

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		Ramagundam Super Thermal Power Station Stage-I&II (pit-head)										
3	Installed Capacity and Configuration	MW	3 X 200 + 3 X 500 = 2100 MW										
4	Rated Steam Parameters (Also state the type of Steam turbine and Boiler)		Stage-I = MS 150 ksc at 535 Deg C Stage-II : MS 175ksc at 537 Deg C Boiler: Stage-I Natural Circulation ; Stage-II :Forced Circulation										
5	Type of BFP		Stage-I : Electric Driven Stage-II :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/andRequirement		Annual allocation through modified FSA dated 21.01.2016 with SCCL for Ramagundam-I- 11.2 MMT Coal receipt above ACQ is considered under bilateral MOUs signed with SCCL from time to time. Allocation through MOU dated 07.08.2012,01.04.2013, 05.05.2015 and 05.05.2016 with SCCL Annual Requirement : 14.35 MMT										
8.1.2	Sources of supply/ procurement along with contracted quantity and grade of coal		<p align="center">SCCL (MCL, SECL- Stopped)</p> <table border="1"> <tr> <td>11.20</td> <td>11.20</td> <td>11.20</td> <td>11.20</td> <td>11.20</td> </tr> </table> <p>SCCL: G9 - G13</p>					11.20	11.20	11.20	11.20	11.20	For the Station (2600 MW) Requirement has been worked out at 90% PLF
11.20	11.20	11.20	11.20	11.20									
8.1.2.1	FSA	LOA MoU	MMT	10.75	11.61	10.86	10.74	11.20					
8.1.2.2	Imported		MMT	2.23	0.70	2.31	1.75	1.24					
8.1.2.3	Spot Market/e-auction		MMT	0.338	0.64	1.60	0.83	0.00					
8.1.2.3			MMT	-	0.26	0.00	0.00	0.00					
8.1.3	Transportation Distance of the station from the sources of supply	KM	SCCL: Min. 21 Km (Godavari Khani Colly Sdng), Max. 25 Km (Low Temp. carbonisation plant colly, MANCHIRYAL)										
8.1.4	Mode of Transport		Indian Railways										
8.1.5	Maximum Station capability to stock primary fuel	Days & MMT	23 / 0.8										
8.1.6	Maximum stock maintained for primary fuel	MT	666756	446000	803000	807103	494000	For the Station (2600 MW)					
8.1.7	Minimum Stock maintained for primary fuel	MT	25000	1205	17777	530700	207000						
8.1.8	Average stock maintained for primary fuel	MT	211089	141498	365087	619844	390293						
8.2	Secondary Fuel :												
8.2.1	Annual Allocation/ Requirement	KL	10250										
8.2.2	Sources of supply		IOCL										
8.2.2													

SI.No.	Particulars	Units	2012-13	2013-14	2014-15	2015-16	2016-17	Basis of Information/ Methodology/ Remarks	
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		Rail/Road/Pipeline						For the Station (2600 MW)
8.2.5	Maximum Station capability to stock secondary fuels	KL	13000 (HFO) / 700 (HSD)						
8.2.6	Maximum Stock of secondary oil actually maintained	KL	3400						
8.2.7	Minimum Stock of secondary oil actually maintained	KL	2850						
8.2.8	Average Stock of secondary oil actually maintained	KL	3125						
9	Cost of Spares :								
9.1	Cost of Spares capitalized in the books of accounts	Rs. Lakhs	2411.93	10589.39	9383.28	4691.72	7210.10	For the Station (2600 MW)	
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	16982.41	15655.07	16421.98	16143.75	15948.22		
10.2	-Actual Net Generation Ex-bus	MU	15995.84	14753.37	15474.84	15171.51	14975.90		
10.3	-Scheduled Generation Ex-bus	MU	15926.83	14880.82	15519.12	15282.07	15032.97		
11	Average Declared Capacity (DC)	MW	1820.08	1740.08	1804.89	1841.41	1853.40		
12	Actual Auxiliary Energy Consumption excluding colony consumption	MU	1065.32	977.84	0.00	1024.71	1028.30		
13	Actual Energy supplied to Colony from the station	MU	20.47	20.58	20.92	20.62	20.06		
14	Primary Fuel :								
14.1	Consumption :	MT	10557736	10499463	11372056	10747320	10217345		
14.1.1	Domestic coal	From linked mines	MT	10219724	9865323	9808798	9888226	10217151	
		Non-linked mines	MT	-	-	-	-	-	
14.1.2	Imported coal	MT	338012	634140	1563258	859094	194		
14.1.3	Spot market/e-auction coal	MT	NA	NA	NA	NA	NA		
14.2	Gross Calorific Value (GCV) :								
14.2.1	Domestic Coal	(As Billed) (Eq. Basis)	kCal/kg			4459	4464	4187	
		(As Received) (TM Basis)	kCal/kg					3669	
		(As Fired) (TM Basis)	kCal/kg						
14.2.2	Imported Coal	(As Billed) (ADB)	kCal/kg						
		(As Billed) (ADB)	kCal/kg						

