

## 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
1	Name of Company		NTPC Ltd.					
2	Name of Station/ Pit head or Non- Pit head		National Capital Thermal Power Station Stage-I (Non-pit head)					
3	Installed Capacity and Configuration	MW	4 X 210 MW = 840 MW					
4	Rated Steam Parameters (Also state the type of Steam turbine and Boiler)		Steam Pr: 170 ata, MS/HRH Temp: 537/537 deg C, BHEL make KWU design Steam Turbine, BHEL make CE design Boiler.					
5	Type of BFP		Electric driven					
6	Circulating water system		Closed Cycle					
7	Any other Site specific feature		NDCT					
8	Fuels :							
8.1	Primary Fuel :		Coal					For the Station of 1820 MW
8.1.1	Annual Allocation or/and Requirement		Annual allocation through FSA dated 30.06.2009 with CCL - 4.4 MMT Annual allocation through modified FSA dated 29.06.2016 with CCL I - 1.31 MMT Annual allocation through modified FSA dated 31.08.2016 with ECL - 1.50 MMT Annual allocation through FSA dated 28.09.2016 with BCCL - 0.80 MMT Allocation through MOU dated 29.06.2011 with SCCL - 5.0 MMT Allocation through MOU dated 08.07.2015 with NCL- 3.0 MMT					
8.1.2	Sources of supply/ procurement along with contracted quantity and grade of coal		CCL, ECL, BCCL, NCL, SCCL					
			4.40	7.73	7.73	7.73	8.01	For the Station 1820 MW
			CCL: G7 - G10 ECL: G10 & above BCCL: NLW coking coal W-III & W-IV and non-coking coal G5 to G17 incl washed power coal					
8.1.2.1	FSA	LOA	7.14	6.62	6.39	5.82	5.32	
		MoU	0.02	0.00	0.12	0.05	0.00	
8.1.2.2	Imported	MMT	1.21	1.35	1.65	0.96	0.00	
8.1.2.3	Spot Market/e-auction	MMT	0.01	0.33	0.30	0.00	0.00	
8.1.3	Transportation Distance of the station from the sources of supply	KM	CCL: Min. 1146 Km (Dakra Manual Sdng), Max. 1244 Km ( Rajrappa) ECL: Min. 1226 (Bonjemehary Colly Sdng), Max. 1284 Km (Purushottampur East Colly Sdng) BCCL: Min. 1160 Km (Sendra Bansjora), Max. 1224 Km (Damagoria)					

SI.No.	Particulars	Units	2012-13	2013-14	2014-15	2015-16	2016-17	Basis of Information/ Methodology
8.1.4	Mode of Transport		Indian Railways					
8.1.5	Maximum Station capability to stock primary fuel	Days & MMT	33 / 0.80					
8.1.6	Maximum stock maintained for primary fuel	MT	152382	249151	380000	807141	572998	
8.1.7	Minimum Stock maintained for primary fuel	MT	0	0	4498	316192	187420	
8.1.8	Average stock maintained for primary fuel	MT	27731	91247	133489	591747	404643	
8.2	Secondary Fuel :							
8.2.1	Annual Allocation/ Requirement	KL	7174					
8.2.2	Sources of supply		IOC/BPCL					
8.2.3	Transportation Distance of the station from the sources	KM	150-1400					
8.2.4	Mode of Transport		Indian Railways / Road					
8.2.5	Maximum Station capability to stock secondary fuels	KL	30820					
8.2.6	Maximum Stock of secondary oil actually maintained	KL	8551	8030	8655	7634	8064	
8.2.7	Minimum Stock of secondary oil actually maintained	KL	5548	6237	5839	4957	5261	
8.2.8	Average Stock of secondary oil actually maintained	KL	6492	7182	7670	6200	6486	
9	Cost of Spares :							
9.1	Cost of Spares capitalized in the books of accounts	Rs. Lakhs	4857.89	2409.5	2017.72	2101.45	3358.07	For the Station 1820 MW
9.2	Cost of spares included in capital cost for the	Rs. Lakhs	0.00	0.00	0.00	0.00	0.00	
10	Generation :							
10.1	-Actual Gross Generation at generator terminals	MU	6363.37	5841.23	6000.12	4152.85	3306.18	
10.2	-Actual Net Generation Ex-bus	MU	5811.93	5308.51	5461.31	3758.17	2980.60	
10.3	-Scheduled Generation Ex-bus	MU	5935.69	5435.17	5702.96	3935.77	3144.33	
11	Average Declared Capacity (DC)	MW	6614.64	6712.23	6724.81	6643.95	7096.54	
12	Actual Auxiliary Energy Consumption excluding colony consumption	MU	461.60	430.18	478.36	339.33	281.88	
13	Actual Energy supplied to Colony from the station	MU	22.79	23.34	23.95	22.61	16.94	For the Station 1820 MW
14	Primary Fuel :							
14.1	Consumption :	MT	4050609	3643459	4013833	2670661	2103722	
14.1.1	Domestic coal	From linked mines	MT	3349158	3073357	3298468	2202341	2101720
		Non-linked mines	MT	-	-	-	-	-
14.1.2	Imported coal	MT	701451	570102	715365	468320	2002	
14.1.3	Spot market/e-auction coal	MT						

