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 2017-18 to 2021-22

S.N	Particulars	Units	2017-18	2018-19	2019-20	2020-21	2021-22	Basis of Information/ Methodology/ Remarks
1	Name of Company		NTPC Ltd.					
2	Name of Station/ Pit head or Non- Pit head		Tanda Thermal Power Station Stage-I (non pit-head)					
	Stage		Single Stage					
3	Installed Capacity and Configuration	MW	4 X 110 = 440 MW					
3.1	Date of Commercial Operation - Unit Wise		U1- 01-01-1990, U2- 01-04-1991, U3- 01-10-1993, U4- 01-07-1998					
3.2	Effective COD		COD : 14.01.2000 (date of Takeover)					
	Make of Turbine		BHEL(SKODA Design)					
4	Rated Steam Parameters (Also state the type of Steam turbine and Boiler)		Rated Pressure: 130 kSC SH/RH out let temp: 535,535 deg C Type of Boiler & Turbine: BHEL(SKODA Design)					
5	Type of BFP		Stage-I - Electric Driven					
	Quantity		2 per unit : 1 in standby 1 in service					
6	Circulating water system		Closed Cycle (IDCT)					
7	Any other Site specific feature		Dry Ash Extraction System (Date of Commisioning 01.04.2014)					
	Design Unit heat rate	Kcal/Kwh	2565					
	Design Boiler efficiency	%	84.7					
	Design Turbine cycle heat rate	Kcal/Kwh	2173					
8	**Fuels :**							
8.1	**Primary Fuel :**		Coal					
8.1.1	Annual Allocation under FSA	LMT	23 LMT	23 LMT	23 LMT	18.19 LMT	18.19 LMT	For the Station (1760 MW)
	Annual Consumption	LMT	21.02	16.33	15.46	12.64	11.54	
	Annual Requirment at NAPAF	LMT	20.54	21.63	23.60	24.90	24.40	
8.1.2	Sources of supply/ procurement along with contracted quantity and grade of coal		CCL G7 to G10, Pakri Barwadih (G10), BCCL (G7 to G15), Imported					For the Station (1760 MW)
8.1.2.1	FSA – LoA	LMT	23.00	23.00	23.00	18.19	18.19	For the Station (1760 MW)
	FSA – MoU	LMT	-	-	22.44	48.06	29.36	For the Station (1760 MW)
8.1.2.2	Imported*	LMT	-	-	-	-	1.25	For the Station (1760 MW)
8.1.2.	Spot Market/e-auction*	MT						For the Station (1760 MW)
8.1.3	Transportation Distance of the station from the sources of supply	KM	500-600 KM					For the Station (1760 MW)
8.1.4	Mode of Transport		RAIL					For the Station (1760 MW)
8.1.5	Maximum Station capability to stock primary fuel (for days consider availability as NAPAF)	Days & LMT	29 days & 7.75 LMT					For the Station (1760 MW)
8.1.6	Maximum stock maintained for primary fuel	MT	4,97,774.77	5,12,348.96	7,51,106.53	9,63,895.12	7,21,675.74	For the Station (1760 MW)
	Date		14.04.2017	31.03.2019	30.03.2020	29.05.2021	15.01.2022	For the Station (1760 MW)
8.1.7	Minimum Stock maintained for primary fuel	MT	9,870.20	8,654.71	41,704.64	1,91,382.90	4,630.41	For the Station (1760 MW)
	Date		21.10.2017	23.10.2018	12.10.2019	31.03.2021	13.10.2021	For the Station (1760 MW)
8.1.8	Average stock maintained for primary fuel	MT	1,26,705.05	1,39,949.28	3,18,947.35	6,04,662.64	2,96,389.90	For the Station (1760 MW)
8.2	**Secondary Fuel :**							For the Station (1760 MW)
8.2.1	Annual Allocation/ Requirement	KL	8000/2000					For the Station (1760 MW)
8.2.2	Sources of supply		HPCL, BPCL, IOCL (LDO is Used)					For the Station (1760 MW)
8.2.3	Transportation Distance of the station from the sources of supply	KM	1500 km					For the Station (1760 MW)
8.2.4	Mode of Transport		Rail					For the Station (1760 MW)
8.2.5	Maximum Station capability to stock secondary fuels	KL	8000					For the Station (1760 MW)
8.2.6	Maximum Stock of secondary oil actually maintained	KL	7700					For the Station (1760 MW)
8.2.7	Minimum Stock of secondary oil actually maintained	KL	1500					For the Station (1760 MW)
8.2.8	Average Stock of secondary oil actually maintained	KL	5000					For the Station (1760 MW)
9.	Cost of Spares :							
9.1	Cost of Spares capitalized in the books of accounts	(Rs. Lakh)	2,161.28	353.77	18,921.01	2,344.98	1,073.45	For the Station (1760 MW)
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)	2,130.32	1,548.23	1,848.28	3,172.35	3,651.65	For the Station (1760 MW)
9.5	Other spares procured with high lead procurement time	(Rs. Lakh)						
10	**Generation :**							
10.1	-Actual Gross Generation at generator terminals	MU	3,277.96	2,371.79	2,059.31	1,566.69	1,456.86	
10.2	-Actual Net Generation Ex-bus	MU	2,887.35	2,051.41	1,765.09	1,334.74	1,235.82	
10.3	-Scheduled Generation Ex-bus	MU	2,939.28	2,091.47	1,827.77	1,400.95	1,288.44	
11	Average Declared Capacity (DC)	MW	366.73	355.62	361.13	372.48	357.85	