SI.No.	Particulars		Units	2012-13	2013-14	2014-15	2015-16	2016-17	Basis of Information/ Methodology/ Remarks	
14.2.3	Spot market/e-auction coal		(As Billed)	kCal/kg						
			(As Received)	kCal/kg						
14.2.4	Weighted Average	Gross Calorific value (As Billed)	kCal/kg							
14.2.5	Weighted Average	Gross Calorific value (As Received)	kCal/kg	-	-	3407	3547	3669		
14.2.6	Weighted Average	Gross Calorific value (As Fired)	kCal/kg	3811	3529					
14.3	Price of coal :									
14.3.1	Weighted Average Landed price of Domestic coal			2400.07	2645.51	2963.29	3054.77	3221.14		
14.3.2	Weighted Average Landed Price of Imported coal			6618.72	5849.26	4898.82	4772.60	4464.41		
14.3.3	Weighted Average Landed Price of Spot market/e-auction			0.00	0.00	0.00	0.00	0.00		
14.3.4	Weighted Average Landed Price of all the Coals			2533.06	2843.94	3173.90	3161.67	3221.16		
14.4	Blending :		% and MT (of the total coal consumed)	3.20%	6.04%	13.75%	7.99%	0.00%		
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									
14.5	Actual Average Coal stock maintained		MT	211089	141498	365087	619844	390293		For the Station (2600 MW)
			Days	5.69	3.81	9.83	16.69	10.51		
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		
14.5.2	Non-Pit Head station									
14.5.2.1	Transit loss from linked mines (MGR/ Rail)		MT							For the Station (2600 MW)
			%	0.2 / 0.16	0.2 / 0.16	0.2 / 0.16	0.2 / 0.16	0.2 / 0.16		
14.5.2.2	Transit loss from non-linked mines including e-auction coal mines.									

SI.No.	Particulars	Units	2012-13	2013-14	2014-15	2015-16	2016-17	Basis of Information/ Methodology/ Remarks	
14.5.2.3	Transit loss of imported coal								
15	Secondary Fuel Oil : (If more than one fuel used then give details of all the fuels)								
15.1	Consumption	HFO	KL	2459	2707	3563	2322		3313
		HSD	KL	753	1829	608	1119		741
15.2	Weighted Average Gross Calorific value (As received)	HFO	Kcal/Ltr	9100	9087	9070	9059		9073
		HSD	Kcal/Ltr	9771	9747	9862	9822		9882
15.3	Weighted Average Price	HFO	Rs/KL	44548	67399	64751	50611		57979
		HSD	Rs/KL	47232	47511	46767	20940		28357
15.4	Actual Average Stock maintained	HFO	KL	4400	4500	4800	4800		4700
		HSD	KL	460	440	450	410		430
16	Weighted average duration of outages(unit-wise)								For the Station (2600 MW)
16.1	Planned Outages	Days	100.02	95.64	98.45	96.27	67.82		
16.2	Forced Outages	Days	40.38	29.79	28.05	45.97	42.56		
16.3	Number of tripping	Nos	51	39	47	35	42		
16.4	Number of start-ups:	Nos	38	42	46	33	36		
16.4.1	Cold Start-up	Nos	3	10	5	5	3		
16.4.2	Warm Start-up	Nos	21	13	17	13	21		
16.4.3	Hot start-up	Nos	14	19	24	15	12		
17	NOx , SOx ,and other particulate matter emission in :								
17.1	Design value of emission control equipment	mg/Nm3	ESP design dust outlet Conc.: Stage- I =300 ; Stage-II = 50						
17.2	Actual emission (Stage-I)	SPM	mg/Nm3	92	91	93	88	87	
		SOX	mg/Nm3	1248	1242	1242	1239	1386	
		NOX	mg/Nm3	449	440	431	431	426	
17.2	Actual emission (Stage-II)	SPM	mg/Nm3	104	105	107	108	107	
		SOX	mg/Nm3	1372	1356	1376	1387	1522	
		NOX	mg/Nm3	484	474	480	484	405	
19	Detail of Ash utilization % of fly ash produced	%	67.5	62.4	64.4	89.2	93.2	For the Station (2600 MW)	
19.1	Conversion of value added product	%	41.6	34.0	32.7	45.4	50.2		
19.2	For making roads & embarkment	%	1.5	1.4	3.5	0.2	0.0		
19.3	Land filling	%	0.0	0.0	0.0	0.0	1.0		
19.4	Used in plant site in one or other form or used in some	%	24.5	27.0	28.2	43.7	42.0		
19.5	Any other use , Please specify	%	0.0	0.0	0.0	0.0	0.0		
20	Cost of spares actually consumed	Rs. Lakhs	9521.52	8904.02	9466.48	9614.17	9038.34	For the Station (2600 MW)	
21	Average stock of spares	Rs. Lakhs	14678.89	15549.96	16282.89	16463.75	16407.02		
22	Number of employees deployed in O&M							Man Power as on last date of FY. Man-MW ratio for the whole station 2600 MW	
22.1	- Executives		534	515	505	474	471		
22.2	- Non Executives		882	824	804	733	651		
22.3	- Corporate office		3170	3051	2916	2973	2787		
23	Man-MW ratio		0.54	0.52	0.50	0.46	0.43		

