

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 2012-13 to 2016-17							
	Particulars	Units	2012-13	2013-14	2014-15	2015-16	2016-17
1	Name of Company		NTPC Ltd.				
2	Name of Station		RAJIV GANDHI COMBINED CYCLE POWER STATION				
3	Installed Capacity and Configuration	MW	359.58 MW(2*115.2 MW+1*129.18 MW)				
4	Make of Turbine		GT-GE,USA; ST-BHEL				
5	Rated Steam Parameters		HP Steam:Pressure-76 ata,Temp-518.2°C,Flow-376.8 T/h; LP Steam:Pressure-6 ata,Temp-200°C,Flow-38.8 T/h				
6	Average site ambient conditions		Ambient Temperature-28°C,Relative humidity-60%,Ambient Pressure-1033mbar,Frequency-50Hz				
7	Any other Site specific feature						
8	Fuels:						
8.1	Main/Primary Fuel		Naphtha				
8.1.1	Annual Allocation	Receipt in MT	270782	162039	154053	23515	0
8.1.2	Sources of Supply		BPCL				
8.1.3	Transportation Distance of the station from the sources of supply	Km	100				
8.1.4	Mode of Transport		Rail				
8.1.5	Maximum Station capability to stock main/primary fuel	Kilo Litre	40000				
8.2	Alternate Fuel:		No alternate fuel. HSD as secondary fuel for start up.				
8.2.1	Annual Allocation/ Requirement	Receipt in KL	192	264	312	264	168
8.2.2	Sources of Supply		BPCL				
8.2.3	Transportation Distance of the station from the sources of supply	Km	100				
8.2.4	Mode of Transport		Road Tankers				
8.2.5	Maximum Station capability to stock secondary fuels	Million Cubic meter of MT or Kilo Litre	365				

	Particulars	Units	2012-13	2013-14	2014-15	2015-16	2016-17
9	Cost of Spares :						
9.1	Cost of Spares capitalized in the books	(Rs. Lakhs)	1205.33	684.78	3655.59	1476.44	374.31
9.2	Cost of spares included in capital cost for the purpose of tariff	(Rs. Lakhs)	0.00	0.00	0.00	0.00	0.00
10	Generation						
10.1	Actual Gross Generation at generator terminals	MU	1548.63	968.34	819.133	142.76	15.401
10.1.1	Total	MU	1548.63	968.34	819.133	142.76	15.401
10.1.2	On Gas	MU	-	-	-	-	-
10.1.3	On Naptha or any other fuel	MU	1548.63	968.34	819.133	142.76	15.401
10.2	Actual Net Generation Ex-bus	MU	1508.293	940.813	792.043	130.557	9.018
10.3	Scheduled Generation Ex-bus	MU	1430.73	947.162	798.81	138.902	14.929
11	Average Declared Capacity (DC)	MW	317.32	321.47	316.46	306.24	311.41
12	Actual Auxiliary Energy Consumption excluding colony consumption & agency power	MU	40.333	27.525	27.087	12.203	5.032
13	Actual Energy supplied to Colony from the station & Agency Power	MU	1.53	1.52	1.547	1.527	1.351
14	Main / Primary Fuel:						
14.1	Consumption :	MCM/MT/ KI	266719.13	166528.818	143046.574	25033.731	2725.747
14.1.1	Natural Gas : APM Gas	MCM					
	Non-APM Gas	MCM					
14.1.2	RLNG	MCM					
14.1.3	Liquid Fuel	KL	266719.13	166528.818	143046.574	25033.731	2725.747
14.2	Weighted Gross Calorific Value (GCV)		11393	11,386	11,381	11341	11294
14.2.1	Natural Gas (As recieved)	kcal/scm					
14.2.2	RLNG/ E-RLNG (As recieved)	kcal/scm					
14.2.3	Liquid Fuel (As recieved)	kcal/Lt	11393	11,386	11,381	11342	11294
14.3	Weighted Average Landed Price	(Rs per 1000 SCM)	62496.01	67107.15	67843.52	40142.79	40079.46
14.3.1	APM	(Rs per 1000 SCM)					
14.3.2	Non-APM	(Rs per 1000 SCM)					
14.3.3	RLNG / E-RLNG	(Rs per 1000 SCM)					
14.3.4	Liquid Fuel	Rs/KL	62496.01	67107.15	67843.52	40142.79	40079.46