	DC Peak HD %		%	-	-	-	97.03	90.22	
	DC Off Peak HD %		%	-	-	-	97.60	90.38	
	DC Peak LD %		%	-	-	-	94.80	92.59	
	DC Off Peak LD %		%	-	-	-	95.08	92.39	
	Actual Declared Capacity		MU	3,212.56	3,115.26	3,172.21	3,262.93	3,134.79	
	Deemed Declared Capacity		MU						
12	Actual Auxiliary Energy Consumption excluding colony consumption		MU	375.76	304.98	276.74	219.67	211.45	
13	Actual Energy supplied to Colony from the station		MU	8.37	7.88	8.64	9.29	8.12	
	Actual energy supplied to construction activities		MU	6.50	7.51	8.83	2.98	1.47	
	Actual energy supplied to long term and medium term beneficiaries		MU	2,938.29	2,091.01	1,827.85	1,400.13	1,288.36	
	Actual energy supplied in short term		MU						
	Energy supplied under bilateral arrangements		MU						
	Energy supplied through excahnges		MU						
	Energy supplied under DSM		MU	(51.93)	(40.06)	(62.68)	(66.21)	(52.63)	
	Energy supplied SCED		MU						
14	**Primary Fuel :**								
14.1	Consumption **:**								
14.1.1	Domestic coal	From Linked Mines	MT	21,02,402	16,32,672	15,46,348	12,64,196	11,33,528	
		From Non-Linkd Mines	MT						
		From Integerated Mines	MT						
14.1.2	Imported coal		MT	-	-	-	-	20,860	
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	4,863	4,356	4,471	4,049	4,170	
		(As Received) - TM Basis as per third party	kCal/kg	4,246	4,122	3,856	3,456	3,657	
14.2.1	Domestic Coal (for NTPC OWNED MINE)	(As Billed) - EM Basis as per third party	kCal/kg				4,604	4,454	
		(As Received) - TM Basis as per third party	kCal/kg				4,158	4,007	
14.2.2	Imported Coal	(As Billed) - ADB Basis	kCal/kg					5,148	
		(As Received) - ADB Basis	kCal/kg					4,936	
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	4,863	4,356	4,471	4,086	4,223	
14.2.5	Weighted Average Gross Calorific value (Domestic+Imported+Spot/e-auction) (As Received)		kCal/kg	4,246	4,122	3,856	3,636	3,689	
	Ash content in coal (%)		%	38.28	37.96	38.58	40.52	38.89	
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)	3,864.00	3,623.00	4,081.00	3,638.00	4,067.00	
	Components of landed cost and break up	Amount charged by Coal company	(Rs/MT)	2,473.76	2,310.67	2,707.12	2,266.72	2,563.58	
		Transport charges	(Rs/MT)	1,390.13	1,312.60	1,373.63	1,371.15	1,483.83	
		Other charges	(Rs/MT)	-	-	-	-	19.53	
14.3.2	Weighted Average Landed Price of Imported coal		(Rs/MT)					14,601.22	
	Components of landed cost and break up	Amount charged by Coal company	(Rs/MT)					14,569.60	
		Transport charges	(Rs/MT)					-	
		Other charges	(Rs/MT)					31.62	
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)	3,864.00	3,623.00	4,081.00	3,638.00	4,302.00	
14.4	Blending :		% and MT (of the total coal consumed)						
	Blending ratio of imported coal with domestic coal		Equivalent to domestic coal	-	-	-	-	1.81	
14.4.2	Proportion of e-auction coal in the blending		% & MT	-	-	-	-	-	
	Coal stockyard capacity		LMT	3.07	3.07	7.75	7.75	7.75	For the Station (1760 MW)
14.5	Actual daily Average Coal stock maintained		MT	106000	144000	316000	559000	275000	For the Station (1760 MW)
			Days	4	6	12	21	10	For the Station (1760 MW)
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	For the Station (1760 MW)
14.5.1.2	Transit loss from non-linked mines including e-auction coal mines.		%	NA	NA	NA	NA	NA	For the Station (1760 MW)
14.5.1.3	Transit loss of imported coal		%	NA	NA	NA	NA	NA	For the Station (1760 MW)
14.5.2	**Non-Pit Head station**								For the Station (1760 MW)
14.5.2.1	Transit loss from linked mines		%	0.76	0.80	0.79	0.78	0.79	For the Station (1760 MW)
