

Pro-forma for furnishing Actual annual performance/operational data for the coal/lignite based thermal generating stations for the 5-year period from 2017-18 to 2021-22

S.N	Particulars	Units	2017-18	2018-19	2019-20	2020-21	2021-22		
1	Name of Company		NTPC Ltd.						
2	Name of Station/ Pit head or Non- Pit head		Talcher Super Thermal Power Station Stage - I (pit-head)						
	Stage		I						
3	Installed Capacity and Configuration	MW	2 x 500 = 1000 MW						
3.1	Date of Commercial Operation - Unit Wise		U1: 01.01.1997, U2: 01.07.1997						
3.2	Effective COD		01.07.1997						
	Make of Turbine		ABB						
4	Rated Steam Parameters (Also state the type of Steam turbine and Boiler)		Steam Pr: 170 ksc, MS/HRH Temp: 540/540 deg C, (Steam Turbine: 3 cylinder, reheat, condensing turbine Boiler: Tower type single pass once through circulation, direct pulverised coal fired, balance draft furnace, single reheat radiant, dry bottom type)						
5	Type of BFP		Steam Driven + Electric Driven						
	Quantity	Nos.	2 nos. Steam Driven + 1 no. Electric Driven						
6	Circulating water system		Closed Cycle						
7	Any other Site specific feature								
	Design Unit heat rate	Kcal/Kwh							
	Design Boiler efficiency	%							
	Design Turbine cycle heat rate	Kcal/Kwh							
8	Fuels :								
8.1	Primary Fuel :		Coal/Lignite						For the Station (3000 MW)
8.1.1	Annual Allocation under FSA	MT						1,78,00,000.00	
	Annual Consumption	MT	61,86,830.00	56,97,326.00	49,99,041.00	55,57,239.00	55,31,185.00		
	Annual Requirement at NAPAF	MT	55,84,500.00	60,74,074.64	60,76,770.40	60,89,502.93	55,72,800.13		
8.1.2	Sources of supply/ procurement along with contracted quantity and grade of coal	LMT	MCL- G14-G12, ECL-G-4-G8						
8.1.2.1	FSA	LoA	1,84,35,388.34	1,66,89,846.84	1,49,37,805.33	1,57,22,809.46	1,66,73,336.52		
		MoU			5,76,162.70	3,850.86	1,57,706.20		
8.1.2.2	Imported*	MT		3,68,143.07	7,40,524.16	4,46,760.92	1,31,190.40		
8.1.2.	Spot Market/e-auction*	MT							
8.1.3	Transportation Distance of the station from the sources of supply	KM	PB-664, IMPORT-229, ECL-684, MCL-LOCP-30, MCL-KOCP-5, MCL-IB-275						
8.1.4	Mode of Transport		MGR/Rail						
8.1.5	Maximum Station capability to stock primary fuel (for days consider availability as NAPAF)	Days & MT							
8.1.6	Maximum stock maintained for primary fuel	MT	5,46,601.83	4,92,221.97	7,83,296.14	9,45,148.38	8,63,065.89		
	Date		20-Aug-17	7-Jan-19	30-Mar-20	22-Jun-20	11-Feb-22		
8.1.7	Minimum Stock maintained for primary fuel	MT	24,705.26	-	-	4,65,563.54	2,95,340.43		
	Date		10-May-17	31-May-18	9-Sep-19	2-Nov-20	27-Nov-21		
8.1.8	Average stock maintained for primary	MT	3,04,376.28	2,05,793.36	2,05,050.31	7,69,284.77	6,23,273.82		
8.2	Secondary Fuel :		HFO & LDO						
8.2.1	Annual Allocation/ Requirement	KL						7,446.00	
8.2.2	Sources of supply		IOCL/BPCL/HPCL						
8.2.3	Transportation Distance of the station from the sources of supply	KM							
8.2.4	Mode of Transport		Rail						
8.2.5	Maximum Station capability to stock secondary fuels	KL						11,780.00	
8.2.6	Maximum Stock of secondary oil actually maintained	KL	7,491.28	7,960.26	7,120.86	7,055.14	7,025.51		
8.2.7	Minimum Stock of secondary oil actually maintained	KL	3,195.44	2,373.24	3,430.58	3,502.63	3,751.59		
8.2.8	Average Stock of secondary oil actually maintained	KL	5,515.81	5,563.93	5,297.65	5,310.25	5,394.58		
9.1	Cost of Spares capitalized in the books of accounts	(Rs. Lakh)	4,276.00	2,227.82	5,825.61	9,192.97	12,600.41		
9.2	Cost of spares included in capital cost for the purpose of tariff	(Rs. Lakh)							
9.3	Initial spares-list, quantity and cost	(Rs. Lakh)							
9.4	Maintenance spares - cost	(Rs. Lakh)	4,868.73	5,055.25	7,649.67	8,121.33	5,909.35		

