

**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	<b>Name of Company</b>		<b>NTPC Ltd.</b>				
2	<b>Name of Station</b>		<b>Jhanor Gandhar Gas Power Project</b>				
3	<b>Installed Capacity and Configuration</b>	MW	144.3x3 + 224.49x1 = 657.39				
4	<b>Make of Turbine</b>		ABB GT13 E1				
5	<b>Rated Steam Parameters</b>		Steam Pressure=66.49 bar, Steam temperature = 501.8				
6	<b>Average site ambient conditions</b>		Temp-27 deg. C., RH-50 %, Pres-1010 mbar				
7	<b>Any other Site specific feature</b>		3 GT + Single ST module. For further details vide form AS1				
8	<b>Fuels:</b>						
8.1	Main/Primary Fuel		Natural Gas/RLNG				
8.1.1	Annual Allocation (MMSCMD)	Dom. Gas	2.29	1.56	1.14	0.85	1.48
		RLNG	0.67	1.81	2.06	2.36	1.03
		Total	2.96	3.37	3.2	3.21	2.51
8.1.2	Sources of Supply		GAIL, GSPCL				
8.1.3	Transportation Distance of the station from the sources of supply	Km	100 (GAIL HVJ pipeline Zone-1, GSPL HP pipeline)				
8.1.4	Mode of Transport		Pipeline				
8.1.5	Maximum Station capability to stock main/primary fuel	Million Cubic meter or MT or Kilo Litre	N/A				
8.2	<b>Alternate Fuel:</b>		<b>No alternate fuel firing facility</b>				
8.2.1	Annual Allocation/ Requirement	Million Cubic meter or MT or Kilo Litre					
8.2.2	Sources of Supply						
8.2.3	Transportation Distance of the station from the sources of supply	Km					
8.2.4	Mode of Transport						
8.2.5	Maximum Station capability to stock secondary fuels						

	Particulars	Units	2012-13	2013-14	2014-15	2015-16	2016-17
9	<b>Cost of Spares :</b>						
9.1	<b>Cost of Spares capitalized in the books</b>	(Rs. Lakhs)	1386.00	1944.14	3250.25	498.69	511.15
9.2	<b>Cost of spares included in capital cost for the purpose of tariff</b>	(Rs. Lakhs)	0	0	0	0	0
<b>10</b>	<b>Generation</b>						
10.1	<b>Actual Gross Generation at generator terminals</b>	MU	3478.58	1322.47	1608.54	961.52	2358.81
10.1.1	<b>Total</b>	MU	3478.58	1322.47	1608.54	961.52	2358.81
10.1.2	<b>On Gas</b>	MU	3478.58	1322.47	1608.54	961.52	2358.81
10.1.3	<b>On Naptha or any other fuel</b>	MU	NA	NA	NA	NA	NA
10.2	<b>Actual Net Generation Ex-bus</b>	MU	3414.29	1280.59	1562.34	922.98	2290.81
10.3	<b>Scheduled Generation Ex-bus</b>	MU	3192.61	1243.34	1549.74	928.89	2227.9
11	<b>Average Declared Capacity (DC)</b>	MW	596.76	589.85	570.43	638.27	588.26
12	<b>Actual Auxiliary Energy Consumption excluding colony consumption &amp; agency power</b>	MU	61.67	39.39	43.602	35.98	65.719
13	<b>Actual Energy supplied to Colony from the station &amp; Agency Power</b>	MU	2.613	2.517	2.591	2.559	2.281
<b>14</b>	<b>Main / Primary Fuel:</b>						
<b>14.1</b>	<b>Consumption :</b>	MCM/MT/ KI	725.44	296.5	359.91	218.67	525.87
14.1.1	<b>Natural Gas : APM Gas</b>	MCM	722.83	296.44	353.08	217.68	524.19
	<b>Non-APM Gas</b>	MCM					
14.1.2	<b>RLNG</b>	MCM	2.61	0.06	6.83	0.99	1.68
14.1.3	<b>Liquid Fuel</b>	KL	NA	NA	NA	NA	NA
<b>14.2</b>	<b>Weighted Gross Calorific Value (GCV)</b>		9727.85	9284.5	9284.03	9340.93	9368.83
14.2.1	<b>Natural Gas (As recieved)</b>	kcal/scm	9728.21	9284.44	9279.6573	9341.3086	9367.81
14.2.2	<b>RLNG/ E-RLNG (As recieved)</b>	kcal/scm	9630.42	9527.33	9509.99	9256.44648	9689.95
14.2.3	<b>Liquid Fuel (As recieved)</b>	kcal/Lt					
14.3	<b>Weighted Average Landed Price</b>	(Rs per 1000 SCM)					
14.3.1	<b>APM</b>	(Rs per 1000 SCM)	10544.1	11411.2	11568.6	12906	8967.8
14.3.2	<b>Non-APM</b>	(Rs per 1000 SCM)	13727.45	13639.5	14621.3	14660.1	9625.2
14.3.3	<b>RLNG / E-RLNG</b>	(Rs per 1000 SCM)	34826.44	46889.5	41061.9	40294.7	29716.1