14.5.2.2	Transit loss from non-linked mines including e-auction coal mines.		%						For the Station (1760 MW)
14.5.2.3	Transit loss of imported coal		%						For the Station (1760 MW)
15	**Secondary Fuel Oil :**								
15.1	Consumption	HFO	KL	-	-	-	-	-	
		LDO	KL	1,036.00	1,622.00	1,142.00	1,273.00	1,410.00	
15.2	Weighted Average Gross Calorific value **(As received)**	HFO	(kCal / Lit.)	-	-	-	-	-	
		LDO	(kCal / Lit.)	9,599.00	9,589.14	9,216.95	9,219.70	9,310.00	
15.3	Weighted Average Price	HFO	(Rs / KL)	-	-	-	-	-	
		LDO	(Rs / KL)		57,202.74	48,533.19	41,068.01	53,034.21	
15.4	Actual Average stock maintained	HFO	KL	-	-	-	-	-	For the Station (1760 MW)
		LDO	KL	1,823.00	779.00	4,696.00	6,027.00	5,630.00	For the Station (1760 MW)
16	**Weighted average duration of outages(unit-wise details)**:								
16.1	Planned Outages		(Days)	15.92	21.69	23.10	12.08	0.92	
16.2	Forced Outages		(Days)	7.01	6.37	3.39	3.20	3.15	
	Within control of generator		(Days)						
	beyond control of generator		(Days)	7.01	6.37	3.39	3.20	3.15	
16.3	Number of tripping		Nos.	27	26	22	14	24	
16.4	Number of start-ups:		Nos.	30	68	44	53	52	
16.4.1	Cold Start-up		Nos.	6	24	21	31	32	
16.4.2	Warm Start-up		Nos.	12	27	10	14	9	
16.4.3	Hot start-up		Nos.	12	17	13	8	11	
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)								
	FGD installation date			FGD is yet to be operational					
	NOX Control system installation date								
17.2	Actual emission (Stage-I)	SPM	mg/Nm^3	As per Annexure-A					
		NOX	mg/Nm^3						
		SOX	mg/Nm^3						
	Actual emission (Stage-II)	SPM	mg/Nm^3						
		NOX	mg/Nm^3						
		SOX	mg/Nm^3						
	Ash dyke capacity as on 31st March								
	Ash pond capacity as on 31st March								
	Fund avalable in Ash Fund Account as on 31st March			As per Annexure-B					
	Amount utilized from Ash Fund Account								
19	Detail of Ash utilization % of fly ash produced		%	142.45	286.37	157.17	167.86	157.67	For the Station (1760 MW)
	Ash available as on 31st March *		LMT	7.09	5.44	9.69	16.74	22.56	For the Station (1760 MW)
	Ash utilized for construction of ash dyke		LMT	0.36	-	-	-	-	For the Station (1760 MW)
	Ash utilized within plant premise, other than construction of ash dyke		LMT	0.04	0.02	0.03	0.06	0.03	For the Station (1760 MW)
	Ash transported		LMT	4.13	8.87	10.00	21.48	17.97	For the Station (1760 MW)
	Average Distance **		Km	150.00	150.00	150.00	150.00	150.00	For the Station (1760 MW)
19.1	Conversion of value added product		%	78.67	122.97	36.22	27.78	29.39	For the Station (1760 MW)
19.2	For making roads &embarkment		%	58.21	163.01	103.20	128.32	79.65	For the Station (1760 MW)
19.3	Land filling		%	0.50	0.39	17.75	11.77	26.46	For the Station (1760 MW)
19.4	Used in plant site in one or other form or used in some other site		%	5.06	-	-	-	-	For the Station (1760 MW)
19.5	Any other use , Please specify		%	-	-	-	-	22.16	For the Station (1760 MW)
20	Cost of spares actually consumed		(Rs. Lakh)	567.79	436.93	36.14	9.87	1.21	For the Station (1760 MW)
21	Average stock of spares		(Rs. Lakhs)	4,593.57	4,652.54	4,602.13	10,820.56	18,511.80	For the Station (1760 MW)
22	Number of employees deployed in O&M		Nos.	563	534	528	514	478	For the Station (1760 MW)
22.1	- Executives		Nos.	342	332	344	324	311	For the Station (1760 MW)
22.2	- Non Executives		Nos.	221	202	184	190	167	For the Station (1760 MW)
22.3	- Corporate office		Nos.	2,568	2,241	2,016	1,815	1,728	For the Station (1760 MW)
23	Man-MW ratio		Man/MW	0.32	0.30	0.30	0.29	0.27	For the Station (1760 MW)
	Total billed amount								