	Particulars	Units	2012-13	2013-14	2014-15	2015-16	2016-17
14.4	Percentage of Declared Capacity	%	90.98	92.16	90.27	87.35	88.83
14.4.1	APM Gas+PMT + NON APM GAS	%	-	-	-	-	-
14.4.2	NON APM	%	-	-	-	-	-
14.4.3	RLNG	%	-	-	-	-	-
14.4.4	Liquid Fuel	%	90.98	92.16	90.27	87.35	88.83
14.4	Actual Average stock maintained		11710	114967	14724	19437	17315
15	Alternate Fuel:(RLNG/Liquid)		NA	NA	NA	NA	NA
15.1	Consumption	MT/ KL	182.482	238.555	307.282	77.26	19.935
15.2	Weighted Average Gross Calorific value (As fired)	kCal/ Kg/ ltr	10959.25	10950.28	10961.92	10931.66	10950.48
15.3	Weighted Average Landed Price		37146.48	50755.81	53281.97	47879.89	43837.47
15.4	Actual Average stock maintained	MT	96	264	312	264	174
16	Weighted average duration of outages :						
16.1	Planned Outages	(Days)	2.44	4.2	3.15	27.73	23.37
16.3	Forced Outages	(Days)	3.47	229.5	231.1	315.53	338.76
16.4	Number of tripping						
16.1	Number of start-ups :	Nos.					
16.2	Cold Start-up	Nos.					1
16.3	Warm Start-up	Nos.					
16.4	Hot start-up	Nos.					1
17	Cost of spares consumed	Rs. Lakhs	403.54	384.51	436.93	698.94	207.99
18	Average stock of spares	Rs. Lakhs	2262.62	2363.97	2444.16	2395.26	2365.31
19	NOx and other particulate matter emission :						
19.1	Design value						
19.2	Actual emission						
20	Number of employees deployed in O&M / Non O&M						
20.1	- Executive		93	93	90	85	69
20.2	- Non Executive		64	54	52	32	48
20.3	Corporate Office		3170	3051	2916	2973	2787
21	Man-MW ratio	Man/MW	0.44	0.41	0.39	0.33	0.33

Note: Allocation of stations attached at Appendix-I
Man-MW ratio computed excluding Corporate Employees

DETAILS OF OPERATION AND MAINTENANCE EXPENSES

Name of the Company:

NTPC Ltd.

Name of the Power Station:

RAJIV GANDHI COMBINED CYCLE POWER STATION

Rs. Lakhs

Sl. No.	Items	2012-13	2013-14	2014-15	2015-16	2016-17
1	Consumption of stores & spares	403.54	384.51	436.93	698.94	207.99
2	Repair & Maintenance	1054.47	1560.90	1181.79	1742.33	1553.71
3	Insurance	78.75	86.33	87.06	85.94	91.59
4	Security	466.29	562.52	617.63	734.74	932.98
5	Water Charges	5.00	5.00	5.00	5.00	0.63
6	Administrative Expenses					
6.1	Rent	0.00	0.00	0.00	0.00	0.00
6.2	Electricity charges	143.90	218.54	250.14	211.51	158.61
6.3	Travelling & Conveyance	193.46	193.53	202.54	191.10	151.00
6.4	Communication Expenses	42.67	27.64	25.72	50.14	38.75
6.5	Advertising	5.97	2.78	3.76	4.42	4.66
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	12.03	11.73	18.63	17.44	15.45
6.9	Filing fee	14.38	15.82	15.80	15.82	15.82
	Subtotal (Administrative Expenses)	412.42	470.05	516.59	490.43	384.29
7.0	Employee Cost					
7.1.1	Salaries, Wages & Allowances	1895.64	1794.23	1899.00	1922.70	2021.42
7.1.2	Pension	9.63	453.31	166.31	170.44	149.00
7.1.3	Gratuity	69.51	33.54	-10.79	-5.98	328.56
7.1.4	Provident Fund	147.04	157.63	161.02	161.80	150.92
7.1.5	Leave Encashment	210.43	192.05	205.05	232.58	277.47
7.2	Staff welfare expenses					
7.2.1	-Medical expenses on superannuated employees	40.19	46.37	49.92	42.58	0.00
7.2.2	-Medical expenses on regular employees & others	120.82	105.51	150.62	168.79	95.49
7.2.3	-Uniform/Livries & safety equipment	12.21	33.14	27.40	30.46	37.15
7.2.4	-Canteen expenses	62.79	66.30	66.56	71.42	77.38
7.2.5	-Other staff welfare expenses	41.63	41.73	50.03	44.07	43.03
	Subtotal (Staff welfare Expenses)	277.65	293.06	344.53	357.32	253.05
7.3	Productivity linked Incentive	88.61	67.65	21.96	18.18	0.00
7.4	Expenditure on VRS	0.00	0.00	91.21	1.59	0.00
7.5	Ex-gratia	42.61	35.75	55.74	34.85	33.18
7.6	Performance Related Pay (PRP)	152.36	90.73	186.47	198.73	206.49
	Sub Total (Employee Cost)	2893.48	3117.96	3120.51	3092.20	3420.08
8	Loss of Store	0.00	0.00	0.00	0.00	0.27
9	Provisions	16.03	52.75	0.00	0.32	8.07
10	Prior Period Expenses	5.75	0.00	70.73	0.00	0.00
11	Corporate Office expenses allocation	926.35	935.40	992.74	1026.01	1046.41
12	Others					
12.1	Rates & Taxes	21.10	24.42	24.39	32.57	27.29
12.2	Water cess	1.75	1.16	0.85	0.19	0.07
12.3	Training & recruitment expenses	13.37	16.94	20.88	26.80	22.19
12.4	Tender Expenses	16.82	41.19	29.17	21.50	22.63
12.5	Guest house expenses	32.17	33.87	37.17	45.80	45.97
12.6	Education expenses	32.91	29.58	178.25	53.22	17.82
12.7	Community Development Expenses	486.93	371.74	177.54	425.50	316.23
12.8	Ash utilisation expenses	0.00	0.00	0.00	0.00	0.00
12.9	Books & Periodicals	1.15	1.00	0.64	1.54	1.21