SI.No.	Particulars	Units	2012-13	2013-14	2014-15	2015-16	2016-17	Basis of Information/ Methodology	
14.2	<b>Gross Calorific Value (GCV) :</b>								
14.2.1	Domestic Coal	(As Billed) (Eq. Basis)	kCal/kg	NA	NA	5100	5262	4820	
		(As Received) (TM Basis)	kCal/kg	NA	NA	NA	3567	3842	
		(As Fired ) (TM Basis)	kCal/kg						
14.2.2	Imported Coal	(As Billed) (Eq. Basis)	kCal/kg	NA	NA	5659	5627	NA	
		(As Received) (TM Basis)	kCal/kg	NA	NA	NA	4508	4454	
		(As Billed)	kCal/kg	NA	NA	NA	NA	NA	
14.2.3	Spot market/e-auction coal	(As Received)	kCal/kg	NA	NA	NA	NA	NA	
		(As Billed)	kCal/kg	NA	NA	NA	NA	NA	
14.2.4	Weighted Average Gross Calorific value (As	kCal/kg	NA	NA	5252	5390	4820		
14.2.5	Weighted Average Gross Calorific value (As	kCal/kg	NA	NA	3597	3733	3843		
14.2.6	Weighted Average Gross Calorific value (As	kCal/kg	3767	3841	NA	NA	NA		
14.3	Price of coal :								
14.3.1	Weighted Average Landed price of Domestic coal	Rs/ MT	3388	4092	4698	4854	4824		
14.3.2	Weighted Average Landed Price of Imported coal	Rs/ MT	7642	7026	6819	6132	0		
14.3.3	Weighted Average Landed Price of Spot market/e-auction coal	Rs/ MT	5707	4982	4963	0	0		
14.3.4	Weighted Average Landed Price of all the Coals	Rs/ MT	4010	4598	5126	5033	4824		
14.4	Blending :	( of the total coal	17.32	15.65	17.82	17.54	0.10		
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		NA	NA	NA	NA	NA		
14.5	Actual Average Coal stock maintained	MT	27731	91247	133489	591747	404643	Computed at normative operating level for the station 1820 MW	
		Days	1.1	3.8	5.5	24.5	16.8		
14.5	Actual Transit & Handling Losses for coal/Lignite								
14.5.1	<b>Pit- Head Station</b>								
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		NA	NA	NA	NA	NA		
14.5.1.3	Transit loss of imported coal		NA	NA	NA	NA	NA		

SI.No.	Particulars	Units	2012-13	2013-14	2014-15	2015-16	2016-17	Basis of Information/ Methodology	
14.5.2	<b>Non-Pit Head station</b>								
14.5.2.1	Transit loss from linked mines	MT %	0.76	0.76	0.78	0.78	0.79	For the Station 1820 MW	
14.5.2.2	Transit loss from non-linked mines including e-auction								
14.5.2.3	Transit loss of imported coal	%	0.18	0.18	0.18	0.18	0.00	For the Station 1820 MW	
<b>15</b>	Secondary Fuel Oil : ( If more than one fuel used then give details of all the								
15.1	Consumption	HFO LDO	KL KL	650 392	875.35 475.2	606.341 90.551	1424.79 94.865	1116.39 29.49	
15.2	Weighted Average Gross Calorific value (As received)	HFO LDO	Kcal/l Kcal/l	9833.86 9503.99	9831.35 9637.15	9834.72 9602.40	9858.80 9567.31	9884.00 9585.00	
15.3	Weighted Average Price	HFO LDO	Rs/KL Rs/KL	48351.21 61024.54	0.00 65089.36	50831.98 0.00	24107.32 0.00	32206.59 43249.08	
15.4	Actual Average stock maintained		KL	6528	7296	7630	6051	6619	For the Station 1820 MW
<b>16</b>	Weighted average duration of outages:								
16.1	Planned Outages		Days	13.16	15.51	11.52	23.31	0.00	
16.2	Forced Outages		Days	4.54	3.17	1.08	1.07	0.42	
16.3	Number of tripping		Nos	28	27	14	24	26	
16.4	Number of start-ups:		Nos	28	31	12	24	26	
16.4.1	Cold Start-up		Nos	15	12	6	18	21	
16.4.2	Warm Start-up		Nos	-	-	-	-	-	
16.4.3	Hot start-up		Nos	13	19	6	6	5	
<b>17</b>	NOx , SOx ,and other particulate matter emission in :								
17.1	Design value of emission control equipment		mg/Nm3						
17.2	Actual emission	SPM SOX NOX	mg/Nm3 mg/Nm3 mg/Nm3	96 565 357	108 555 347	101 551 333	82 617 358	64 799 364	
<b>19</b>	Detail of Ash utilization % of fly ash produced		%	86.7	116.5	103.7	136.3	203.5	
19.1	Conversion of value added product		%	71.4	81.1	75.1	81.7	76.2	
19.2	For making roads & embarkment		%	0.8	4.6	0.0	0.0	104.3	
19.3	Land filling		%	14.5	30.9	15.1	28.3	22.9	
19.4	Used in plant site in one or other form or used in some		%	0.0	0.0	13.5	26.2	0.0	
19.5	Any other use , Please specify		%	0.0	0.0	0.0	0.0	0.0	
<b>20</b>	Cost of spares actually consumed		Rs. Lakhs	5480.14	4391.32	5348.91	5287.77	4404.51	
<b>21</b>	Average stock of spares		Rs. Lakhs	10658.99	12860.51	14622.47	15310.72	15239.70	
<b>22</b>	Number of employees deployed in O&M								
22.1	- Executives			545	523	476	444	441	
22.2	- Non Executives			563	558	536	521	488	
22.3	- Corporate office			3170	3051	2916	2973	2787	
<b>23</b>	Man-MW ratio			0.61	0.59	0.56	0.53	0.51	