	Total received amount within due date			As per Annexure C					
	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			16	16	16	16	16	
	ICT - nos and rating			2: 400/220 KV					
	Dedicated transmission line - voltage and length			NA	NA	NA	NA	NA	

* Total ash generated during the Financial Year given

** Weighted average distance of Ash Transported given

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 2017-18 to 2021-22

S.N	Particulars		Units	2017-18	2018-19	2019-20	2020-21	2021-22	Basis of Information/ Methodology/ Remarks
1	Name of Company								
2	Name of Station/ Pit head or Non- Pit head			TANDA THERMAL POWER STATION/ Non- Pit head					
	Stage			Stage-2					
3	Installed Capacity and Configuration		MW	1320(2X660)MW					
3.1	Date of Commercial Operation - Unit Wise			Unit-1: 07.11.2019; Unit-2 : 01.07.2021					
3.2	Effective COD			01-07-2021					
	Make of Turbine			GE- Alstom					
4	Rated Steam Parameters (Also state the type of Steam turbine and Boiler)			Steam Parameter: Rated Pressure: 246.7 kSC SH/RH out let temp: 568 deg C/596 deg C Type of Boiler & Turbine: Supercritical LMB make &(GE-Alstom make)					
5	Type of BFP			2 TDBFP & 1 MDBFP					
	Quantity			3					
6	Circulating water system			Closed Cycle (NDCT)					
7	Any other Site specific feature			Boiler is double fireball supercritical and turbine is Double LP Turbine.					
	Unit heat rate		kCal/kWh	2124					
	Boiler efficiency		%	85.61					
	Turbine cycle heat rate		kCal/kWh	1818					
8	**Fuels :**								
8.1	**Primary Fuel :**			Coal					
8.1.1	Annual Allocation under FSA		LMT			23 LMT	18.19 LMT	18.19 LMT	For the Station (1760 MW)
	Annual Consumption		LMT			11.03	27.48	42.93	
	Annual Requirment at NAPAF		LMT	-	-	12.01	31.93	52.06	
8.1.2	Sources of supply/ procurement along with contracted quantity and grade of coal			CCL G7 to G10, Pakri Barwadih (G10), BCCL (G7 to G15), Imported					For the Station (1760 MW)
8.1.2.1	FSA	LoA	LMT			23.00	18.19	18.19	For the Station (1760 MW)
		MoU	LMT			22.44	48.06	29.36	For the Station (1760 MW)
8.1.2.2	Imported*		LMT	-	-	-	-	1.25	For the Station (1760 MW)
8.1.2.	Spot Market/e-auction*		LMT						For the Station (1760 MW)
8.1.3	Transportation Distance of the station from the sources of supply		KM	500-600 KM					For the Station (1760 MW)
8.1.4	Mode of Transport			RAIL					For the Station (1760 MW)
