

DETAILS OF OPERATION AND MAINTENANCE EXPENSES

Annexure VI

Name of the Company:

NTPC Ltd.

Name of the Power Station:

Kayamkulam

(Rs. In Lakhs)

Sl. No.	Items	2008-09	2009-10	2010-11	2011-12	2012-13
1	Consumption of stores & spares	577.83	310.58	602.96	544.97	403.54
2	Repair & Maintenance	1254.87	761.50	1083.12	1185.60	1060.22
3	Insurance	42.14	72.13	86.26	78.20	78.75
4	Security	230.48	423.77	389.85	437.41	466.29
5	Water Charges	5.00	5.00	5.00	5.00	5.00
6	Administrative Expenses					
6.1	Rent	0.60	0.66	0.66	0.56	0.00
6.2	Electricity charges	203.50	113.32	125.66	112.79	143.90
6.3	Travelling & Conveyance	140.40	151.50	142.15	191.19	193.46
6.4	Communication Expenses	34.06	39.43	39.95	41.64	42.67
6.5	Advertising	2.16	1.28	3.21	12.43	5.97
6.6	Foundation Laying & Inaugration	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	43.02	40.07	2.31	6.54	12.03
6.9	Filing fee	0.40	7.19	7.19	7.19	14.38
	Subtotal (Administrative Expenses)	424.14	353.45	321.13	372.34	412.42
7	Employee Cost					
7.1	- Salaries, Wages & Allowances	1722.87	1951.20	2153.20	2038.33	2291.77
7.2	- Staff Welfare expenses	204.51	151.45	210.26	210.17	279.99
7.3	- Incentive	55.21	88.24	85.06	86.54	88.61
7.4	- Expenditure on VRS	0.00	0.00	0.00	0.00	0.00
7.5	- Ex-gratia	0.00	33.55	38.52	39.96	38.14
7.6	- Performance Related Pay (PRP)	105.46	192.28	169.32	263.76	194.97
	Sub Total (Employee Cost)	2088.05	2416.72	2656.37	2638.77	2893.48
8	Loss of Store	0.00	0.00	0.00	0.00	0.00
9	Provisions	184.94	0.77	0.17	111.81	6.98
10	Prior Period Expenses	0.00	0.00	0.00	0.00	0.00
11	Corporate Office expenses allocation	898.02	815.70	1004.09	946.08	926.35
12	Others					
12.1	Rates & Taxes	30.39	20.02	21.67	21.02	21.10
12.2	Water cess	2.03	2.35	1.83	0.75	1.75
12.3	Training & recruitment expenses	8.08	15.87	17.07	17.81	13.37
12.4	Tender Expenses	0.30	38.15	52.13	15.78	16.82
12.5	Guest house expenses	19.67	24.04	41.18	26.56	32.17
12.6	Education expenses	90.18	109.56	128.73	35.29	32.91
12.7	Community Development Expenses	21.24	12.15	28.14	250.13	486.93
12.8	Ash utilisation expenses	0.00	0.00	0.00	0.00	0.00
12.9	Books & Periodicals	2.78	3.40	2.64	1.79	1.15
12.1	Professional Charges	1.91	5.61	5.71	2.16	11.04
12.11	Legal expenses	6.20	4.56	6.47	5.84	1.11
12.12	EDP Hire & other charges	13.50	12.92	12.07	10.91	11.77
12.13	Printing & Stationery	4.26	9.03	8.46	9.93	8.16
12.14	Misc and other Expenses	1401.52	140.50	570.58	889.25	150.59
	Sub Total (Others)	1602.06	398.16	896.68	1287.23	788.87
13	(Total 1 to 12)	7307.53	5557.79	7045.64	7607.40	7041.90
14	Revenue / Recoveries	4.37	20.16	10.30	12.44	11.79
15	Net Expenses	7303.16	5537.63	7035.34	7594.96	7030.12
16	Capital spares consumed	2469.19	147.35	2743.86	1261.66	596.21
	Total O&M Cost	9772.35	5684.98	9779.20	8856.62	7626.33
17	Expenditure of Capital nature as per accounting practice not claimed/ disallowed in capital cost	0.00	770.00	220.00	133.00	
	Total O&M Cost including SI No. 17 above	9772.35	6454.98	9999.20	8989.62	7626.33
	No. of Employee opting for VRS	0	0	0	0	0