9.5	Other spares procured with high lead procurement time	(Rs. Lakh)	2,543.00	9,077.00	4,951.00	3,709.00	5,377.00	For the Station (3000	
10	Generation :								
10.1	-Actual Gross Generation at generator terminals	MU	7,679.19	7,679.19	7,020.93	6,043.30	7,369.73		Station (3000 MW)
10.2	-Actual Net Generation Ex-bus	MU	7,060.70	7,061.34	6,462.51	5,542.66	6,812.93		
10.3	-Scheduled Generation Ex-bus	MU	7,047.84	7,047.84	6,439.61	5,578.75	6,824.48		
11	Average Declared Capacity (DC)	MW	816.54	816.54	742.38	688.95	856.36		
	Actual Declared Capacity	MW	816.54	7,152.88	6,503.25	6,051.75	7,501.72		
	DC Peak HD %	%	-	-	-	96.11	86.00		
	DC Off Peak HD %	%	-	-	-	95.09	86.59		
	DC Peak LD %	%	-	-	-	90.90	88.48		
	DC Off Peak LD %	%	-	-	-	91.11	88.09		
	Deemed Declared Capacity	MU		7,152.88	6,503.25	6,051.75	7,501.72		
12	Actual Auxiliary Energy Consumption excluding colony	MU	613.39	613.39	553.74	495.92	552.13		
13	Actual Energy supplied to Colony from the station	MU	5.10	4.46	4.68	4.72	4.67		
	Actual energy supplied to construction activities	MU							
	Actual energy supplied to long term and medium term beneficiaries	MU	7,045.65	6,440.24	5,545.48	6,199.43	6,705.79		
	Actual energy supplied in short term								
	Energy supplied under bilateral arrangements								
	Energy supplied through exchanges	MU	0.94	4.18	0.16	16.24	1.21		
	Energy supplied under DSM	MU	(5.62)	6.81	(49.74)	(29.76)	(13.41)		
	Energy supplied SCED	MU			49.09	554.47	20.14		
14	Primary Fuel :								
14.1	Consumption :	MT	61,86,830.00	56,97,326.00	49,99,041.00	55,57,239.00	55,31,185.00	For the Station (3000 MW)	
14.1.1	Domestic coal								
		From Linked Mines	61,86,830.00	55,89,662.00	47,96,179.00	54,20,592.00	54,96,851.00		
		From Non-Linkd Mines							
		From Integerated Mines							
14.1.2	Imported coal	MT	-	1,07,664.00	2,02,862.00	1,36,647.00	34,334.00		
14.1.3	Spot market/e-auction coal	MT							
14.2	Gross Calorific Value (GCV) :								
14.2.1	Domestic Coal (for each type)	(As Billed) - EM Basis as per third party	kCal/kg	3,622.18	3,481.19	3,457.91	3,718.04		3,755.67
		(As Received) - TM Basis as per third party	kCal/kg	2,982.96	2,881.73	2,912.93	3,241.00		3,151.24
14.2.2	Imported Coal	(As Billed) - ADB Basis	kCal/kg		5,709.00	5,760.23	5,826.99		5,887.37
		(As Received) - ADB Basis	kCal/kg		4,927.78	4,990.24	5,018.12		5,025.90
14.2.3	Spot market/e- auction coal	(As Billed)	kCal/kg						
		(As Received)	kCal/kg						
14.2.4	Weighted Average Gross Calorific value (Domestic+Imported+Spot/e-auction) (As Billed)	kCal/kg	3,622.18	3,524.84	3,561.73	3,774.96	3,772.16		
14.2.5	Weighted Average Gross Calorific value (Domestic+Imported+Spot/e-auction) (As Received)	kCal/kg	2,982.96	2,932.65	2,995.37	3,298.70	3,154.20		
	Ash content in coal (%)		48.60	49.85	48.91	45.64	46.15		
14.3	Price of coal :								
	Billed Cost (including adjustments)								
	Amount Charged by transporting agency upto delivery point								
14.3.1	Weighted Average Landed price of Domestic coal	(Rs/MT)	1,827.28	1,884.32	2,030.42	2,340.45	2,051.90	For the Station (3000 MW)	
	Components of landed cost and break up	Amount charged by Coal company	(Rs/MT)	1,614.27	1,661.45	1,701.28	1,940.55		1,769.14
		Transport charges	(Rs/MT)	186.21	200.89	299.95	365.63		213.26
		Other charges	(Rs/MT)	26.80	21.98	29.19	34.27		69.50
14.3.2		Weighted Average Landed Price of Imported coal	(Rs/MT)		6,410.97	6,520.30	6,630.31		10,038.28
	Components of landed cost and break up								
14.3.3	Weighted Average Landed Price of Spot market / e-auction coal	(Rs/MT)							
	Components of landed cost and break up								
14.3.4	Weighted Average Landed Price of all the Coals	(Rs/MT)	1,827.28	1,973.01	2,232.87	2,456.23	2,113.70		