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**

SI.No.	Particulars	Units	2012-13	2013-14	2014-15	2015-16	2016-17	Basis of Information/ Methodology
1	Name of Company		<b>NTPC Ltd.</b>					
2	Name of Station/ Pit head or Non- Pit head		<b>National Capital Thermal Power Station Stage-II (Non-pit head)</b>					
3	Installed Capacity and Configuration	MW	2 x 490 MW = 980 MW					
4	Rated Steam Parameters (Also state the type of Steam turbine and Boiler)		Steam Pr: 170 ata, MS/HRH Temp: 537/537 deg C, BHEL make KWU design Steam Turbine, BHEL make CE design Boiler.					
5	Type of BFP		Steam Driven					
6	Circulating water system		Closed Cycle					
7	Any other Site specific feature		NDCT					
8	Fuels :							
8.1	Primary Fuel :		Coal					
8.1.1	Annual Allocation or/and Requirement		Annual allocation through FSA dated 30.06.2009 with CCL for Dadri - I - 4.4 MMT Annual allocation through modified FSA dated 29.06.2016 with CCL for Dadri -II -1.31 MMT Annual allocation through modified FSA dated 31.08.2016 with ECL for Dadri -II - 1.50 MMT Annual allocation through FSA dated 28.09.2016 with BCCL for Dadri -II - 0.80 MMT Allocation through MOU dated 29.06.2011 with SCCL - 5.0 MMT Allocation through MOU dated 08.07.2015 with NCL- 3.0 MMT					For the Station of 1820 MW
8.1.2	Sources of supply/ procurement along with contracted quantity and grade of coal		CCL, ECL, BCCL, NCL, SCCL					
			4.40	7.73	7.73	7.73	8.01	
			CCL: G7 - G10 ECL: G10 & above BCCL: NLW coking coal W-III & W-IV and non-coking coal G5 to G17 incl washed power coal					For the Station of 1820 MW
8.1.2.1	FSA	LOA	7.14	6.62	6.39	5.82	5.32	
		MoU	0.02	0.00	0.12	0.05	0.00	
8.1.2.2	Imported	MMT	1.21	1.35	1.65	0.96	0.00	
8.1.2.3	Spot Market/e-auction	MMT	0.01	0.33	0.30	0.00	0.00	
8.1.3	Transportation Distance of the station from the sources of supply	KM	CCL: Min. 1146 Km (Dakra Manual Sdng), Max. 1244 Km ( Rajrappa) ECL: Min. 1226 (Bonjemehary Colly Sdng), Max. 1284 Km (Purushottampur East Colly Sdng) BCCL: Min. 1160 Km (Sendra Bansjora), Max. 1224 Km (Damagoria)					

Sl.No.	Particulars	Units	2012-13	2013-14	2014-15	2015-16	2016-17	Basis of Information/ Methodology	
8.1.4	Mode of Transport		Indian Railways						For the Station of 1820 MW
8.1.5	Maximum Station capability to stock primary fuel	Days & MMT	33 / 0.80						
8.1.6	Maximum stock maintained for primary fuel	MT	152382	249151	380000	807141	572998		
8.1.7	Minimum Stock maintained for primary fuel	MT	0	0	4498	316192	187420		
8.1.8	Average stock maintained for primary fuel	MT	27731	91247	133489	591747	404643		
8.2	Secondary Fuel :								
8.2.1	Annual Allocation/ Requirement	KL	7174						
8.2.2	Sources of supply		IOC/BPCL						
8.2.3	Transportation Distance of the station from the sources of supply	KM	150-1400						
8.2.4	Mode of Transport		Indian Railways / Road						
8.2.5	Maximum Station capability to stock secondary fuels	KL	30820						
8.2.6	Maximum Stock of secondary oil actually maintained	KL	8551	8030	8655	7634	8064		
8.2.7	Minimum Stock of secondary oil actually maintained	KL	5548	6237	5839	4957	5261		
8.2.8	Average Stock of secondary oil actually maintained	KL	6492	7182	7670	6200	6486		
9	Cost of Spares :								
9.1	Cost of Spares capitalized in the books of accounts	Rs. Lakhs	4857.89	2409.5	2017.72	2101.45	3358.07	For the Station 1820 MW	
9.2	Cost of spares included in capital cost for the purpose of tariff	Rs. Cr.	41.63	12.18	0.00	0.00	0.00		
10	Generation :								
10.1	-Actual Gross Generation at generator terminals	MU	6730.33	7352.78	6284.58	5894.77	5459.91		
10.2	-Actual Net Generation Ex-bus	MU	6405.53	7003.71	6004.96	5635.03	5216.60		
10.3	-Scheduled Generation Ex-bus	MU	6581.75	7202.03	6234.81	5875.07	5466.52		
11	Average Declared Capacity (DC)	MW	845.16	949.63	826.62	959.94	917.86		
12	Actual Auxiliary Energy Consumption excluding colony	MU	391.86	428.28	316.13	292.48	270.06		
13	Actual Energy supplied to Colony from the station	MU	0.00	0.00	0.00	0.00	0.00		
14	Primary Fuel :								
14.1	Consumption :	MT	4378194	4609328	4113659	3818466	3396510		
14.1.1	Domestic coal	From linked mines	MT	3796044	3862278	3236699	3286911	3385160	
		Non-linked mines	MT						
14.1.2	Imported coal	MT	582150	747050	876960	531555	11350		
14.1.3	Spot market/e-auction coal	MT							
14.2	Gross Calorific Value (GCV) :								
14.2.1	Domestic Coal	(As Billed) (Eq. Basis)	kCal/kg	NA	NA	5100	5262	4820	
		(As Received) (TM Basis)	kCal/kg	NA	NA	NA	3544	3846	
		(As Fired)							
		(TM Basis)	kCal/kg	NA	NA	NA	NA	NA	