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

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		Ramagundam Super Thermal Power Station Stage-III (pit-head)					
3	Installed Capacity and Configuration	MW	1 X 500 = 500 MW					
4	Rated Steam Parameters (Also state the type of Steam turbine and Boiler)		MS/HRH Temp 537/ 537 deg & Stage-3 MS Pressure 170 Ksc.					
5	Type of BFP		Stage-I : Electric Driven Stage-II :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 modified FSA dated 21.01.2016 with SCCL for Ramagundam-I- 11.2 MMT Coal receipt above ACQ is considered under bilateral MOUs signed with SCCL from time to time. Annual Requirement : 15.4 MMT Allocation through MOU dated 07.08.2012,01.04.2013, 05.05.2015 and 05.05.2016 with SCCL					
8.1.2	Sources of supply/ procurement along with contracted quantity and grade of coal		SCCL (MCL, SECL- Stopped)					For the Station (2600 MW)
			11.20	11.20	11.20	11.20	11.20	
			SCCL: G9 - G13					
8.1.2.1	FSA	LOA	10.75	11.61	10.86	10.74	11.20	
		MoU	2.23	0.70	2.31	1.75	1.24	
8.1.2.2	Imported	MMT	0.338	0.64	1.60	0.83	0.00	
8.1.2.3	Spot Market/e-auction	MMT	-	0.26	0.00	0.00	0.00	
8.1.3	Transportation Distance of the station from the sources of supply	KM	SCCL: Min. 21 Km (Godavari Khani Colly Sdng), Max. 25 Km (Low Temp. carbonisation plant colly, MANCHIRYAL)					For the Station (2600 MW)
8.1.4	Mode of Transport		Indian Railways					
8.1.5	Maximum Station capability to stock primary fuel	Days & MMT	23 / 0.8					
8.1.6	Maximum stock maintained for primary fuel	MT	666756	446000	803000	807103	494000	
8.1.7	Minimum Stock maintained for primary fuel	MT	25000	1205	17777	530700	207000	
8.1.8	Average stock maintained for primary fuel	MT	211089	141498	365087	619844	390293	
8.2	Secondary Fuel :							