14.4	Blending :	% and MT (of the total coal consumed						
	Blending ratio of imported coal with domestic coal	Equivalent to domestic coal	-	1.89	4.06	2.46	0.62	
14.4.2	Proportion of e-auction coal in the blending	% & MT						
	Coal stockyard capacity	MT					11,00,000.00	
14.5	Actual daily Average Coal stock maintained	MT	3,04,376.28	2,05,793.36	2,05,050.31	7,69,284.77	6,23,273.82	
		Days	6.63	4.48	4.47	16.76	13.58	
14.5	Actual Transit & Handling Losses for coal/Lignite							
14.5.1	Pit- Head Station							
14.5.1.1	Transit loss from linked mines	%	0.23	0.27	0.54	0.54	0.51	
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	%	-	0.16	0.17	0.18	0.16	
14.5.2	Non-Pit Head station							
14.5.2.1	Transit loss from linked mines	%	NA	NA	NA	NA	NA	
14.5.2.2	Transit loss from non-linked mines including e-auction coal mines.	%	NA	NA	NA	NA	NA	
14.5.2.3	Transit loss of imported coal	%	NA	NA	NA	NA	NA	
15	Secondary Fuel Oil :							
15.1	Consumption	HFO	KL	4,858.00	3,658.00	7,125.00	4,680.00	4,750.00
		HSD/LDO	KL	271.00	469.00	420.00	140.00	254.00
15.2	Weighted Average Gross Calorific value (As received)	HFO	(kCal / Lit.)	9,996.25	9,997.58	9,998.02	9,997.00	9,996.21
		HSD/LDO	(kCal / Lit.)	9,904.49	9,905.51	9,903.63	9,902.00	9,899.83
15.3	Weighted Average Price	HFO	(Rs / KL)	30,612.88	43,604.39	40,180.39	34,165.48	49,695.45
		LDO	(Rs / KL)	40,381.71	53,973.17	52,047.04	42,620.20	54,595.88
		HSD	(Rs / KL)					
15.4	Actual Average stock maintained	HFO	KL	4,906.18	5,011.19	4,784.52	4,770.19	4,860.25
		HSD/LDO	KL	609.63	552.52	512.90	541.45	533.82
16	Weighted average duration of outages(unit-wise details):							
16.1	Planned Outages	(Days)	18.08	25.39	24.06	15.37	30.84	
16.2	Forced Outages	(Days)	13.18	17.90	13.79	15.33	12.48	
	Within control of generator							
	beyond control of generator							
16.3	Number of tripping	Nos.	26.00	24.00	28.00	17.00	14.00	
16.4	Number of start-ups:	Nos.	27.00	25.00	29.00	17.00	16.00	
16.4.1	Cold Start-up	Nos.	16.00	19.00	15.00	9.00	12.00	
16.4.2	Warm Start-up	Nos.	9.00	3.00	7.00	6.00	1.00	
16.4.3	Hot start-up	Nos.	2.00	3.00	7.00	2.00	3.00	
17	NOx , SOx ,and other particulate matter emission in : at conditions specified by MoEF&CC							
17.1	Design value of emission control equipment (specify conditions)	mg/Nm ³						
	FGD installation date							
	NOX Control system installation date							
17.2	Actual emission (Stage-I)	SPM	mg/Nm ³	Attached as Annexure - A (Emission Data)				
		NOX	mg/Nm ³					
		SOX	mg/Nm ³					
	Actual emission (Stage-II)	SPM	mg/Nm ³	Attached as Annexure A with Talcher Stage II Data				
		NOX	mg/Nm ³					
		SOX	mg/Nm ³					
	Ash dyke capacity as on 31st March	LCM						
	Ash pond capacity as on 31st March	LCM						
	Fund available in Ash Fund Account as on 31st March							
	Amount utilized from Ash Fund Account							
19	Detail of Ash utilization % of fly ash produced	Qty Produced	24.60	32.12	31.24	37.68	53.05	
	Ash available as on 31st March	LMT	79.58	81.86	88.57	87.14	82.38	