Sl.No.	Particulars	Units	2012-13	2013-14	2014-15	2015-16	2016-17	Basis of Information/ Methodology	
14.2.2	Imported Coal	(As Billed) (Eq. Basis)	kCal/kg	NA	NA	5659	5627	NA	
		(As Received) (TM Basis)	kCal/kg	NA	NA	NA	4512	4454	
14.2.3	Spot market/e-auction coal	(As Billed)	kCal/kg	NA	NA	NA	NA	NA	
		(As Received)	kCal/kg	NA	NA	NA	NA	NA	
14.2.4	Weighted Average Gross Calorific value (As Billed)	kCal/kg	NA	NA	5252	5390	4820		
14.2.5	Weighted Average Gross Calorific value (As Received)	kCal/kg	NA	NA	3638	3678	3848		
14.2.6	Weighted Average Gross Calorific value (As Fired)	kCal/kg	3672	3807	NA	NA	NA		
14.3	Price of coal :								
14.3.1	Weighted Average Landed price of Domestic coal	Rs/ MT	3387.83	4092.42	4698.38	4853.83	4824.41		
14.3.2	Weighted Average Landed Price of Imported coal	Rs/ MT	7641.82	7025.83	6819.25	6131.86	0.00		
14.3.3	Weighted Average Landed Price of Spot market/e-auction coal	Rs/ MT	5707.46	4981.90	4963.48	0.00	0.00		
14.3.4	Weighted Average Landed Price of all the Coals	Rs/ MT	4009.86	4598.29	5125.61	5033.42	4824.41		
14.4	Blending :	% and MT ( of the total coal consumed )	13.30	16.21	21.32	13.92	0.33		
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		NA	NA	NA	NA	NA		
14.5	Actual Average Coal stock maintained	MT	27731	91247	133489	591747	404643	Computed at normative operating level for the station 1820 MW	
		Days	1.1	3.8	5.5	24.5	16.8		
14.5	Actual Transit & Handling Losses for coal/Lignite								
14.5.1	<b>Pit- Head Station</b>								
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 mines.		NA	NA	NA	NA	NA		
14.5.1.3	Transit loss of imported coal		NA	NA	NA	NA	NA		
14.5.2	<b>Non-Pit Head station</b>								
14.5.2.1	Transit loss from linked mines	MT %	0.76	0.76	0.78	0.78	0.79		
14.5.2.2	Transit loss from non-linked mines including e-auction coal mines.								
14.5.2.3	Transit loss of imported coal		0.18	0.18	0.18	0.18	0.00		
15	Secondary Fuel Oil : ( If more than one fuel used then give details of all the fuels								
15.1	Consumption	LDO	KL	1458	983	1386	1241	1254	
		HSD	KL	428	109	29	24	14	

Sl.No.	Particulars	Units	2012-13	2013-14	2014-15	2015-16	2016-17	Basis of Information/ Methodology	
15.2	Weighted Average Gross Calorific value (As received)	LDO	Kcal/l	9842	9832	9836	9866	9887	
		HSD	Kcal/l	9516	9644	9583	9555	9576	
15.3	Weighted Average Price	HFO	Rs/KL	48351.21	0.00	50831.98	24107.32	32206.59	
		LDO	Rs/KL	61024.54	65089.36	0.00	0.00	43249.08	
15.4	Actual Average stock maintained	KL	6528	7296	7630	6051	6619	For the Station 1820 MW	
16	Weighted average duration of outages( unit-wise details):								
16.1	Planned Outages	Days	29.25	4.76	25.95	5.31	17.45		
16.2	Forced Outages	Days	6.30	4.62	1.08	1.49	2.36		
16.3	Number of tripping	Nos	33	14	18	9	11		
16.4	Number of start-ups:	Nos	31	14	15	9	11		
16.4.1	Cold Start-up	Nos	17	7	5	4	5		
16.4.2	Warm Start-up	Nos	-	-	-	-	-		
16.4.3	Hot start-up	Nos	14	7	10	5	6		
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	36.8	24.4	25.0	27.0	27.0	
		SOX	mg/Nm3	606.0	634.3	638.0	663.1	812.4	
		NOX	mg/Nm3	414.5	438.8	424.8	402.3	365.4	
19	Detail of Ash utilization % of fly ash produced		%	86.7	116.5	103.7	136.3	203.5	Ash utilization in some years is more than 100% due to utilization of ash from previous years from Ash Mund/ Pond
19.1	Conversion of value added product	%	71.4	81.1	75.1	81.7	76.2		
19.2	For making roads & embarkment	%	0.8	4.6	0.0	0.0	104.3		
19.3	Land filling	%	14.5	30.9	15.1	28.3	22.9		
19.4	Used in plant site in one or other form or used in some other site	%	0.0	0.0	13.5	26.2	0.0		
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	5480.14	4391.32	5348.91	5287.77	4404.51	For the Station 1820 MW	
21	Average stock of spares	Rs. Lakhs	10658.99	12860.51	14622.47	15310.72	15239.70		
22	Number of employees deployed in O&M								
22.1	- Executives		545	523	476	444	441	Manpower as on last day of the FY. Man-MW Ratio for the station 1820 MW	
22.2	- Non Executives		563	558	536	521	488		
22.3	- Corporate office		3170	3051	2916	2973	2787		
23	Man-MW ratio		0.61	0.59	0.56	0.53	0.51		

