582.82	520.62
31	DSM Generation (MU)									-4.70	-55.14		-311.03	-36.21	-80.23
32	DSM Rate (Ps/Kwh)														
33	Revenue from DSM (Rs. Crore)									0.58	10.77		98.08	14.32	12.09

Note:

- 1 \$ "Ex-Bus" word is additionally inserted.
- 2 # "Average" word is additionally inserted.
- 3 \$ "for 2004-09 & pre tax (admitted by CERC) for 2009-17" word is additional inserted
- 4 # Additional Row 24(e) inserted
- 5 DSM Revenue (-)Received / (+) Paid
- 6 * For the whole station as an when the units were declared COD