For the
2015-16

	Ash utilized for construction of ash dyke	LMT	3.99	16.53	19.93	12.71	11.18	Station (3000 MW)
	Ash utilized within plant premise, other than construction of ash dyke	LMT	0.15	0.24	0.29	0.40	0.36	
	Ash transported	LMT	-	-	-	1.21	5.08	
	Average Distance	KM	-	-	-	150.00	150.00	
19.1	Conversion of value added product	(%)	9.05	4.54	3.76	4.30	5.28	
19.2	For making roads & embarkment	(%)	-	-	-	1.39	4.39	
19.3	Land filling	(%)	0.19	0.29	3.80	15.38	14.19	
19.4	Used in plant site in one or other form or used in some other site	(%)	5.02	20.19	22.50	14.59	15.34	
19.5	Any other use , Please specify	Qty. and Usage	10.34	7.10	1.17	2.02	13.84	
20	Cost of spares actually consumed	(Rs. Lakh)	1,958.85	618.56	495.99			
21	Average stock of spares	(Rs. Lakhs)	22,811.58	24,359.24	27,163.06	29,774.99	33,505.75	
22	Number of employees deployed in O&M	Nos.						
22.1	- Executives	Nos.	397.00	342.00	359.00	347.00	338.00	
22.2	- Non Executives	Nos.	653.00	623.00	556.00	583.00	581.00	
22.3	- Corporate office	Nos.	2,568.00	2,241.00	2,016.00	1,815.00	1,728.00	
23	Man-MW ratio	Man/MW	0.35	0.32	0.31	0.31	0.31	
	Total billed amount	Attached as Annexure - C (Billing Details)						
	Total received amount within due date							
	Total amount received beyond due date							
	Total amount pending							
	Total amount under dispute							
	Total rebate given							
	Total LPSC recovered							
24	Generation Switchyard Details							
	No. of Bays voltagewise	400KV:22 220KV:14						
	ICT - nos and rating	2nos ICT of Rating: 315MVA, 400/220 KV						
	Dedicated transmission line - voltage and length	400KV Rourkela 1&2: 171Km, 400KV Rengali 1&2: 30Km, 400 KV Meramundali 1: 55Km, 400 KV Meramundali 2: 62Km, 220KV Meramundali 1&2: 55KM, 220KV Rengali: 30KM, 220KV TTPS: 34KM, (TSTPS1 & TSTPS2 are interconnected)						

Notes: * Total Ash generated during the Financial Year Given
** Weighted Average distance of Ash Transportation Given

Details of expenditure incurred from Compensation Allowance and Special Allowance during Tariff Period 2014-17