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:

National Capital Thermal Power Station

Rs. Lakhs

Sl. No.	Items	2012-13	2013-14	2014-15	2015-16	2016-17
1	Consumption of stores & spares	5480.14	4391.32	5348.91	5287.77	4404.51
2	Repair & Maintenance	5444.17	5381.19	4991.03	5873.90	6397.44
3	Insurance	513.72	573.90	616.04	339.65	488.63
4	Security	1913.26	2063.29	2351.05	2720.02	2263.38
5	Water Charges	351.13	304.90	346.79	329.83	304.56
6	Administrative Expenses					
6.1	Rent	0.00	0.00	0.00	0.00	0.00
6.2	Electricity charges	560.88	628.91	603.79	694.99	484.53
6.3	Travelling & Conveyance	557.08	609.02	591.27	546.07	538.63
6.4	Communication Expenses	97.20	97.31	91.83	91.96	104.94
6.5	Advertising	5.98	7.66	19.51	10.73	23.99
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	32.25	40.08	50.13	64.04	60.30
6.9	Filing fee	72.80	80.08	80.08	78.60	80.08
	Subtotal (Administrative Expenses)	<b>1326.18</b>	<b>1463.06</b>	<b>1436.60</b>	<b>1486.41</b>	<b>1292.47</b>
7.0	Employee Cost					
7.1.1	Salaries, Wages & Allowances	10950.44	11179.83	11395.24	11461.60	13575.95
7.1.2	Pension	66.02	3263.48	979.43	1016.45	983.76
7.1.3	Gratuity	383.37	158.07	-66.53	-43.26	2189.15
7.1.4	Provident Fund	821.46	937.13	921.77	927.87	956.83
7.1.5	Leave Encashment	1373.70	1372.74	1311.01	1432.73	1977.89
7.2	Staff welfare expenses					
7.2.1	-Medical expenses on superannuated employees	41.99	48.73	38.61	65.53	8.91
7.2.2	-Medical expenses on regular employees & others	1178.71	1185.02	1239.30	1523.57	817.03
7.2.3	-Uniform/Livries & safety equipment	84.00	223.61	202.09	181.74	241.46
7.2.4	-Canteen expenses	272.81	280.03	281.54	313.19	336.39
7.2.5	-Other staff welfare expenses	183.85	190.45	254.42	229.57	261.71
	Subtotal (Staff welfare Expenses)	<b>1761.36</b>	<b>1927.85</b>	<b>2015.97</b>	<b>2313.61</b>	<b>1665.50</b>
7.3	Productivity linked Incentive	549.60	585.56	221.17	158.79	0.00
7.4	Expenditure on VRS	0.00	0.00	0.00	0.00	0.00
7.5	Ex-gratia	297.34	296.33	514.29	311.47	296.64
7.6	Performance Related Pay (PRP)	874.95	426.06	712.86	926.07	1109.78
	Sub Total (Employee Cost)	<b>17078.24</b>	<b>20147.06</b>	<b>18005.20</b>	<b>18505.32</b>	<b>22755.49</b>
8	Loss of Store	0.00	0.00	0.00	0.00	0.00
9	Provisions	41.05	113.22	219.95	68.59	73.87
10	Prior Period Expenses	0.00	-125.62	0.00	0.00	0.00
11	Corporate Office expenses allocation	4683.58	4740.57	5042.71	5192.49	5310.32
12	Others					
12.1	Rates & Taxes	2.97	2.04	1.87	11.51	5.85
12.2	Water cess	49.79	51.75	52.49	31.10	28.02
12.3	Training & recruitment expenses	126.03	52.96	54.36	66.60	57.06
12.4	Tender Expenses	39.95	73.20	53.54	54.46	65.63

## Annexure-VI (A)

## DETAILS OF OPERATION AND MAINTENANCE EXPENSES

Name of the Company:

NTPC Ltd.

Name of the Power Station:

National Capital Thermal Power Station

Rs. Lakhs

Sl. No.	Items	2012-13	2013-14	2014-15	2015-16	2016-17
12.5	Guest house expenses	57.02	86.51	87.33	107.70	171.40
12.6	Education expenses	55.84	80.62	257.59	108.10	140.58
12.7	Community Development Expenses	279.39	334.62	481.89	1083.28	911.15
12.8	Ash utilisation expenses	170.84	-67.61	16.98	-15.82	-6.17
12.9	Books & Periodicals	2.92	3.02	1.23	4.34	1.61
12.10	Professional Charges	13.68	27.69	33.04	54.08	10.49
12.11	Legal expenses	20.49	9.69	31.25	16.40	16.54
12.12	EDP Hire & other charges	14.47	31.79	64.11	94.11	102.04
12.13	Printing & Stationery	28.56	40.98	40.64	30.17	43.38
12.14	Misc Expenses	757.10	1452.92	922.94	745.79	545.78
	Sub Total (Others)	<b>1619.04</b>	<b>2180.20</b>	<b>2099.28</b>	<b>2391.81</b>	<b>2093.36</b>
13	(Total 1 to 12)	<b>38450.52</b>	<b>41233.08</b>	<b>40457.57</b>	<b>42195.78</b>	<b>45384.02</b>
14	Revenue / Recoveries	-80.58	-112.24	-103.83	-127.17	-130.45
15	Net Expenses	<b>38369.94</b>	<b>41120.84</b>	<b>40353.73</b>	<b>42068.60</b>	<b>45253.57</b>
16	Capital spares consumed	398.86	689.85	589.15	1290.96	716.43
	Total O&M Cost	<b>38768.80</b>	<b>41810.69</b>	<b>40942.89</b>	<b>43359.56</b>	<b>45970.01</b>
	No. of Emp. Applied for VRS	0	No. VRS scheme was in operational			

## DETAILS OF WATER CHARGES

Name of the Company: NTPC Ltd.