8.1.5	Maximum Station capability to stock primary fuel (for days consider availability as NAPAF)		Days & MT	29 days & 7.75 LMT					For the Station (1760 MW)
8.1.6	Maximum stock maintained for primary fuel		MT			7,51,106.53	9,63,895.12	7,21,675.74	For the Station (1760 MW)
	Date					30.03.2020	29.05.2021	15.01.2022	For the Station (1760 MW)
8.1.7	Minimum Stock maintained for primary fuel		MT			41,704.64	1,91,382.90	4,630.41	For the Station (1760 MW)
	Date					12.10.2019	31.03.2021	13.10.2021	For the Station (1760 MW)
8.1.8	Average stock maintained for primary fuel		MT			3,18,947.35	6,04,662.64	2,96,389.90	For the Station (1760 MW)
8.2	Secondary Fuel :								For the Station (1760 MW)
8.2.1	Annual Allocation/ Requirement		KL	8000/2000					For the Station (1760 MW)
8.2.2	Sources of supply			HPCL, BPCL, IOCL (LDO is Used)					For the Station (1760 MW)
8.2.3	Transportation Distance of the station from the sources of supply		KM	1500 km					For the Station (1760 MW)
8.2.4	Mode of Transport			Rail					For the Station (1760 MW)
8.2.5	Maximum Station capability to stock secondary fuels		KL	8000					For the Station (1760 MW)
8.2.6	Maximum Stock of secondary oil actually maintained		KL	7700					For the Station (1760 MW)
8.2.7	Minimum Stock of secondary oil actually maintained		KL	1500					For the Station (1760 MW)
8.2.8	Average Stock of secondary oil actually maintained		KL	5000					For the Station (1760 MW)
9.	Cost of Spares :								For the Station (1760 MW)
9.1	Cost of Spares capitalized in the books of accounts		(Rs. Lakh)			18,921.01	2,344.98	1,073.45	For the Station (1760 MW)
9.2	Cost of spares included in capital cost for the purpose of tariff		(Rs. Lakh)					20,596.18	
9.3	Initial spares-list, quantity and cost		(Rs. Lakh)					20,596.18	
9.4	Maintenance spares - cost		(Rs. Lakh)			1,848.28	3,172.35	3,651.65	For the Station (1760 MW)
9.5	Other spares procured with high lead procurement time		(Rs. Lakh)						
10	**Generation :**								
10.1	-Actual Gross Generation at generator terminals		MU			1,783.99	4,171.98	6,974.68	
10.2	-Actual Net Generation Ex-bus		MU			1,677.85	3,918.07	6,565.35	
10.3	-Scheduled Generation Ex-bus		MU			1,699.44	4,010.91	6,670.63	
11	Average Declared Capacity (DC)		MW			226.83	581.46	1,019.92	
		DC Peak HD %	%			-	98.52	100.37	
		DC Off Peak HD %	%			-	98.59	101.40	