Rs. Lakhs

Sl. No.	Items	2012-13	2013-14	2014-15	2015-16	2016-17
12.10	Professional Charges	11.04	4.21	7.04	25.10	13.26
12.11	Legal expenses	1.11	5.49	31.84	49.50	4.66
12.12	EDP Hire & other charges	11.77	13.99	13.13	9.54	8.81
12.13	Printing & Stationery	8.16	8.43	7.78	9.31	7.25
12.14	Misc Expenses	131.91	163.54	187.79	163.50	203.63
	Sub Total (Others)	770.20	715.55	716.48	864.09	691.02
13	(Total 1 to 12)	7032.28	7890.96	7745.47	8740.01	8337.05
14	Revenue / Recoveries	-11.79	-14.62	-17.76	-26.87	-18.75
15	Net Expenses	7020.49	7876.34	7727.71	8713.14	8318.30
16	Capital spares consumed	0.00	0.00	161.64	783.73	4.82
	Total O&M Cost	7020.49	7876.34	7889.36	9496.87	8323.12
	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: Kayamkumal Combine Cycle Plant

(Rs. In Lakhs)

SI.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	Gas Based combined cycle generation plant				
2	Type of Cooling Tower	IDCT				
3	Type of Cooling Water System	Circulating closed type				
4	Any Special Features which may increase/reduce water consumption					
(B)	Quantum of Water : (Cubic Meter)					
5	Contracted Quantum	10.5 Cusecs				
6	Allocation of Water	40,51,500 KL/year				
7	Actual water Consumption (KL)	23.54285	15.15325	11.58023	3.71137	1.92255
8	Rate of Water Charges (Re/kl)	1.00				
9	Other charges/Fees , if paid as part of Water Charges Rs lakhs	Nil	Nil	Nil	Nil	Nil
	Total water Charges Paid Rs lakhs	500000	500000	500000	371137	192255

Annexure-VI D)**Details of capital Spares****Name of Company : NTPC LIMITED****Name of Power station : KAYAMKULAM**

(in Rs. Lakhs)

Sl . No.	ITEM	2012-13	2013-14	2014-15	2015-16	2016-17
(A)	Details of capital spares in Opening stock	10474.61	11679.94	12364.72	15858.67	16551.37
(B)	Details of capital spares procured during the year	1205.33	684.78	3,655.59	1476.44	374.31
(C)	Details of capital spares consumed during the year	0	0	161.64	783.73	4.82
(D)	Details of capital spares closing at the end of the year	11679.94	12364.72	15858.67	16551.37	16920.87

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

Name of the Utility: NTPC Ltd																
Name of the Generating Station:RAJIV GANDHI COMBINED CYCLE POWER STATION																
Station/ Stage/ Unit: 359.58 MW(2*115.2 MW+1*129.18 MW)																
Fuel Type (Coal/ Lignite/ Gas/ Liquid Fuel/ Nuclear/ Hydro): Combined Cycle																
Capacity of Plant (MW): 359.58 MW																
COD : 01.03.2000																
	Absolute value (in Rs Cr)	28.04	29.16	30.34	31.53	32.79	53.21	56.27	59.47	62.89	66.48	52.8	56.1	59.63		
	Water charges (finally admitted by CERC) (in Rs Cr) #	NA					NA									
	Rate (%)															
	(f) Compensation Allowances (in Rs Cr)															
25	AFC (Rs. Kwh)	0.85	0.85	0.84	0.87	0.77	1.00	0.99	0.99	0.83	0.85	1.09	1.11	1.12		
26	Energy Charge (Rs./Kwh)	3.58	4.00	5.95	7.25	7.02	6.46	7.70	9.94	11.28	12.13	12.16	7.56	7.31		
27	Total tariff (Rs. Kwh)	4.43	4.85	6.79	8.12	7.79	7.46	8.69	10.93	12.11	12.98	13.25	8.67	8.43		
28	Revenue realisation before tax (Rs. Crore)															
29	Revenue realisation after tax (Rs. Crore)															
30	Profit/ loss (Rs. Crore)	47.36	9.20	87.75	42.51	22.30	165.59	183.87	170.51	221.84	158.70	188.18	159.58	214.87		
31	DSM Generation (MU)															
32	DSM Rate (Ps/Kwh)															
33	Revenue from DSM (Rs. Crore)						4.14	2.86	2.12	3.82	1.54	1.87	1.93	1.58		

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