8.2.1	Annual Allocation/ Requirement	KL	10250					For the Station (2600 MW)	
8.2.2	Sources of supply		IOCL						
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		Rail/Road/Pipeline					For the Station (2600 MW)	
8.2.5	Maximum Station capability to stock secondary fuels	KL	13000 (HFO) / 700 (HSD)						
8.2.6	Maximum Stock of secondary oil actually maintained	KL	3400						
8.2.7	Minimum Stock of secondary oil actually maintained	KL	2850						
8.2.8	Average Stock of secondary oil actually maintained	KL	3125						
9	Cost of Spares :								
9.1	Cost of Spares capitalized in the books of accounts	Rs. Lakhs	2411.93	10589.39	9383.28	4691.72	7210.10	For the Station (2600 MW)	
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	3802.82	4091.16	4021.14	4106.35	3649.28		
10.2	-Actual Net Generation Ex-bus	MU	3552.78	3806.41	3749.55	3818.05	3380.71		
10.3	-Scheduled Generation Ex-bus	MU	3539.69	3857.32	3766.87	3860.90	3420.50		
11	Average Declared Capacity (DC)	MW	406.86	459.98	443.73	474.44	431.76		
12	Actual Auxiliary Energy Consumption excluding colony consumption	MU	189.22	208.61	194.11	215.21	192.53		
13	Actual Energy supplied to Colony from the station	MU	20.47	20.58	16.81	16.44	16.33		
14	Primary Fuel :								
14.1	Consumption :	MT	2569527	2948497	2925469	2839020	2368529		
14.1.1	Domestic coal	From linked mines	MT	2569527	2948497	2925469	2839020	2368529	
		Non-linked mines	MT						
14.1.2	Imported coal	MT	0	0	0	0	0		
14.1.3	Spot market/e-auction coal	MT	NA	NA	NA	NA	NA		
14.2	Gross Calorific Value (GCV) :								
14.2.1	Domestic Coal	(As Billed) (Eq. Basis)	kCal/kg			4459	4464	4187	
		(As Received) (TM Basis)	kCal/kg				4383	3660	
		(As Fired) (TM Basis)	kCal/kg						
14.2.2	Imported Coal	(As Billed) (Eq. Basis)	kCal/kg			5677	5677		
		(As Received)	kCal/kg						

14.2.3	Spot market/e-auction coal	(As Billed)	kCal/kg						
		(As Received)	kCal/kg						
14.2.4	Weighted Average Gross Calorific value (As Billed)		kCal/kg			4313	4383	4187	
14.2.5	Weighted Average Gross Calorific value (As Received)		kCal/kg	-	-	3372	3518	3660	
14.2.6	Weighted Average Gross Calorific value (As Billed)		kCal/kg	3749	3473				
14.3	Price of coal :								
14.3.1	Weighted Average Landed price of Domestic coal			2939.89	3112.90	2963.29	3054.77	3221.14	
14.3.2	Weighted Average Landed Price of Imported coal			0.00	0.00	4898.82	4772.60	4464.41	
14.3.3	Weighted Average Landed Price of Spot market/e-			0.00	6018.72	0.00	0.00	0.00	
14.3.4	Weighted Average Landed Price of all the Coals			2939.89	3412.52	3173.90	3161.67	3221.16	
14.4	Blending :		% and MT (of the total coal consumed)	-	-	-	-	-	
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								
14.5	Actual Average Coal stock maintained		MT	211089	141498	365087	619844	390293	
			Days	5.69	3.81	9.83	16.69	10.51	
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	
14.5.2	Non-Pit Head station								
14.5.2.1	Transit loss from linked mines (MGR/ Rail)		MT						
			%	0.2 / 0.16	0.2 / 0.16	0.2 / 0.16	0.2 / 0.16	0.2 / 0.16	
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 : (If more than one fuel used then give details of all the fuels								
15.1	Consumption		HFO	KL	1363.6	447.8	521.6	222.8	987.0
15.2	Weighted Average Gross Calorific value (As received)		HFO	Kcal/Ltr	10177	10147	9896	9887	9886
15.3	Weighted Average Price			Rs/KL	47232	47511	46767	20940	28357
15.4	Actual Average Stock maintained		HFO	KL	4400	4500	4800	4800	4700
			HSD	KL	460	440	450	410	430
16	Weighted average duration of outages(unit-wise								

For the Station (2600 MW)

16.1	Planned Outages	Days	40.45	0.00	23.46	0.00	34.74	For the Station (2600 MW)	
16.2	Forced Outages	Days	7.79	2.70	1.31	4.08	1.33		
16.3	Number of tripping	Nos	51	39	47	35	42		
16.4	Number of start-ups:	Nos	14	3	2	2	4		
16.4.1	Cold Start-up	Nos	1	0	1	0	1		
16.4.2	Warm Start-up	Nos	5	2	1	2	1		
16.4.3	Hot start-up	Nos	8	1	0	0	2		
17	NOx , SOx ,and other particulate matter emission in :								
17.1	Design value of emission control equipment		mg/Nm3						
17.2	Actual emission	SPM	mg/Nm3	77	83	84	80	77	
		SOX	mg/Nm3	1383	1379	1372	1376	1498	
		NOX	mg/Nm3	492	482	480	475	421	
19	Detail of Ash utilization % of fly ash produced		%	67.5	62.4	64.4	89.2	93.2	For the Station (2600 MW)
19.1	Conversion of value added product		%	41.6	34.0	32.7	45.4	50.2	
19.2	For making roads & embarkment		%	1.5	1.4	3.5	0.2	0.0	
19.3	Land filling		%	0.0	0.0	0.0	0.0	1.0	
19.4	Used in plant site in one or other form or used in some		%	24.5	27.0	28.2	43.7	42.0	
19.5	Any other use , Please specify		%	0.0	0.0	0.0	0.0	0.0	
20	Cost of spares actually consumed		Rs. Lakhs	9521.52	8904.02	9466.48	9614.17	9038.34	For the Station (2600 MW)
21	Average stock of spares		Rs. Lakhs	14678.89	15549.96	16282.89	16463.75	16407.02	
22	Number of employees deployed in O&M								Man Power as on last date of FY. Man-MW ratio for the whole station 2600 MW
22.1	- Executives			534	515	505	474	471	
22.2	- Non Executives			882	824	804	733	651	
22.3	- Corporate office			3170	3051	2916	2973	2787	
23	Man-MW ratio			0.54	0.52	0.50	0.46	0.43	