	Particulars	Units	2012-13	2013-14	2014-15	2015-16	2016-17
14.3.4	Liquid Fuel	Rs/KL	NA	NA	NA	NA	NA
14.4	Percentage of Declared Capacity	%	93.58	92.5	89	99.58	91.78
14.4.1	APM Gas+PMT + NON APM GAS	%	73.99	49.38	39.97	38.91	65.55
14.4.2	NON APM	%	6.74	6.22	3.1	2.97	10.94
14.4.3	RLNG	%	12.86	36.9	45.93	57.7	15.3
14.4.4	Liquid Fuel	%	NA	NA	NA	NA	NA
14.4	Actual Average stock maintained						
15	Alternate Fuel:(RLNG/Liquid)		NA	NA	NA	NA	NA
15.1	Consumption	MT/ KL	NA	NA	NA	NA	NA
15.2	Weighted Average Gross Calorific value (As fired)	kCal/ Kg/	NA	NA	NA	NA	NA
15.3	Weighted Average Landed Price		NA	NA	NA	NA	NA
15.4	Actual Average stock maintained	MT	NA	NA	NA	NA	NA
16	Weighted average duration of outages :						
16.1	Planned Outages	(Days)	9	24	24	2	16
16.2	Forced Outages	Nos.	0.75	0.5	3.89	0.16	0.38
16.3	Number of tripping		9	12	14	9	10
16.4	Number of start-ups :		51	71	15	52	29
16.4.1	Cold Start-up		20	18	3	23	6
16.4.2	Warm Start-up		21	23	7	14	16
16.4.3	Hot start-up	Nos.	10	30	5	15	7
17	Cost of spares consumed	Rs. Lakhs	552.27	695.57	471.82	464.94	436.74
18	Average stock of spares	Rs. Lakhs	4604.14	4771.30	4771.90	4631.96	4432.32
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		107	106	99	84	69
20.2	- Non Executive		82	83	81	80	78
20.3	Corporate Office		3170	3051	2916	2973	2787
21	Man-MW ratio	Man/MW	0.29	0.29	0.27	0.25	0.22

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

## Annexure-VI (A)

## DETAILS OF OPERATION AND MAINTENANCE EXPENSES

Name of the Company:

NTPC Ltd.

Name of the Power Station:

Gandhar Gas Power Plant

Rs. Lakhs

Sl. No.	Items	2012-13	2013-14	2014-15	2015-16	2016-17
1	Consumption of stores & spares	552.27	695.57	471.82	464.94	436.74
2	Repair & Maintenance	1251.91	996.10	977.14	682.32	992.28
3	Insurance	154.61	159.10	158.48	158.46	165.16
4	Security	573.12	687.55	731.80	898.35	983.70
5	Water Charges	950.25	536.28	549.93	465.76	1034.13
6	Administrative Expenses					
6.1	Rent	7.61	6.19	5.56	6.35	7.81
6.2	Electricity charges	59.72	77.56	77.16	91.83	48.10
6.3	Travelling & Conveyance	162.89	164.57	171.48	155.52	132.80
6.4	Communication Expenses	31.84	25.92	28.39	51.19	41.32
6.5	Advertising	2.01	3.23	6.41	5.57	5.06
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	49.89	52.56	57.86	54.20	58.26
6.9	Filing fee	26.30	28.93	0.00	28.93	28.93
	Subtotal (Administrative Expenses)	<b>340.25</b>	<b>358.96</b>	<b>346.85</b>	<b>393.59</b>	<b>322.28</b>
7.0	Employee Cost					
7.1.1	Salaries, Wages & Allowances	1977.99	2059.26	2153.04	2019.36	2201.87
7.1.2	Pension	12.15	526.20	184.57	181.57	158.89
7.1.3	Gratuity	62.77	25.29	-10.79	-6.07	315.90
7.1.4	Provident Fund	150.00	171.85	173.26	165.39	153.21
7.1.5	Leave Encashment	208.63	231.01	205.87	232.19	319.57
7.2	Staff welfare expenses					
7.2.1	employees	2.25	5.37	4.75	8.24	0.00
7.2.2	& others	162.37	157.83	180.93	234.93	108.57
7.2.3	-Uniform/Livries & safety equipment	13.44	41.02	37.17	33.55	40.51
7.2.4	-Canteen expenses	0.11	0.36	0.22	0.40	0.00
7.2.5	-Other staff welfare expenses	41.29	45.84	39.93	45.24	80.53
	Subtotal (Staff welfare Expenses)	219.46	250.42	262.99	322.35	229.61
7.3	Productivity linked Incentive	89.42	70.37	29.24	21.06	0.00
7.4	Expenditure on VRS	0.00	0.00	25.38	0.00	0.00
7.5	Ex-gratia	43.68	44.73	78.93	48.40	48.40
7.6	Performance Related Pay (PRP)	189.37	104.40	181.85	190.54	190.08
	Sub Total (Employee Cost)	<b>2953.48</b>	<b>3483.53</b>	<b>3284.34</b>	<b>3174.80</b>	<b>3617.52</b>
8	Loss of Store	0.07	0.00	-0.10	0.06	0.00
9	Provisions	130.67	39.80	31.66	21.23	49.70
10	Prior Period Expenses	0.00	0.00	0.00	-640.87	0.00
11	Corporate Office expenses allocation	1689.41	1707.33	1820.09	1872.64	1911.49