		DC Peak LD %	%			-	92.17	91.88	
		DC Off Peak LD %	%			-	92.34	91.12	
	Actual Declared Capacity		MU			1,992.50	5,093.62	8,934.47	
	Deemed Declared Capacity		MU						
12	Actual Auxiliary Energy Consumption excluding colony consumption		MU			106.14	253.91	409.33	
13	Actual Energy supplied to Colony from the station		MU			-	-	-	
	Actual energy supplied to construction activities		MU			-	-	-	
	Actual energy supplied to long term and medium term beneficiaries		MU			1,445.98	3,761.83	6,013.38	
	Actual energy supplied in short term		MU						
	Energy supplied under bilateral arrangements		MU						
	Energy supplied through excahnges		MU			-	-	19.61	
	Energy supplied under DSM		MU			(21.59)	(92.83)	(105.28)	
	Energy supplied SCED		MU			221.81	181.79	469.85	
14	**Primary Fuel :**								
14.1	Consumption **:**								
14.1.1	Domestic coal	From Linked Mines	MT			11,03,199.00	27,47,624.00	41,89,305.00	
		From Non-Linkd Mines	MT						
		From Integerated Mines	MT						
14.1.2	Imported coal		MT					1,04,065.00	
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			4,465	4,049	4,170	
		(As Received) - TM Basis as per third party	kCal/kg			3,789	3,456	3,657	
14.2.1	Domestic Coal (for NTPC OWNED MINE)	(As Billed) - EM Basis as per third party	kCal/kg				4,604	4,454	
		(As Received) - TM Basis as per third party	kCal/kg				4,158	4,007	
14.2.2	Imported Coal	(As Billed) - ADB Basis	kCal/kg					5,148	
		(As Received) - ADB Basis	kCal/kg					4,936	
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			4,465	4,086	4,223	
14.2.5	Weighted Average Gross Calorific value (Domestic+Imported+Spot/e-auction) (As Received)		kCal/kg			3,789	3,530	3,723	
	Ash content in coal (%)					38.58	40.52	38.89	
14.3	**Price of coal :**								
	Billed Cost (including adjustments)					3,703.85	3,445.04	3,638.12	
	Amount Charged by transporting agency upto delivery point					3,788.85	3,530.04	3,723.12	
14.3.1	Weighted Average Landed price of Domestic coal		(Rs/MT)			4,113.00	3,638.00	4,067.00	
	Components of landed cost and break up	Amount charged by Coal company	(Rs/MT)			2,734.00	2,266.72	2,563.58	
		Transport charges	(Rs/MT)			1,380.00	1,371.15	1,483.83	
		Other charges	(Rs/MT)			-	-	19.53	
14.3.2	Weighted Average Landed Price of Imported coal		(Rs/MT)					14,601.22	
	Components of landed cost and break up	Amount charged by Coal company	(Rs/MT)					14,569.60	
		Transport charges	(Rs/MT)					-	
		Other charges	(Rs/MT)					31.62	
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)			4,113.00	3,638.00	4,302.00	
14.4	Blending :		% and MT (of the total coal consumed)						
	Blending ratio of imported coal with domestic coal		Equivalent to domestic coal			-	-	2.42	
14.4.2	Proportion of e-auction coal in the blending		% & MT			-	-	-	
	Coal stockyard capacity		LMT			7.75	7.75	7.75	For the Station (1760 MW)
14.5	Actual daily Average Coal stock maintained		MT			3.16	5.59	2.75	For the Station (1760 MW)
			Days			12	21	10	For the Station (1760 MW)
14.5	**Actual Transit & Handling Losses for coal/Lignite**								For the Station (1760 MW)
14.5.1	**Pit- Head Station**								For the Station (1760 MW)