FY Year	Add-cap allowed by the Commission under the provision of Regulation 9(2)		Compensatory allowance allowed by the Commission, if any	Special allowance allowed by the Commission, if any	Income tax rate	Effective Compensatory allowance available for Expenditure	Effective Special allowance available for Expenditure	Details of Asset/Work wise Capitalisation based on the Expenditure allowed by the Commission in						Total Expenditure done under Special and Compensation Allowance	Capitalisation done which has not been claimed/ allowed in the tariff	Difference of Allowed vs Expenditure	Capital Spares	Total Addition during the year	Total Addition during the year as per duly audited Schedule of Fixed Asset	Variation if any to be reconciled /justified.
	Gross Basis	Liability included in (2)						Capitalisation allowed under Regulation 9(2)	out of add cap	Capitalisation allowance in the stations wherever applicable	Capitalisation out of Special Allowance allowed in the stations where applicable	Asset/work	Rs(Lakh)							
1	2	3	4	5	6	7 = 4*6	8 = 5*6	9		10		11		12=10+11	13	14=(2+3+7+8)-(9+12+13)	15	16=9+12+13+15	17	18
2014-15	1448.04		500	Nil	20.961	395.195	Nil	Ash handling works	904.52	Capital spares capitalisation	511.19			1,927.36	0.00	-1,532.17	511.19	3,886.59	2,202.66	Decap spares (-)554.50 Liability reversal (-) 64.10 5 KM Radius : 2.17
							Other works	543.52	Capital works undertaken for technological upgradation & reliability of operation.	1,416.17										
							Total	1,448.04	Total	1,927.36	Total	0.00								
2015-16	2274.87		500	Nil	21.342	393.29	Nil	Ash handling works	2100.87	Capital spares capitalisation	719.22			2000.88	0	-1607.6	719.22	4994.98	2012.66	Decap of spares : -322.25 Decap of MBOA -110.93 5 km scheme -1358.27
							Other works	174.01	Capital works undertaken for technological upgradation & reliability of operation.	1281.66										
							Total	2274.88	Total	2000.88	Total	0								
2016-17	2817.95		500	Nil	21.342	393.29	Nil	Ash handling works	2256.38	Capital spares capitalisation	144.55			593.27	0	-199.98	144.54	3555.76	3223.61	Decap of spares:-109.74 Reverssal liability -19.30 INdAS Overhauling 1818.07
							Other works	561.57	Capital works undertaken for technological upgradation & reliability of operation.	448.72										
							Total	2817.95	Total	593.27	Total	0								
2017-18	3388.94		750	Nil	21.342	589.935	Nil	Ash handling works	3273.02	Capital spares capitalisation	504.45			1327.58	0	-737.645	504.45	5220.97	7113.65	Decap of spares:-213.85 Decap of MBOPA -7.49
							Other works	115.92	Capital works undertaken for technological upgradation & reliability of operation.	823.13										
							Total	3388.94	Total	1327.58	Total	0								
2018-19	13321.46		1000	Nil	21.549	784.51	Nil	Ash handling works	12884.57	Capital spares capitalisation	911.01			938.08	0	-153.57	911.01	15170.55	16478.14	Decap of spares :-134.79, decap of MBOA -3.25 Liability reversal : -15.98
							Other works	436.89	Capital works undertaken for technological upgradation & reliability of operation.	27.07										
							Total	13321.46	Total	938.08	Total	0								
2019-20	3160.86		0	Nil	18.782	0	Nil	Ash handling works	3111.64	Capital spares capitalisation	1815.36			1815.36	0	-1815.36	1815.36	6791.58	9221.64666	Decap of capital spares: -97.19 loan FERV 36.83 Liability reversal -42.82 overhauling 4388.39
							Other works	49.22	Capital works undertaken for technological upgradation & reliability of operation.											
							Total	3160.86	Total	1815.36	Total	0								

Remarks 2014-15 to 2018-19 filled from true up petition while 2019-20 from approved ADD Cap

DETAILS OF WATER CHARGES

Name of the Company:

NTPC Ltd.

Name of the Power Station and Stage/Phase:

Talcher Super Thermal Power Station Stage-I (1000 MW)

(Rs. In Lakhs)

Sl.No.	ITEM	2017-18	2018-19	2019-20	2020-21	2021-22
1	2	3	4	5	6	7
(A)	Plant	Talcher Super Thermal Power Station Stage-I (1000 MW)				
1	Type of Plant	Coal Based Plant				
2	Type of Cooling Tower	Induced Draft Cooling Tower				
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	3,12,55,006	3,12,55,006	3,13,40,637	3,12,55,006	3,12,55,006
6	Allocation of Water	3,12,55,006	3,12,55,006	3,13,40,637	3,12,55,006	3,12,55,006
7	Actual water Consumption	2,65,02,078	2,73,46,498	2,40,55,443	2,55,94,569	2,58,11,823
8.	Rate of Water Charges (Rs/m3)	6.16	6.72	7.28	7.84	8.40
9	Other charges/Fees , if paid as part of Water	90.73	-	-	-	-
10	Total water Charges Paid	1,928.30	2,100.34	2,281.60	2,450.39	2,625.42

DETAILS OF OPERATIONS AND MAINTENANCE EXPENSES

Name of the Company: NTPC

Name of the Power Station: Talcher Super Thermal Power Station (3000 MW)

(Rs. In Lakhs)

Sl. No.	ITEM	2017-18	2018-19	2019-20	2020-21	2021-22
1	2	3.00	4.00	5.00	6.00	7.00
(A)	Details of Capital Spares in opening Stock	33,651.27	33,719.03	33,022.00	37,432.15	45,087.68
1	...					
2	...					
3	...					
4	...					
	...					
(B)	Details of Capital Spares procured during the year	4,276.00	2,227.82	5,825.61	9,192.97	12,600.41
1	...	Details Attached as Annexure VI(D)				
2	...					
3	...					
4	...					
	...					
(C)	Details of capital spares consumed during the year	4,208.25	2,924.85	1,415.46	1,537.43	1,605.97
1	...	Details Attached as Annexure VI(D)				
2	...					
3	...					
4	...					
	...					
(D)	Details of capital spares closing at the end of	33,719.03	33,022.00	37,432.15	45,087.68	56,082.13