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-II

Pro-forma furnishing Actual annual performance/operational data for the Gas/ Liquid fuel 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					
2	Name of Station		RAJIV GANDHI COMBINED CYCLE POWER STATION					
3	Installed Capacity and Configuration	MW	359 MW(2*115 MW+1*129 MW)					
4	Make of Turbine		GT-GE,USA; ST-BHEL					
5	Rated Steam Parameters		HP Steam:Pressure-76ata,Temp-518.2°C,Flow-376.8T/h;LP					
6	Average site ambient conditions		28°C, 80% RH					
7	Any other Site specific feature							
8	Fuels:							
8.1	Main / Primary Fuel:		Naphtha					
8.1.1	Annual Allocation or/ and Requirement	MnM ³ /MT	340885	417294	329568	122832	270782	
			Requirement: 4.84 Lakh MT					Based on 85% DC + 3% APC, normative HR
8.1.2	Sources of supply		BPCL					
8.1.3	Transportation Distance of the station from the sources of km		100					
8.1.4	Mode of Transport		Rail					
8.1.5	Maximum Station capability to stock main/ primary fuel	Kl	40000					
8.2	Alternate Fuel:		No alternate fuel. Only HSD as secondary fuel for start up.					
8.2.1	Annual Allocation or/ and Requirement	MnM ³ /MT/ Kl	456	264	312	168	192	
8.2.2	Sources of supply		BPCL					
8.2.3	Transportation Distance of the station from the sources of supply		100					
8.2.4	Mode of Transport		Road Tankers					
8.2.5	Maximum Station capability to stock secondary fuels	Kl	365					
9	Cost of Spares:							
9.1	Cost of Spares capitalized in the books of accounts	(Rs. Lakh)	0	844	2663	3815		2012-13 data to be submitted later
9.2	Cost of spares included in capital cost for the purpose of tariff	(Rs. Lakh)	0	0	0	0		
10	Generation							
10.1	Actual Gross Generation at generator terminals	MU	2022.41	2417.62	1902.82	706.41	1548.63	
10.1.1	Total	MU	2022.41	2417.62	1902.82	706.41	1548.63	
10.1.2	On Gas	MU	0.00	0.00	0.00	0.00	0.00	
10.1.2	On Naptha	MU	2022.41	2417.62	1902.82	706.41	1548.63	
10.2	Actual Net Generation Ex-bus	MU	1990.47	2381.06	1856.08	681.79	1508.02	
10.3	Scheduled Generation Ex-bus	MU	2009.63	2401.79	1865.46	691.58	1517.90	
11	Average Declared Capacity (DC)	MU	2501.70	2832.46	2667.38	2853.79	2779.70	
	Machine Availability Hours	Hrs	7761.73	8640.04	8321.95	8524.80	8618.13	
	Average Declared Capacity (DC)	MW	322.31	327.83	320.52	334.76	322.54	
12	Actual Auxiliary Energy Consumption including colony consumption	MU	31.94	36.56	46.74	24.62	40.61	
13	Actual Energy supplied to Colony from the station	MU	1.74	1.81	1.68	1.63	1.53	
14	Main / Primary Fuel:							
14.1	Consumption :							
14.1.1	Natural Gas :APM Gas (including PMT & KG D6)	MCM	Nil	Nil	Nil	Nil	Nil	

ANNEXURE-II

Pro-forma furnishing Actual annual performance/operational data for the Gas/ Liquid fuel 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					
2	Name of Station		RAJIV GANDHI COMBINED CYCLE POWER STATION					
	Non-APM Gas	MCM	Nil	Nil	Nil	Nil	Nil	
14.1.2	RLNG	MCM	Nil	Nil	Nil	Nil	Nil	
14.1.3	Liquid Fuel	MT	348932	417004	330783	123403	266719	
14.2	Weighted Gross Calorific Value (GCV)							
14.2.1	Natural Gas (As fired)		Nil	Nil	Nil	Nil	Nil	
14.2.2	RLNG (As fired)		Nil	Nil	Nil	Nil	Nil	
14.2.3	Liquid Fuel (As fired)	(kCal/Kg)	11338	11340	11342	11348	11393	
14.3	Weighted Average Price	(Rs/MT/KL/1000 SCM)						
14.3.1	APM Gas							
14.3.2	Non-APM Gas							
14.3.3	RLNG							
14.3.4	Liquid Fuel	(Rs Per MT)	39129.78	35703.88	42608.56	55550.29	62512.95	
14.4	Percentage of Declared Capacity	% and MW						
14.4.1	APM Gas (including PMT & KG D6)	% & MW	Nil	Nil	Nil	Nil	Nil	
14.4.2	Non-APM Gas	% & MW	Nil	Nil	Nil	Nil	Nil	
14.4.3	RLNG	% & MW	Nil	Nil	Nil	Nil	Nil	
14.4.4	Liquid Fuel	%	81.9	92.7	87.3	93.1	91.0	
	Liquid Fuel	MW	322.3	327.8	320.5	334.8	322.5	
14.4	Actual Average stock maintained	MT	340885	417294	329568	122832	270782	
15	Alternate Fuel/Secondary fuel(HSD):		HSD is used as start up fuel only					
15.1	Consumption	KL	422.8	254.5	302.4	246.3	182.5	
15.2	Weighted Average Gross Calorific value (As fired)	kCal/ ltr	9077	9077	9077	9077	9093	
15.3	Weighted Average Price							
15.4	Actual Average stock maintained	KL	200	200	200	200	200	
16	Weighted average duration of outages							
16.1	Scheduled Outages	MU	219.7	35.2	140.9	92.0	21.0	
16.2	Forced Outages	MU	8.0	7.9	16.7	1.2	30.0	
16.3	Number of trippings	No	6	7	11	3	3	
16.4	Number of start-ups :	No	18	17	21	13	24	
17	Cost of spares consumed	Rs Lakh	3009.6	412.8	3295.8	1793.6	972.2	
18	Average stock of spares	Rs Lakh	2079.9	2058.3	2232.0	2294.9	2280.2	
19	Nox and other particulate emission							
19.1	Design value of emission- NOx	ppm	150					
19.2	Actual emission (NOx)	ppm	76-85	78-85	10-91	81-91	73-85	
20	Number of employees deployed in O&M							
20.1	Executives		93	94	95	101	91	
20.2	Non Executives		75	77	77	75	64	
20.3	Corporate office		3205	3272	3298	3354	3170	Total Corporate Man Power
21	Man-MW ratio		0.48	0.49	0.49	0.5	0.44	Excluding Corporate Man Power

Note:

Daily Gas Allocation at stations is done from 06:00 to 06:00 Hrs, hence GCV and pricing is based on weighted average of 06:00 to 06:00 Hrs period

Daily Gas Consumption figures are based of 00:00 to 00:00 Hrs period.