14.5.1.1	Transit loss from linked mines		%			NA	NA	NA	For the Station (1760 MW)
14.5.1.2	Transit loss from non-linked mines including e-auction coal mines.		%			NA	NA	NA	For the Station (1760 MW)
14.5.1.3	Transit loss of imported coal		%			NA	NA	NA	For the Station (1760 MW)
14.5.2	**Non-Pit Head station**								For the Station (1760 MW)
14.5.2.1	Transit loss from linked mines		%			0.79	0.78	0.79	For the Station (1760 MW)
14.5.2.2	Transit loss from non-linked mines including e-auction coal mines.		%						For the Station (1760 MW)
14.5.2.3	Transit loss of imported coal		%						For the Station (1760 MW)
15	**Secondary Fuel Oil :**								
15.1	Consumption	HFO	KL						
		LDO	KL			5,969.00	3,293.00	8,541.00	
15.2	Weighted Average Gross Calorific value **(As received)**	HFO	(kCal / Lit.)						
		LDO	(kCal / Lit.)			9,149.00	9,200.16	9,310.00	
15.3	Weighted Average Price	HFO	(Rs / KL)						
		LDO	(Rs / KL)			48,533.19	41,068.01	53,034.21	
15.4	Actual Average stock maintained	HFO	KL						For the Station (1760 MW)
		LDO	KL			4,696.00	6,027.00	5,630.00	For the Station (1760 MW)
16	**Weighted average duration of outages(unit-wise details)**:								
16.1	Planned Outages		(Days)			0	33	34	
16.2	Forced Outages		(Days)			11	4	13	
	Within control of generator								
	beyond control of generator					11	4	13	
16.3	Number of tripping		Nos.			22	14	23	
16.4	Number of start-ups**:**		Nos.			27	17	31	
16.4.1	Cold Start-up		Nos.			1	1	7	
16.4.2	Warm Start-up		Nos.			7	2	4	
16.4.3	Hot start-up		Nos.			19	14	20	
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			SOx; 100; NOX: 100			Norms as per MOEF&CC
	FGD installation date					FGD work under progress			
	NOX Control system installation date								
17.2	Actual emission (Stage-I)	SPM	mg/Nm^3			As per Annexure A			
		NOX	mg/Nm^3						
		SOX	mg/Nm^3						
	Actual emission (Stage-II)	SPM	mg/Nm^3						
		NOX	mg/Nm^3						
		SOX	mg/Nm^3						
	Ash dyke capacity as on 31st March								
	Ash pond capacity as on 31st March								
	Fund avalable in Ash Fund Account as on 31st March					As per Annexure B			
	Amount utilized from Ash Fund Account								
19	Detail of Ash utilization % of fly ash produced		%			157.17	167.86	157.67	For the Station (1760 MW)
	Ash available as on 31st March *		LMT			9.69	16.74	22.56	For the Station (1760 MW)
	Ash utilized for construction of ash dyke		LMT			-	-	-	For the Station (1760 MW)
	Ash utilized within plant premise, other than construction of ash dyke		LMT			0.03	0.06	0.03	For the Station (1760 MW)
	Ash transported		LMT			10.00	21.48	17.97	For the Station (1760 MW)
	Average Distance **		Km			150.00	150.00	150.00	For the Station (1760 MW)
19.1	Conversion of value added product		%			36.22	27.78	29.39	For the Station (1760 MW)
19.2	For making roads &embarkment		%			103.20	128.32	79.65	For the Station (1760 MW)
19.3	Land filling		%			17.75	11.77	26.46	For the Station (1760 MW)
19.4	Used in plant site in one or other form or used in some other site		%			-	-	-	For the Station (1760 MW)
19.5	Any other use , Please specify		%			-	-	22.16	For the Station (1760 MW)
20	Cost of spares actually consumed		(Rs. Lakh)			36.14	9.87	1.21	For the Station (1760 MW)
21	Average stock of spares		(Rs. Lakhs)			4,602.13	10,820.56	18,511.80	For the Station (1760 MW)
22	Number of employees deployed in O&M		Nos.			528	514	478	For the Station (1760 MW)
22.1	- Executives		Nos.			344	324	311	For the Station (1760 MW)
22.2	- Non Executives		Nos.			184	190	167	For the Station (1760 MW)
22.3	- Corporate office		Nos.			2,016	1,815	1,728	For the Station (1760 MW)
23	Man-MW ratio		Man/MW			0.30	0.29	0.27	For the Station (1760 MW)
	Total billed amount								
	Total received amount within due date								
	Total amount received beyond due date								