Name of the Power Station and Stage/Phase: National Capital Thermal Power Station

(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	Thermal : Coal Fired				
2	Type of Cooling Tower	NDCT				
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					
6	Allocation of Water					
7	Actual water Consumption	309580.8	268883.2	305755.2	290796.9	268637.4
8	Rate of Water Charges (lakhs/ cusecs)	12.48	12.48	12.48	12.48	12.48
9	Other charges/Fees , if paid as part of Water Charges Rs lakhs	21204163.2	18416657.6	20942136.8	19917596.1	18399822.5
	Total water Charges Paid Rs	35113011.2	30497040.8	34679106.65	32982518.55	30469162.9

**Annexure-VI (D)****Details of capital Spares****Name of Company- NTPC Limited****Name of Power station : National Capital Thermal Power Station**

Rs. Lakhs

SI . No.	ITEM	2012-13	2013-14	2014-15	2015-16	2016-17
(A)	Details of capital spares in Opening stock	11172	15631	17351	18780	19590
	IND AS Adjustment in opening					2164
	Opening of capital spares after IND AS Adj					21754
(B)	Details of capital spares procured during the year	4858	2410	2018	2101	3358
(C)	Details of capital spares consumed during the year	399	690	589	1291	716
(D)	Details of capital spares closing at the end of the year	15631	17351	18780	19590	24396

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

Name of the Utility: NTPC Ltd														
Name of the Generating Station: National Capital Thermal Power Station Stage-I														
Station/ Stage/ Unit: 4 X 210 MW (Stage-I)														
Fuel Type (Coal/ Lignite/ Gas/ Liquid Fuel/ Nuclear/ Hydro): Coal														
Capacity of Plant (MW): 840 MW														
COD : 01.12.1995														
		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) (%)	96.20	94.70	97.88	100.45	101.22	101.38	98.69	96.47	98.24	99.69	99.88	98.41	105.40
2	Plant Load Factors (PLF) (%)	92.84	91.98	95.69	98.02	99.36	100.59	92.26	86.63	86.48	79.38	81.54	56.28	44.93
3	Scheduled Energy (MU)	6173.57	6167.18	6414.79	6621.26	6645.11	6601.62	5886.52	5798.95	5935.69	5435.17	5702.96	3935.82	3144.33
4	Scheduled Generation (MU)	6173.57	6167.18	6414.79	6621.26	6645.11	6601.62	5886.52	5798.95	5935.69	5435.17	5702.96	3935.82	3144.33
5	Actual Generation (MU)	6327.26	6265.71	6514.31	6704.73	6744.54	6743.42	6136.39	5833.80	5811.93	5308.51	5461.31	3758.17	2980.60
6	Quantum of coal consumption (MT)	4433439	4290978	4323842	4533368	4619580	4602968	4179886	4066091	4050609	3643459	4013833	2670661	2103722
7	Value of coal (Rs. Lakh)					0	0	0	0	0	0	0	0	0
8	Specific Coal Consumption (kg/kwh)	0.65	0.63	0.61	0.63	0.63	0.62	0.62	0.64	0.64	0.62	0.67	0.64	0.64
9	Gross Calorific Value of Coal (Kcal/ Kg)	3729.00	3792.00	3906.00	3816.00	3778.21	3837.73	3878.92	3776.19	3766.92	3841.32	3596.52	3732.62	3843.82
10	Heat Contribution of Coal (Kcal/ kwh)	2420.12	2404.13	2398.28	2392.63	2387.32	2386.55	2388.32	2402.23	2397.84	2396.01	2405.92	2400.42	2445.82
11	Cost Of Specific Coal Consumption (Rs./Kwh) – Finally admitted by CERC (Ex Bus) \$													
12	Quantum of Oil Consumption (Lit.)	1081.05	1425.02	804.90	809.87	1008.79	632.47	824.50	1165.70	1042.00	1350.55	696.89	1519.66	1145.88
13	Value of Oil (Rs. lakh)													
14	Gross calorific value of oil (kcal/lit)	9710	9807	9694	9841	9782	9673	9616	9615	9710	9763	9805	9841	9876
15	Specific Oil Consumption (ml/ kwh)	0.16	0.21	0.11	0.11	0.14	0.09	0.12	0.18	0.16	0.23	0.12	0.37	0.35
16	Cost Of Specific Oil Consumption (Rs./Kwh) – Finally admitted by CERC (Ex Bus) \$													
17	Heat Contribution of Oil (Kcal/ kwh)	1.07	0.94	1.15	0.66	1.36	0.71	1.17	1.75	1.59	2.26	1.14	3.60	3.42
18	Station Heat Rate (kcal/kwh)	2421.19	2405.07	2399.43	2393.29	2388.68	2387.26	2389.49	2403.98	2399.43	2398.27	2407.06	2404.02	2449.25
19	Auxiliary Energy Consumption (%)	7.35	7.39	7.45	7.23	7.36	7.28	7.77	7.58	7.61	7.76	7.97	8.17	8.53
20	Debt at the end of the year (Rs. Cr)	218.13	158.55	100.82	60.38	26.38	0.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	Equity (Rs. Cr - (Average) #	857.97	858.39	858.81	859.62	860.29	850.69	850.65	849.92	849.11	848.07	847.11	847.11	847.11
22	Working Capital (Rs. Cr) – finally admitted by CERC	350.37	351.30	352.37	354.63	355.87	586.82	590.31	595.49	598.63	604.20	626.59	633.23	638.72
23	Capital cost (Rs. Cr) – finally admitted by CERC (Average) #	1716.01	1717.42	1718.80	1721.52	1723.74	1702.35	1702.21	1699.78	1697.09	1693.62	1702.35	1701.62	1698.60
24	Capacity Charges/ Annual Fixed Cost (AFC) in Rs. Cr	342.08	336.21	330.62	326.94	325.24	476.44	482.53	490.26	500.04	515.88	483.22	498.57	513.80
	(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)	120.12	120.17	120.23	120.35	120.44	199.75	197.44	195.01	194.82	199.14	166.12	166.92	166.92
	Rate (%)	0.14	0.14	0.14	0.14	0.14	0.23	0.23	0.23	0.23	0.23	0.20	0.20	0.20
	(b) Interest on Loan													
	Absolute value (in Rs Cr)	39.59	29.98	20.58	12.68	6.74	1.26	0.03	0.00	0.00	0.00	0.00	0.00	0.00
	Rate (%) – Weighted Average Rate	0.16	0.16	0.16	0.16	0.16	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	(c) Depreciation (finally allowed by CERC)													
	Absolute value (in Rs Cr)	59.18	59.22	59.27	59.37	59.44	23.99	24.04	23.87	23.69	23.57	23.95	23.95	23.95
	Rate (%)	3.45%	3.45%	3.45%	3.45%	3.45%	Spread over useful life							
	(d) Interest on working Capital													
	Absolute value (in Rs Cr)	35.84	35.94	36.04	36.27	36.39	71.89	72.31	72.95	73.33	74.01	84.59	85.49	86.23
	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)	87.36	90.89	94.50	98.28	102.23	152.88	161.62	170.86	180.68	191.02	202.26	214.86	228.30
	Water charges (finally admitted by CERC) (in Rs Cr) #	Not Applicable										1.504	1.504	1.504
	Rate (%)	Not Applicable												
	(f) Compensation Allowances (in Rs Cr)	Not Applicable					2.1	2.52	2.94	2.94	3.57	6.3	7.35	8.4