Rs. Lakhs

Sl. No.	Items	2012-13	2013-14	2014-15	2015-16	2016-17
12	Others					
12.1	Rates & Taxes	38.12	33.40	36.19	45.44	35.11
12.2	Water cess	644.17	321.78	323.96	0.13	2.09
12.3	Training & recruitment expenses	17.30	14.33	21.97	17.50	15.68
12.4	Tender Expenses	2.00	32.72	19.94	24.32	14.36
12.5	Guest house expenses	37.10	39.52	44.21	32.20	33.71
12.6	Education expenses	17.64	20.83	25.24	-17.06	9.10
12.7	Community Development Expenses	87.24	116.64	158.39	532.39	282.01
12.8	Ash utilisation expenses	0.00	0.00	0.00	0.00	0.00
12.9	Books & Periodicals	1.24	1.03	0.96	1.48	2.68
12.10	Professional Charges	20.21	23.30	10.32	18.23	27.23
12.11	Legal expenses	7.90	15.04	35.89	12.56	6.67
12.12	EDP Hire & other charges	4.56	6.40	6.49	7.04	16.84
12.13	Printing & Stationery	10.53	16.70	14.81	14.47	8.36
12.14	Misc Expenses	233.48	379.95	254.28	221.94	279.47
	Sub Total (Others)	<b>1121.49</b>	<b>1021.64</b>	<b>952.66</b>	<b>910.63</b>	<b>733.33</b>
13	(Total 1 to 12)	<b>9717.53</b>	<b>9685.86</b>	<b>9324.68</b>	<b>8401.91</b>	<b>10246.34</b>
14	Revenue / Recoveries	-13.61	-15.37	-23.13	-22.65	-18.40
15	Net Expenses	<b>9703.92</b>	<b>9670.49</b>	<b>9301.55</b>	<b>8379.26</b>	<b>10227.94</b>
16	Capital spares consumed	108.66	295.12	64.69	118.44	500.58
	Total O&M Cost	<b>9812.59</b>	<b>9965.61</b>	<b>9366.24</b>	<b>8497.69</b>	<b>10728.53</b>

### DETAILS OF WATER CHARGES

Name of the Company: NTPC Ltd.

Name of the Power Station and Stage/Phase: GANDHAR GAS POWER PROJECT

(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	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	40	40	40	40	40
6	Allocation of Water	8760000	5475000	2555000	2562000	4898300
7	Actual water Consumption (Lac KL)	6507117	3115232	3137249	2423276	4857671
8	Rate of Water Charges	14.64	16.1	17.71	19.48	21.43
9	Other charges/Fees , if paid as part of Water Charges Rs lakhs					
	<b>Total water Charges Paid Rs lakhs</b>	950.25	536.28	549.93	465.76	1034.13

## Details of capital Spares

Name of Company : NTPC Limited

Name of Power station : Gandhar Gas Station

SI . No.	ITEM	2012-13	2013-14	2014-15	2015-16	2016-17
(A)	Details of capital spares in Opening stock	41,189.07	42,466.41	44,115.42	47,300.98	47,681.24
(B)	Details of capital spares procured during the year	1386.00	1944.14	3250.25	498.69	511.15
(C)	Details of capital spares consumed during the year	108.66	295.12	64.69	118.44	500.58
(D)	Details of capital spares closing at the end of the year	42466.41	44115.42	47300.98	47681.24	47691.80

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





<b>Name of the Utility: NTPC Ltd</b>															
<b>Name of the Generating Station: Jhanor Gandhar Gas Power Project</b>															
<b>Station/ Stage/ Unit: 144.3x3 + 224.49x1 = 657.39</b>															
<b>Fuel Type (Coal/ Lignite/ Gas/ Liquid Fuel/ Nuclear/ Hydro): Combined Cycle</b>															
<b>Capacity of Plant (MW):</b>															
<b>COD : 01.11.1995</b>															
<b>29</b>	<b>Revenue realisation after tax (Rs. Crore)</b>														
<b>30</b>	<b>Profit/ loss (Rs. Crore)</b>	305.92	150.09	133.18	280.17	265.69	272.30	286.48	447.30	383.95	407.94	211.75	163.14	428.06	
<b>31</b>	<b>DSM Generation (MU)</b>														
<b>32</b>	<b>DSM Rate (Ps/Kwh)</b>														
<b>33</b>	<b>Revenue from DSM (Rs. Crore)</b>					-20.797	-22.136	-65.5956	-57.1654	-113.988	-60.6823	-11.0226	-7.6077	-2.3619	-1.5697

**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