Name of Utility:	NTPC Ltd.				
Name of Generating Station:	Talcher Super Thermal Power Station Stage-I (1000 MW)				
Station Configuration:	2 x 500 = 1000 MW				
Capacity (MW):	1000 MW				
COD: (Station)	01.07.1997				

S.N	Particulars	Unit	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	2017-18	2018-19	2019-20	2020-21	2021-22	
1	Plant Availability Factor (PAF)	%	84.21	83.77	84.53	80.36	88.49	86.68	84.77	80.83	81.93	86.11	86.03	90.64	87.86	86.64	78.77	74.12	92.13	87.74	
2	Plant Load Factor (PLF)	%	84.55	83.88	84.15	89.17	88.68	87.62	84.94	78.83	81.32	83.16	85.48	89.42	87.05	87.66	80.15	68.80	84.13	82.84	
2a	Loadin Factor*	%														96.72	92.05	84.20	91.86	94.00	
3	Scheduled Energy	MU	6,809.60	6,771.86	6,795.53	7,257.71	7,167.66	7,062.30	6,871.59	6,499.72	6,605.74	6,765.65	6,898.46	7,256.87	7,024.24	7,047.84	6,439.61	5,578.75	6,824.48	6,709.11	
4	Scheduled Generation (ex-bus)	MU	6,809.60	6,771.86	6,795.53	7,257.71	7,167.66	7,062.30	6,871.59	6,499.72	6,605.74	6,765.65	6,898.46	7,256.87	7,024.24	7,047.84	6,439.61	5,578.75	6,824.48	6,709.11	
5	Gross Generation	MU																			
	Actual Generation (ex-bus)	MU	6,824.90	6,802.43	6,854.60	7,307.36	7,229.24	7,116.27	6,911.61	6,431.61	6,580.38	6,731.03	6,929.27	7,252.22	7,008.89	7,079.19	7,020.93	6,043.30	7,389.73	7,251.15	
	Actual energy supplied to beneficiaries (Long Term, Medium Term and Short Term)	MU														7,060.70	6,462.51	5,542.66	6,812.93	6,705.70	
6	Quantum of coal consumption	MT	54,86,246.00	48,61,606.00	52,20,246.00	57,74,521.00	61,86,696.00	62,75,212.00	57,86,436.00	53,03,434.00	58,28,759.00	57,47,544.00	55,89,188.00	59,04,802.00	61,78,013.00	61,86,830.00	56,97,326.00	49,99,041.00	55,57,239.00	55,31,185.00	
7	Value of coal	Rs. Lakh						63,818.91	65,323.08	96,050.49	1,42,145.95	1,00,343.50	99,385.78	1,00,001.96	1,23,570.14	3,70,941.98	3,77,593.18	3,65,973.86	4,05,803.52	3,57,630.85	
8	Specific Coal Consumption	kg/kWh	0.74	0.66	0.71	0.74	0.80	0.82	0.78	0.77	0.82	0.79	0.75	0.75	0.81	0.81	0.81	0.83	0.75	0.76	
9	Gross Calorific Value of Coal**	(Kcal/ Kg)	3,229.00	3,578.00	3,334.00	3,161.00	2,956.00	2,875.00	3,015.72	3,073.79	2,810.23	3,033.82	3,166.00	3,158.00	3,061.00	2,982.96	2,932.65	2,910.37	3,213.70	3,069.20	
10	Heat Contribution of Coal	(Kcal/ kWh)	2,392.00	2,367.00	2,361.00	2,330.00	2,354.00	2,350.00	2,345.28	2,354.08	2,381.19	2,393.55	2,364.82	2,372.85	2,482.00	2,403.26	2,379.78	2,407.46	2,423.33	2,339.25	
11	Cost Of Specific Coal Consumption – Finally admitted by CERC (Ex-Bus)	(Rs./kWh)																			
12	Quantum of Oil Consumption	(KL)	42,36,000.00	47,16,000.00	27,34,000.00	30,52,000.00	70,07,000.00	84,84,000.00	41,96,000.00	48,57,000.00	81,86,000.00	39,28,000.00	41,12,000.00	36,47,000.00	38,43,000.00	5,129.00	4,127.00	7,545.00	4,820.00	5,004.00	
13	Value of Oil	(Rs. lakh)														3,573.20	2,816.22	4,787.92	3,987.54	5,846.26	
14	Gross calorific value of oil	(kcal/lit)	9,500.00	9,500.00	9,500.00	9,499.00	9,517.00	9,505.00	9,503.59	9,510.13	9,511.36	9,505.46	9,760.66	9,973.55	9,982.07	9,991.41	9,987.12	9,992.77	9,994.24	9,991.31	
15	Specific Oil Consumption	(ml/kWh)	0.57	0.64	0.37	0.39	0.90	1.11	0.56	0.70	1.15	0.54	0.55	0.46	0.50	0.67	0.59	1.25	0.65	0.69	
16	Cost Of Specific Oil Consumption – Finally admitted by CERC	(Rs./kWh)																			
17	Heat Contribution of Oil	(Kcal/ kWh)	5.00	6.00	4.00	3.70	8.60	11.00	5.36	6.67	10.93	5.13	5.36	4.63	5.03	6.67	5.87	12.48	6.54	6.89	
18	Station Heat Rate	(Kcal/ kWh)	2,397.03	2,373.37	2,363.71	2,334.02	2,362.00	2,360.75	2,351.00	2,360.75	2,392.12	2,398.67	2,370.18	2,377.70	2,487.00	2,409.93	2,385.65	2,419.94	2,429.87	2,346.14	
19	Auxiliary Energy Consumption	(%)	7.44	6.75	6.81	6.45	6.67	7.02	6.81	6.83	7.35	7.33	7.18	7.30	7.80	7.99	7.89	8.21	7.49	7.50	
20	Debt at the end of the year	(Rs. Crore)	340.45	256.58	178.99	119.21	87.14	28.07						274.38							