<b>Name of the Utility: NTPC Ltd</b>														
<b>Name of the Generating Station: National Capital Thermal Power Station Stage-I</b>														
<b>Station/ Stage/ Unit: 4 X 210 MW (Stage-I)</b>														
<b>Fuel Type (Coal/ Lignite/ Gas/ Liquid Fuel/ Nuclear/ Hydro): Coal</b>														
<b>Capacity of Plant (MW): 840 MW</b>														
<b>COD : 01.12.1995</b>														
		<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>
<b>25</b>	<b>AFC (Rs. Kwh)</b>	0.660	0.628	0.617	0.610	0.607	0.832	0.843	0.857	0.874	0.901	0.865	0.892	0.919
<b>26</b>	<b>Energy Charge (Rs./Kwh)</b>	1.542	1.614	1.687	1.628	1.987	2.140	2.371	2.966	2.946	3.248	3.835	3.686	3.313
<b>27</b>	<b>Total tariff (Rs. Kwh)</b>	2.202	2.242	2.304	2.238	2.594	2.973	3.215	3.823	3.820	4.149	4.699	4.578	4.233
<b>28</b>	<b>Revenue realisation before tax (Rs. Crore)</b>													
<b>29</b>	<b>Revenue realisation after tax (Rs. Crore)</b>													
<b>30</b>	<b>Profit/ loss (Rs. Crore)*</b>	160.43	147.44	227.59	350.82	260.30	328.71	663.18	894.72	2415.38	1003.96	896.42	746.65	824.80
<b>31</b>	<b>DSM Generation (MU)</b>	153.68	98.53	99.52	83.47	99.42	141.79	249.87	34.85	-123.76	-126.66	-241.66	-177.65	-163.73
<b>32</b>	<b>DSM Rate (Ps/Kwh)</b>													
<b>33</b>	<b>Revenue from DSM (Rs. Crore)</b>				-25.86	-31.42	-39.11	-71.49	-20.85	4.29	11.86	40.54	34.56	29.36

