

## 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		<b>NTPC Ltd.</b>										
2	Name of Station/ Pit head or Non- Pit head		<b>Bongaigaon Thermal Power Station</b>										
3	Installed Capacity and Configuration	MW	3X250 MW = 750 MW										
4	Rated Steam Parameters (Also state the type of Steam turbine and Boiler)		MS at Turbine Inlet : 150 Ksc / 537 Deg C RH at Turbine Inlet : 35.64 ksc / 537 Deg C										
5	Type of BFP		Electrical Driven										
6	Circulating water system		Closed Cycle										
7	Any other Site specific feature		FGD, Unit-3 yet to be declared COD										
8	Fuels :												
8.1	Primary Fuel :		Coal										
8.1.1	Annual Allocation or/and Requirement		Annual allocation through FSA dated 17.07.2013 with ECL - 0.40 MMT Annual allocation through FSA dated 08.08.2013 with NEC - 1.25 MMT Annual Requirement : 4.73 MMT					Considering 90% PLF Of 750 MW					
8.1.2	Sources of supply/ procurement along with contracted quantity and grade of coal	MMT	<p align="center">NEC, ECL</p> <table border="1"> <tr> <td></td> <td>0.83</td> <td>0.83</td> <td>0.83</td> <td>1.65</td> </tr> </table> <p>ECL: G 6 and above NEC: G1/G2/G4</p>						0.83	0.83	0.83	1.65	
	0.83	0.83	0.83	1.65									
8.1.2.1	FSA	<table border="1"> <tr> <td>LOA</td> <td></td> </tr> <tr> <td>MoU</td> <td>MMT</td> </tr> </table>	LOA		MoU	MMT				0.11	0.90		
LOA													
MoU	MMT												
8.1.2.2	Imported	MMT				0.00	0.00						
8.1.2.3	Spot Market/e-auction	MMT											
8.1.3	Transportation Distance of the station from the sources of supply	KM	ECL: Min. 667 Km (Kottadih Colly Sdng, Pandabeswar), About 713 Km (Pure Jambad Colly Sdng, SONACHARA) NEC: 725 Km ( Tirap sdng/Tikok sdng)										
8.1.4	Mode of Transport		Indian Railways										
8.1.5	Maximum Station capability to stock primary fuel	Days & MMT	66 / 0.36										
8.1.6	Maximum stock maintained for primary fuel	MT					82000						
8.1.7	Minimum Stock maintained for primary fuel	MT					35000						
8.1.8	Average stock maintained for primary fuel	MT					60451						
8.2	Secondary Fuel :		LDO										
8.2.1	Annual Allocation/ Requirement	KL	825										
8.2.2	Sources of supply		BRPL										
8.2.3	Transportation Distance of the station from the sources of	KM	40										
8.2.4	Mode of Transport		Road										
8.2.5	Maximum Station capability to stock secondary fuels	KL	3000										

SI.No.	Particulars	Units	2012-13	2013-14	2014-15	2015-16	2016-17	Basis of Information/ Methodology
8.2.6	Maximum Stock of secondary oil actually maintained	KL					2173	
8.2.7	Minimum Stock of secondary oil actually maintained	KL					328	
8.2.8	Average Stock of secondary oil actually maintained	KL					1306	
<b>9</b>	Cost of Spares :							
9.1	Cost of Spares capitalized in the books of accounts						431.05	
9.2	Cost of spares included in capital cost for the purpose of tariff						431.05	
<b>10</b>	Generation :							
10.1	-Actual Gross Generation at generator terminals	MU					1656.42	
10.2	-Actual Net Generation Ex-bus	MU					1510.90	
10.3	-Scheduled Generation Ex-bus	MU					1568.01	
<b>11</b>	Average Declared Capacity (DC)	MW					189.09	
<b>12</b>	Actual Auxiliary Energy Consumption excluding colony consumption	MU					145.52	
<b>13</b>	Actual Energy supplied to Colony from the station	MU					0.00	
<b>14</b>	Primary Fuel :					Coal		
14.1	Consumption :	MT					815390	
14.1.1	Domestic coal	From linked mines	MT				815390	
		Non-linked mines	MT				0.00	
14.1.2	Imported coal	MT					0.00	
14.1.3	Spot market/e-auction coal	MT					0.00	
14.2	<b>Gross Calorific Value (GCV) :</b>							
14.2.1	Domestic Coal	(As Billed) (Eq. Basis)	kCal/kg				6063	
		(As Received) (TM Basis)	kCal/kg				4866.48	
		(As Fired) (TM Basis)	kCal/kg				-	
14.2.2	Imported Coal	(As Billed) (Eq. Basis)	kCal/kg				-	
		(As Received) (TM Basis)	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					6063	
14.2.5	Weighted Average Gross Calorific value (As Received)	kCal/kg					4866	
14.2.6	Weighted Average Gross Calorific value (As Fired)	kCal/kg					-	
14.3	Price of coal :							
14.3.1	Weighted Average Landed price of Domestic coal						5789.4	
14.3.2	Weighted Average Landed Price of Imported coal							