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

Annexure-VI (A)

DETAILS OF OPERATION AND MAINTENANCE EXPENSES

Name of the Company:

NTPC Ltd.

Name of the Power Station:

Ramagundam Super Thermal Power Station (2600 MW)

Rs. Lakhs

Sl. No.	Items	2012-13	2013-14	2014-15	2015-16	2016-17
1	Consumption of stores & spares	9521.52	8904.02	9466.48	9614.17	9038.34
2	Repair & Maintenance	11354.59	8357.60	9959.57	8855.58	10678.25
3	Insurance	803.49	856.27	837.44	735.46	701.34
4	Security	1822.93	2077.90	2018.65	2454.40	3086.40
5	Water Charges	1392.10	2024.75	1825.26	1930.91	2801.51
6	Administrative Expenses					
6.1	Rent	0.00	0.00	0.00	0.00	0.00
6.2	Electricity charges	371.27	458.74	514.78	485.73	458.29
6.3	Travelling & Conveyance	844.20	880.51	872.78	838.69	800.69
6.4	Communication Expenses	128.55	116.43	101.05	150.43	152.66
6.5	Advertising	7.23	9.08	22.43	11.37	28.56
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	32.77	30.60	47.88	56.61	64.45
6.9	Filing fee	104.00	114.40	114.40	114.40	114.40
	Subtotal (Administrative Expenses)	1488.02	1609.76	1673.32	1657.24	1619.05
7.0	Employee Cost					
7.1.1	Salaries, Wages & Allowances	15403.26	15309.66	15568.26	15126.17	16905.27
7.1.2	Pension	85.78	3576.89	1315.42	1344.69	1248.77
7.1.3	Gratuity	719.82	265.68	-106.22	-56.05	3206.86
7.1.4	Provident Fund	1171.65	1290.93	1261.28	1277.16	1264.96
7.1.5	Leave Encashment	1513.50	1737.01	1732.47	1784.37	2370.14
7.2	Staff welfare expenses					
7.2.1	-Medical expenses on superannuated employees	21.83	15.52	3.39	6.87	0.00
7.2.2	-Medical expenses on regular employees & others	1367.24	1252.55	1500.32	1794.92	1438.89
7.2.3	-Uniform/Livries & safety equipment	114.83	297.00	272.94	266.78	344.44
7.2.4	-Canteen expenses	248.93	275.76	237.21	224.06	243.22
7.2.5	-Other staff welfare expenses	254.85	343.50	297.44	313.44	451.63
	Subtotal (Staff welfare Expenses)	2007.68	2184.32	2311.30	2606.07	2478.18
7.3	Productivity linked Incentive	730.46	630.02	376.81	250.78	0.00
7.4	Expenditure on VRS	0.00	0.00	186.63	0.00	0.00
7.5	Ex-gratia	519.15	488.82	779.79	510.05	443.62
7.6	Performance Related Pay (PRP)	910.24	459.20	802.13	968.35	1256.11
	Sub Total (Employee Cost)	23061.53	25942.53	24227.88	23811.60	29173.90
8	Loss of Store	1.99	1.55	1.65	1.94	1.93
9	Provisions	50.41	221.98	99.97	93.81	50.74
10	Prior Period Expenses	83.37	126.86	33.23	19.17	0.00
11	Corporate Office expenses allocation	6690.99	6756.68	7221.94	7434.97	7600.07
12	Others					
12.1	Rates & Taxes	126.73	124.12	123.90	122.89	125.42
12.2	Water cess	112.54	118.38	108.42	75.81	87.33
12.3	Training & recruitment expenses	133.52	72.52	85.08	63.12	81.99
12.4	Tender Expenses	149.50	146.31	157.59	108.68	91.35
12.5	Guest house expenses	22.39	16.19	24.02	62.27	95.07
12.6	Education expenses	16.35	13.52	254.27	20.63	24.81