**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

Name of the Utility: NTPC Ltd															
Name of the Generating Station: National Capital Thermal Power Station Stage-II															
Station/ Stage/ Unit: 2 x 490 MW (Stage-II)															
Fuel Type (Coal/ Lignite/ Gas/ Liquid Fuel/ Nuclear/ Hydro): Coal															
Capacity of Plant (MW): 980 MW															
COD : Unit I - 31.01.2010, Unit II - 31.07.2010															
		2004-05	2005-06	2006-07	2007-08	2008-09	2009-10 (31.01.2010 to 31.03.2010)	2010-11 (01.04.2010 to 30.07.2010)	2010-11 (31.07.2010 to 31.03.2011)	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
1	Plant Availability Factor (PAF) (%)						56.68		84.57	100.22	91.75	103.09	89.02	103.10	98.85
2	Plant Load Factors (PLF) (%)						55.44		73.45	90.99	78.40	85.65	73.21	68.48	63.60
3	Scheduled Energy (MU)						361.91		4844.04	7554.72	6581.75	7202.03	6234.81	5875.07	5466.52
4	Scheduled Generation (MU)						361.91		4844.04	7554.72	6581.75	7202.03	6234.81	5875.07	5466.52
5	Actual Generation (MU)						361.05		5035.03	7467.83	6405.53	7003.71	6004.96	5635.03	5216.60
6	Quantum of coal consumption (MT)						241132		3191550	4789755	4378194	4609328	4113659	3818466	3396510
7	Value of coal (Rs. Lakh)						7617.36		108991.43	198607.19	175559.24	211950.45	210850.09	192199.53	163861.68
8	Specific Coal Consumption (kg/kwh)						0.62		0.61	0.61	0.65	0.63	0.65	0.65	0.62
9	Gross Calorific Value of Coal (Kcal/ Kg)						3983.38		3932.16	3916.80	3672.11	3806.69	3638.35	3678.42	3855.35
10	Heat Contribution of Coal (Kcal/ kwh)						2455.56		2385.81	2395.22	2388.77	2386.35	2381.53	2382.78	2398.35
11	Cost Of Specific Coal Consumption (Rs./Kwh) – Finally admitted by CERC (Ex Bus) \$														
12	Quantum of Oil Consumption (Lit.)						2107.80		5558.71	1125.50	1886.05	1091.75	1414.74	1265.04	1267.97
13	Value of Oil (Rs. lakh)														
14	Gross calorific value of oil (kcal/lit)						9783.56		9771.82	9805.65	9768.09	9813.35	9830.33	9860.02	9883.66
15	Specific Oil Consumption (ml/ kwh)						5.39		1.06	0.14	0.28	0.15	0.23	0.21	0.23
16	Cost Of Specific Oil Consumption (Rs./Kwh) – Finally admitted by CERC (Ex Bus) \$														
17	Heat Contribution of Oil (Kcal/ kwh)						47.74		10.33	1.41	2.74	1.46	2.21	2.12	2.30
18	Station Heat Rate (kcal/kwh)						2503.29		2396.13	2396.63	2391.51	2387.80	2383.74	2384.90	2400.64
19	Auxiliary Energy Consumption (%)						7.39		5.99	5.58	5.82	5.82	5.03	4.96	4.95
20	Debt at the end of the year (Rs. Cr)						1492.10	1522.43	2848.54	2794.28	2759.50	2559.30	2334.05	2093.50	1842.95
21	Equity (Rs. Cr - (Average) #						635.50	661.16	1255.53	1338.95	1417.07	1467.97	1481.46	1488.52	1490.58
22	Working Capital (Rs. Cr) – finally admitted by CERC						340.53	343.92	740.58	754.07	760.82	767.81	774.15	776.12	776.24
23	Capital cost (Rs. Cr) – finally admitted by CERC (Average) #						2118.32	2203.87	4185.10	4463.18	4723.56	4893.25	4938.21	4961.72	4968.61
24	Capacity Charges/ Annual Fixed Cost (AFC) in Rs. Cr						493.45	507.66	973.99	1032.89	1068.44	1095.72	1045.77	1036.13	1023.66
	(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)						154.04	158.40	300.80	317.12	335.62	355.82	299.88	302.78	303.19
	Rate (%)						24.239%	23.958%	23.958%	23.684%	23.684%	24.239%	20.243%	20.341%	20.341%
	(b) Interest on Loan														
	Absolute value (in Rs Cr)						128.65	130.19	249.33	269.18	264.80	254.52	233.67	209.80	186.06
	Rate (%) – Weighted Average Rate						8.7273%	8.6377%	8.8836%	9.5406%	9.5360%	9.5704%	9.5506%	9.4770%	9.4530%
	(c) Depreciation (finally allowed by CERC)														
	Absolute value (in Rs Cr)						105.34	109.61	207.75	221.25	233.80	241.77	249.01	250.20	250.55
	Rate (%)						4.973%	4.973%	4.964%	4.957%	4.950%	4.941%	5.043%	5.043%	5.043%
	(d) Interest on working Capital														
	Absolute value (in Rs Cr)						41.71	42.13	81.46	82.95	83.69	84.46	104.51	104.78	104.79
	Rate (%)						12.25%	12.25%	11.00%	11.00%	11.00%	11.00%	13.50%	13.50%	13.50%
	(e) Operation and maintenance cost (finally admitted by CERC)														
	Absolute value (in Rs Cr)						63.70	67.33	134.65	142.39	150.53	159.15	156.80	166.70	177.18

		2004-05	2005-06	2006-07	2007-08	2008-09	2009-10 (31.01.2010 to 31.03.2010)	2010-11 (01.04.2010 to 30.07.2010)	2010-11 (31.07.2010 to 31.03.2011)	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
	Water charges (finally admitted by CERC) (in Rs Cr) #												1.88	1.88	1.88
	Rate (%)														
	(f) Compensation Allowances (in Rs Cr)														
25	AFC (Rs. Kwh)						1.44	1.48	1.42	1.51	1.56	1.60	1.55	1.53	1.52
26	Energy Charge (Rs./Kwh)						2.28	2.22	2.22	2.70	2.86	3.10	3.57	3.47	3.11
27	Total tariff (Rs. Kwh)						3.72	3.70	3.64	4.21	4.42	4.70	5.12	5.00	4.63
28	Revenue realisation before tax (Rs. Crore)														
29	Revenue realisation after tax (Rs. Crore)														
30	Profit/ loss (Rs. Crore)*	160.43	147.44	227.59	350.82	260.30	328.71	663.18	894.72	2415.38	1003.96	896.42	746.65	824.80	
31	DSM Generation (MU)						-0.86	190.99	-86.89	-176.22	-198.32	-229.85	-240.05	-249.92	
32	DSM Rate (Ps/Kwh)														
33	Revenue from DSM (Rs. Crore)						-1.067	44.8002	6.6407	13.8168	24.5214	40.611	48.1456	45.7584	

**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