21	Equity-Average	(Rs. Crore)	1,258.98	1,258.87	1,255.75	1,255.10	1,259.15	1,257.45	1,259.30	1,261.71	1,266.50	1,272.71	1,279.47	1,301.10	1,333.02	1,354.60	1,361.88	1,340.38	1,377.10	1,414.94	
22	Working Capital – finally admitted by CERC	(Rs. Crore)	196.00	199.82	199.95	199.82	202.37	365.12	367.41	371.08	374.86	380.97	393.48	424.55	431.49	460.68	473.76	494.37		494.37	
23	Capital cost – finally admitted by CERC	(Rs. Crore)	2,515.01	2,514.72	2,511.00	2,512.15	2,522.32	2,519.08	2,525.54	2,533.30	2,533.00	2,539.25	2,569.97	2,605.77	2,723.37	2,818.61	2,867.19	2,795.50	2,927.45	3,062.51	
24	Capacity Charges/ Annual Fixed Cost (AFC)	(Rs. Crore)	439.86	430.63	414.24	412.07	412.07	538.93	540.07	544.75	557.21	578.89	559.33	585.37	620.78	652.89	691.83	771.17		923.85	
(a)	Return on equity – post tax (admitted by CERC upto 2009) and Pre Tax																				
	Absolute value	(Rs. Crore)	175.97	175.96	175.80	175.85	176.28	205.26	202.30	289.48	200.58	288.84	250.91	256.39	262.68	266.93	268.37	251.75	258.66	265.75	
	Rate	(%)	14.00	14.00	14.00	14.00	14.00	23.48	23.21	22.94	22.94	23.48	0.20	0.20	0.20	0.20	0.20	18.78	18.78	18.78	
(b)	Interest on Loan																				
	Absolute value	(Rs. Crore)	61.36	48.36	35.20	23.97	16.45	5.43	1.34	-	-	-	-	12.08	11.60	-	-	-	-	-	
	Rate – Weighted Average Rate	(%)	16.22	16.20	16.17	16.08	15.94	9.58	9.58	9.58	9.58	9.58	8.98	8.80	8.46	7.71	6.68	8.16	8.19	8.22	
(c)	Depreciation (finally allowed by CERC)																				
	Absolute value	(Rs. Crore)	88.84	88.83	88.70	88.74	89.10	62.02	62.53	63.02	64.61	67.49	70.29	79.58	95.57	106.32	109.03	123.50	183.17	302.89	
	Rate	(%)	3.53	3.53	3.53	3.53	3.53	3.53	3.53	3.53	3.53	3.53	3.53	3.53	3.53	3.53	3.53	3.53	3.53	3.53	
(d)	Interest on working Capital																				
	Absolute value	(Rs. Crore)	20.09	20.18	20.29	20.48	20.74	44.72	45.00	45.45	45.92	46.66	73.71	74.38	75.75	79.51	80.59	55.51	57.09	59.57	
	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	13.50	13.50	12.05	12.05	12.05	
(e)	Operation and maintenance cost (finally admitted by CERC)																				
	Absolute value	(Rs. Crore)	93.60	97.30	101.20	105.20	109.50	130.00	137.40	145.30	153.60	162.40	180.00	190.10	202.07	214.82	228.36	261.07	271.97	283.37	
	Rate	(%)																			
(f)	Compensation Allowances																				
(g)	Special Allowance								1.50	1.50	1.50	2.50	3.50	5.00	5.00	5.00	7.50	10.00		11.71	
(h)	Supplementary Tariff – Emission Control																				
	Absolute value	(Rs. Crore)																			
	Rate	(%)																			
(i)	Ash Utilisation Expenses	(Rs. Crore)																			
25	AFC	(Rs./ kWh)	0.68	0.66	0.65	0.64	0.64	0.77	0.78	0.78	0.80	0.83	0.80	0.83	0.88	0.93	0.96	1.00	1.11	1.33	
26	Energy Charge	(Rs./ kWh)	0.47	0.66	0.62	0.68	0.95	1.00	1.55	2.04	1.51	1.51	1.45	1.36	1.66	1.57	1.73	1.98	1.96	1.79	
26.1	Supplemental Energy Charges – Emission Control	(Rs./ kWh)																			
27	Total tariff	(Rs. kWh)	1.15	1.32	1.27	1.32	1.59	1.77	2.33	2.82	2.31	2.34	2.25	2.19	2.54	2.50	2.69	2.98	3.07	3.12	
28	Revenue realisation before tax	(Rs. Crore)																			
29	Revenue realisation after tax	(Rs. Crore)																			
30	Profit/loss	(Rs. Crore)	490.61	418.37	565.15	637.42	731.97	1,189.59	997.26	805.80	753.83	829.36	808.55	798.18	755.65	963.74	716.57	535.16	584.14	619.18	
31	DSM Generation	(MU)	15.30	30.57	59.27	49.65	61.58	53.97	40.02	(68.11)	(25.35)	(34.62)	30.80	(4.65)	(15.34)	12.86	621.74	883.77	(1,281.62)	103.82	
32	DSM Rate	(Rs./ kWh)																			
33	Revenue from DSM	(Rs. Crore)				(10.98)	(20.46)	(15.98)	(11.09)	5.60	(5.06)	(1.56)	(12.64)	(8.55)	(1.54)	(2.08)	(4.88)	3.30	4.47	1.52	
34	Compensation received for operation below NAPAF																				
35	Part load Compensation received from beneficiaries																	27.86	-	-	
36	Amount received from SCED	(Rs. Crore)																	6.74	6.77	1.42