Rs. Lakhs

Sl. No.	Items	2012-13	2013-14	2014-15	2015-16	2016-17
12.7	Community Development Expenses	698.01	465.60	479.37	2368.03	1341.84
12.8	Ash utilisation expenses	71.26	-227.68	136.06	-10.16	-27.88
12.9	Books & Periodicals	2.16	3.16	2.65	2.83	1.18
12.10	Professional Charges	86.98	48.19	59.35	69.42	92.20
12.11	Legal expenses	16.21	11.83	39.74	13.31	8.86
12.12	EDP Hire & other charges	82.24	80.92	90.08	83.34	84.95
12.13	Printing & Stationery	39.58	44.40	68.48	66.06	67.23
12.14	Misc Expenses	849.10	2192.67	913.40	957.60	655.17
	Sub Total (Others)	2406.56	3110.14	2542.41	4003.82	2729.52
13	(Total 1 to 12)	58677.51	59990.03	59907.78	60613.07	67481.05
14	Revenue / Recoveries	-84.68	-75.64	-97.37	-101.51	-98.48
15	Net Expenses	58592.83	59914.40	59810.41	60511.56	67382.57
16	Capital spares consumed	661.95	2091.81	2632.70	1641.64	364.37
	Total O&M Cost	59254.78	62006.21	62443.12	62153.20	67746.95
	No. of Emp. Applied for VRS	6	No. VRS scheme was in operational			

Annexure-VI (C)

DETAILS OF WATER CHARGES

Name of the Company: NTPC Ltd.

Name of the Power Station and Stage/Phase: Ramagundam Super Thermal Power Station (2600 M

(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	IDCT				
3	Type of Cooling Water System	Closed system				
4	Any Special Features which may increase/reduce water consumption	Ash Water Re-circulation System				
(B)	Quantum of Water : (Cubic Meter)					
5	Contracted Quantum	184.06	184.06	184.06	184.06	184.06
6	Allocation of Water	184.06	184.06	184.06	184.06	184.06
7	Actual water Consumption	91.97	100.47	79.68	57.00	72.75
8	Rate of Water Charges	0.99	0.99	0.99	2.09	2.09
9	Other charges/Fees , if paid as part of Water Charges Rs lakhs					
	Total water Charges Paid Rs lakhs	1392.10	2024.75	1825.26	1930.91	2801.51

Details of capital Spares

Name of Company : NTPC Limited

Name of Power station: Ramagundam Super Thermal Power Station

(in Lakhs)

Sl . No.	ITEM	2012-13	2013-14	2014-15	2015-16	2016-17
(A)	Details of capital spares in Opening stock	15825.03	17575.01	26072.58	32823.16	35873.24
(B)	Details of capital spares procured during the year	2411.93	10589.39	9383.28	4691.72	7210.10
(C)	Details of capital spares consumed during the year	661.95	2091.81	2632.70	1641.64	364.37
(D)	Details of capital spares closing at the end of the year	17575.01	26072.58	32823.16	35873.24	42718.97