Sl.No.	Particulars	Units	2012-13	2013-14	2014-15	2015-16	2016-17	Basis of Information/ Methodology
14.3.3	Weighted Average Landed Price of Spot market/e-							
14.3.4	Weighted Average Landed Price of all the Coals						5789.4	
14.4	Blending :	% and MT ( of the total coal consumed )					0%	
14.4.1	Blending ratio of imported coal with domestic coal	Equivalent to domestic coal					0	
14.4.2	Proportion of e-auction coal in the blending						0	
14.5	Actual Average Coal stock maintained	MT Days					60451 14.8	
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	
14.5.1.2	Transit loss from non-linked mines including e-auction	%					NA	
14.5.1.3	Transit loss of imported coal	%					NA	
14.5.2	<b>Non-Pit Head station</b>							
14.5.2.1	Transit loss from linked mines	MT %					0 0.8	
14.5.2.2	Transit loss from non-linked mines including e-auction						-	
14.5.2.3	Transit loss of imported coal						-	
<b>15</b>	Secondary Fuel Oil : ( If more than one fuel used then give details of all the							LDO
15.1	Consumption	LDO						791
15.2	Weighted Average Gross Calorific value (As received)	Kcal/l						9420
15.3	Weighted Average Price	Rs/ KL						45795
15.4	Actual Average stock maintained	LDO						1306
<b>16</b>	Weighted average duration of outages( unit-wise							
16.1	Planned Outages	Days						0
16.2	Forced Outages	Days						12.48
16.3	Number of tripping	Nos						21
16.4	Number of start-ups:	Nos						21
16.4.1	Cold Start-up	Nos						5
16.4.2	Warm Start-up	Nos						2
16.4.3	Hot start-up	Nos						14
<b>17</b>	NOx , SOx ,and other particulate matter emission in :							
17.1	Design value of emission control equipment	mg/Nm3						ESP design outlet Conc. = 18
17.2	Actual emission	SPM						39.2
		SOX						278.02
		NOX						506.45
<b>19</b>	Detail of Ash utilization % of fly ash produced	%					0.00	

SI.No.	Particulars	Units	2012-13	2013-14	2014-15	2015-16	2016-17	Basis of Information/ Methodology
19.1	Conversion of value added product	%					0.00	
19.2	For making roads &embarkment	%					0.00	
19.3	Land filling	%					0.00	
19.4	Used in plant site in one or other form or used in some	%					0.00	
19.5	Any other use , Please specify	%					0.00	
<b>20</b>	Cost of spares actually consumed							
<b>21</b>	Average stock of spares						1761.49	Manpower as on last day of the FY. Man- MW computed for 500 MW capacity
<b>22</b>	Number of employees deployed in O&M							
22.1	- Executives						210	
22.2	- Non Executives						83	
22.3	- Corporate office		3170	3051	2916	2973	2787	
<b>23</b>	Man-MW ratio						0.59	

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 WATER CHARGES

Name of the Company: NTPC Ltd.

Name of the Power Station and Stage/Phase: Bongaigaon 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	Induced draft				
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 (cusec)					40
7	Actual water Consumption					4743400
8	Rate of Water Charges (lakhs/ cusecs)					-
9	Other charges/Fees , if paid as part of Water Charges Rs lakhs					360717
	Total water Charges Paid Rs lakhs					<b>360717</b>

### Details of capital Spares

Name of Company: NTPC Limited

Name of Power station: Bongaigaon Thermal Power Project

In Rs.

Sl . No.	ITEM	2012-13	2013-14	2014-15	2015-16	2016-17
(A)	Details of capital spares in Opening stock					-
(B)	Details of capital spares procured during the year					4,31,04,622.64
(C)	Details of capital spares consumed during the year					-
(D)	Details of capital spares closing at the end of the year					4,31,04,622.64

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



<b>Name of the Utility:</b> NTPC Ltd														
<b>Name of the Generating Station:</b> Bongaigaon Thermal Power Station														
<b>Station/ Stage/ Unit:</b> 3 x 250 MW (Stage-II)														
<b>Fuel Type (Coal/ Lignite/ Gas/ Liquid Fuel/ Nuclear/ Hydro):</b> Coal														
<b>Capacity of Plant (MW):</b> 750 MW														
<b>COD : Unit-1 - 01.04.2016</b>														
		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
	<b>Rate (%)</b>													12.8
	<b>(e) Operation and maintenance cost (finally admitted by CERC)</b>													
	<b>Absolute value (in Rs Cr)</b>													67.5
	<b>Water charges (finally admitted by CERC) (in Rs Cr) #</b>													
	<b>Rate (%)</b>													
	<b>Normative O&amp;M Expenses (in Rs Lakh/MW) #</b>													
	<b>(f) Compensation Allowances (in Rs Cr)</b>													
25	<b>AFC (Rs. Kwh)</b>													2.67
26	<b>Energy Charge (Rs./Kwh)</b>													3.11
27	<b>Total tariff (Rs. Kwh)</b>													5.78
28	<b>Revenue realisation before tax (Rs. Crore)</b>													
29	<b>Revenue realisation after tax (Rs. Crore)</b>													
30	<b>Profit/ loss (Rs. Crore)</b>												-3.42	102.43
31	<b>DSM Generation (MU)</b>													-56.92
32	<b>DSM Rate (Ps/Kwh)</b>													
33	<b>Revenue from DSM (Rs. Crore)</b>													8.38

**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