Note: *Additional data related Loading factor (%) submitted

**GCV of coal as received minus 85 Kcal/kg

DSM Revenue (-)Received / (+) Paid

DETAILS OF EMISSION CONTROL SYSTEM

Generating company: NTPC Limited
 Name of Generating station: Talcher Super Thermal Power Station
 Installed Capacity (MW) : 3000 MW

Type of Emission Control System: Wet Limestone based FGD for SO_x

Under Operation/Anticipated Operation Date:

S.No.	Particulars	Units	2017-18	2018-19	2019-20	2020-21	2021-22
A							
1	Gross Generation	MU	NA	NA	NA	NA	NA
2	Auxiliary Consumption - emission control (Actual)	MU	NA	NA	NA	NA	NA
	Auxiliary Consumption - emission control (Actual)	%	NA	NA	NA	NA	NA
3	Auxiliary Consumption (Normative)	%	NA	NA	NA	NA	NA
4	Hours of Operation	Hrs	NA	NA	NA	NA	NA
5	O&M Expenses (Actual) with Breakup as per format	Rs. Crore	NA	NA	NA	NA	NA
6	Other maintenace spares consumed [^]	Rs. Crore	NA	NA	NA	NA	NA
7	Initial Spares consumed*	Rs. Crore	NA	NA	NA	NA	NA

S.No.	Particulars	Units	Investment Approval	
1	Capital Cost of Emission Control System (FGD)	Rs. Crore		For the Station (3000 MW)
1.1	Hard Cost	Rs. Crore	1576.7234	
1.1.1	Civil Works	Rs. Crore	Incl. Above	
1.1.2	Plant and Machinery and others	Rs. Crore	Incl. Above	
1.1.3	Initial Spares procured	Rs. Crore	Incl. Above	
1.2	IDC	Rs. Crore	109.014	
1.3	IEDC	Rs. Crore	47.3	
1.4	Others. Pls specify (Taxes & duties etc.)	Rs. Crore	0	
1.4	Completed Cost	Rs. Crore		