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

Name of the Utility: NTPC Ltd														
Name of the Generating Station: Ramagundam STPS Stage-I&II														
Station/ Stage/ Unit: 3 X 200 (Stage-I) + 3X 500(Stage-II)														
Fuel Type (Coal/ Lignite/ Gas/ Liquid Fuel/ Nuclear/ Hydro): Coal														
Capacity of Plant (MW): 2100 MW														
COD : 01.09.1981														
		2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
1	Plant Availability Factor (PAF) (%)	91.61	92.20	91.76	90.91	96.10	95.13	93.85	94.35	93.41	89.30	92.10	93.96	94.58
2	Plant Load Factors (PLF) (%)	90.46	86.37	91.12	88.18	94.41	93.30	89.78	93.00	92.32	85.10	89.27	87.52	86.69
3	Scheduled Energy (MU)	15278.49	14710.21	15508.17	15179.89	16267.16	16065.55	15462.58	16050.52	15926.83	14880.82	15519.12	15282.07	15033.64
4	Scheduled Generation (MU)	15278.49	14710.21	15508.17	15179.89	16267.16	16065.55	15462.58	16050.52	15926.83	14880.82	15519.12	15282.07	15033.64
5	Actual Generation (MU)	15555.92	14881.42	15730.37	15278.32	16396.88	16215.85	15601.91	16155.05	15995.84	14753.37	15474.84	15171.51	14975.90
6	Quantum of coal consumption (MT)	10043866	9356564	10234010	10188649	10685263	10152811	9707087	10105104	10557736	10499463	11372056	10747320	10217345
7	Value of coal (Rs. Lakh)					192174	206193	220555	246100	267434	298598	360937	339795	329117
8	Specific Coal Consumption (kg/kwh)	0.60	0.59	0.61	0.63	0.62	0.59	0.59	0.59	0.62	0.67	0.69	0.67	0.64
9	Gross Calorific Value of Coal (Kcal/ Kg)	4014	4079	3898	3793	3856	4010	4036	4026	3811	3529	3407	3547	3669
10	Heat Contribution of Coal (Kcal/ kwh)	2423	2402	2380	2376	2372	2372	2372	2371	2369	2367	2359	2361	2350
11	Cost Of Specific Coal Consumption (Rs./Kwh) – Finally admitted by CERC (Ex Bus) \$													
12	Quantum of Oil Consumption (KL)	2845	3685	3007	4216	2917	1932	2150	2036	3212	4535	4171	3441	4054
13	Value of Oil (Rs. lakh)													
14	Gross calorific value of oil (kcal/lit)	9558	9782	9887	10023	9709	10175	9712		9925	9730	9774	9558	9736
15	Specific Oil Consumption (ml/ kwh)	0.17	0.23	0.18	0.26	0.17	0.11	0.13	0.12	0.19	0.29	0.25	0.21	0.25
16	Cost Of Specific Oil Consumption (Rs./Kwh) – Finally admitted by CERC (Ex Bus) \$													
17	Heat Contribution of Oil (Kcal/ kwh)	1.63	2.27	1.77	2.60	1.63	1.15	1.26	0.00	1.88	2.82	2.48	2.04	2.47
18	Station Heat Rate (kcal/kwh)	2424	2405	2381	2378	2374	2373	2373	2373	2371	2370	2362	2363	2353
19	Auxiliary Energy Consumption (%)	6.60	6.63	6.44	6.39	5.97	5.96	5.99	6.26	6.22	6.25	6.11	6.00	6.45
20	Debt at the end of the year (Rs. Cr)	125.07	78.68	38.14	20.67	18.03	19.19	19.24	21.77	29.37	22.89	0.00	0.00	0.00
21	Equity (Rs. Cr - (Average) #	1137.41	1139.57	1140.33	1141.22	1142.29	1140.48	1136.48	1134.54	1137.42	1142.95	1145.84	1145.84	1145.84
22	Working Capital (Rs. Cr) – finally admitted by CERC	471.91	476.38	481.02	486.94	482.98	844.52	853.73	865.66	874.34	888.50	953.04	962.97	973.62
23	Capital cost (Rs. Cr) – finally admitted by CERC (Average) #	2277.04	2284.24	2286.77	2289.73	2293.32	2287.82	2274.49	2268.00	2277.62	2296.60	2305.69	2305.69	2305.69
24	Capacity Charges/ Annual Fixed Cost (AFC) in Rs. Cr	499.29	506.58	513.88	522.21	480.76	728.09	753.9	783.6	813.09	863.04	852.7	904.21	976.47
	(a) Return on equity – post tax (admitted by CERC) for 2004-09 & pre tax (admitted by CERC) for 2009-17 \$													
	Absolute value (in Rs. Cr)	159.23	159.54	159.64	159.77	159.92	267.79	263.77	260.30	260.97	268.37	224.70	225.78	225.78
	Rate (%)	14.00	14.00	14.00	14.00	14.00	23.48	23.21	22.94	22.94	23.48	19.61	19.71	19.71
	(b) Interest on Loan													
	Absolute value (in Rs Cr)	6.51	4.71	2.90	1.70	1.38	1.29	1.31	1.41	2.17	2.59	1.16	0.00	0.00
	Rate (%) – Weighted Average Rate	4.56	4.62	4.97	5.80	7.17	6.98	6.84	6.90	8.52	9.93	10.19	102.04	10.22
	(c) Depreciation (finally allowed by CERC)													
	Absolute value (in Rs Cr)	82.37	82.63	82.72	82.83	32.68	0.00	0.00	0.48	6.17	23.96	13.69	0.00	0.00
	AAD	0.00	0.00	0.00	0.00	0.00								
	Rate (%)	3.62	3.62	3.62	3.62	3.62								
	(d) Interest on working Capital													
	Absolute value (in Rs Cr)	48.37	48.82	49.30	49.92	49.50	103.45	104.58	106.04	107.10	108.84	152.39	148.73	145.17
	Rate (%)	10.25	10.25	10.25	10.25	10.25	12.25	12.25	12.25	12.25	12.25	13.50	13.50	13.50
	(e) Operation and maintenance cost (finally admitted by CERC)													
	Absolute value (in Rs Cr)	202.8	210.87	219.30	228.00	237.27	304.20	321.54	339.99	359.46	380.04	383.40	407.55	433.20
	Water charges (finally admitted by CERC) (in Rs Cr) #											13.72	13.72	13.72

Name of the Utility: NTPC Ltd														
Name of the Generating Station: Ramagundam STPS Stage-I&II														
Station/ Stage/ Unit: 3 X 200 (Stage-I) + 3X 500(Stage-II)														
Fuel Type (Coal/ Lignite/ Gas/ Liquid Fuel/ Nuclear/ Hydro): Coal														
Capacity of Plant (MW): 2100 MW														
COD : 01.09.1981														
		2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
	Rate (%)													
	(f) Compensation Allowances (in Rs Cr)						9.35	9.55	9.75	9.75	9.75			
	(g) Special Allowance (in Rs Cr)						10.00	21.14	33.53	35.45	37.48	77.36	122.15	172.32
25	AFC (Rs. Kwh)	0.37	0.37	0.38	0.39	0.35	0.50	0.52	0.54	0.56	0.59	0.60	0.63	0.69
26	Energy Charge (Rs./Kwh)	0.86	0.92	0.98	1.01	1.35	1.38	1.49	1.57	1.72	2.12	2.41	2.31	2.26
27	Total tariff (Rs. Kwh)	1.23	1.29	1.36	1.40	1.70	1.88	2.01	2.11	2.28	2.71	3.01	2.94	2.95
28	Revenue realisation before tax (Rs. Crore)													
29	Revenue realisation after tax (Rs. Crore)													
30	Profit/ loss (Rs. Crore)*	233.46	502.08	619.26	975.45	614.82	732.02	826.41	749.74	829.97	602.63	364.08	350.75	733.95
31	DSM Generation (MU)	277.427	171.210	222.197	98.430	129.713	150.296	139.329	104.527	69.007	-127.458	-44.279	-110.561	-57.740
32	DSM Rate (Ps/Kwh)													
33	Revenue from DSM (Rs. Crore)				-0.02	-46.72	-56.05	-46.15	-38.04	-28.58	5.96	2.51	11.16	0.65

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

Name of the Utility: NTPC Ltd														
Name of the Generating Station: Ramagundam STPS Stage-III														
Station/ Stage/ Unit: 1 X 500(Stage-III)														
Fuel Type (Coal/ Lignite/ Gas/ Liquid Fuel/ Nuclear/ Hydro): Coal														
Capacity of Plant (MW): 500 MW														
COD : 25.03.2005														
		2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
	(f) Compensation Allowances (in Rs Cr)													
25	AFC (Rs. Kwh)	0.92	0.84	0.93	0.94	0.94	0.98	0.97	0.97	0.96	0.97	0.94	0.94	0.94
26	Energy Charge (Rs./Kwh)	0.94	1.03	1.04	1.08	1.20	1.23	1.55	1.86	2.17	2.70	2.49	2.35	2.25
27	Total tariff (Rs. Kwh)	1.86	1.87	1.97	2.02	2.14	2.21	2.52	2.83	3.13	3.67	3.43	3.29	3.19
28	Revenue realisation before tax (Rs. Crore)													
29	Revenue realisation after tax (Rs. Crore)													
30	Profit/ loss (Rs. Crore)	233.46	502.08	619.26	975.45	614.82	732.02	826.41	749.74	829.97	602.63	364.08	350.75	733.95
31	DSM Generation (MU)	1.06	69.81	49.23	48.18	32.28	32.37	24.73	32.23	14.35	-50.91	-17.32	-42.85	-39.92
32	DSM Rate (Ps/Kwh)													
33	Revenue from DSM (Rs. Crore)				0.01	-11.20	-13.12	-9.51	-12.02	-6.61	1.95	-0.47	4.13	2.14

Note:

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- 5 DSM Revenue (-)Received / (+) Paid
- 6 * For the whole station as an when the units were declared COD