	Total amount pending					As per Annexure C			
	Total amount under dispute								
	Total rebate given								
	Total LPSC recovered								
24	Generation Switchyard Details								
	No. of Bays voltagewise					12	12	12	
	ICT - nos and rating					2: 400/220 KV			
	Dedicated transmission line - voltage and length					NA	NA	NA	

* Total ash generated during the Financial Year given

** Weighted average distance of Ash Transported given

Annexure-VI (C)

DETAILS OF WATER CHARGES

Name of the Company: **NTPC Ltd.**

Name of the Power Station and Stage/Phase: **Tanda Thermal Power Station (1760 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**	Tanda Thermal Power Station Stage-I & Stage II				
1	Type of Plant	Coal Based Plant				
2	Type of Cooling Tower	Stage I: IDCT; Stage II: NDCT				
3	Type of Cooling Water System	CLOSED				
4	Any Special Features which may increase/reduce water consumption					
(B)	**Quantum of Water :**					
5	Contracted Quantum (Cusec)	45	45	85	85	85
6	Allocation of Water (Cusec)	45	45	85	85	85
7	Actual water Consumption (Cusec)	14.16	11.37	20.20	24.35	32.07
8.	Rate of Water Charges	Water Rate: Rs 12.48 per 1000 cft; Royalty: Rs 6 Lakh/Cusec/Year.				
9	Other charges/Fees , if paid as part of Water Charges	**140.64**	**16.19**	**200.54**	**274.73**	**268.72**
10	**Total water Charges Paid (Rs Lakh)**					

Annexure-VI (D)

Detais of capital Spares

Name of Company : NTPC Limited
Name of Power station : Tanda STPS (440 MW + 1320 MW)

in Rs Lakhs

Sl . No.	ITEM	2012-13	2013-14	2014-15	2015-16	2016-17
(A)	Details of capital spares in Opening stock	12907.84	14501.33	14418.17	33303.05	35638.16
(B)	Details of capital spares procured during the year	2161.28	353.77	18921.01	2344.98	1073.45
(C)	Details of capital spares consumed during the year	567.79	436.93	36.14	9.87	1.21
(D)	Details of capital spares closing at the end of the year	14501.33	14418.17	33303.05	35638.16	36710.41

Annexure XVI A

Name of the Company: NTPC LTD

Name of the Power Station : Tanda Super Thermal Powe Station, Stage-II

(in Rs Lakhs)

Details of Incidental Expenses during Construction (IEDC) with break-up for the Generating stations for which COD is

Sl. No.	Item-wise details of expenditure with break-up	Expenditure as on SCOD	Expenditure as on actual COD of unit/station	Time Overrun
A	**Head of Expenses:**			
1	Salaries & Wages	11,210.57	18,070.74	
2	Depreciation	1,365.13	1,526.73	
3	Power Charges	634.04	955.70	
4	R&M - Bldg	81.67	72.31	
5	R&M - Others	1,280.13	1,516.83	
6	Rates&taxes	16.20	17.07	
7	Communication Exp	80.13	147.83	
8	Travel exp	498.01	702.57	
9	Tender Expenses	207.28	207.27	
10	Advertisement & publicity	4.11	4.16	
11	Security exp	2,673.91	4,192.91	
12	Entertainment exp	38.12	75.06	
13	Guest house exp	187.58	226.74	
14	Professional Charges	71.74	81.16	
15	Legal Exp	95.70	160.89	
16	EDP Exp	6.89	6.86	24 months (which was beyond the control of generator)
17	Printing exp	7.39	8.45	
18	Community development	7.04	6.89	
19	Vehicle hiring	574.21	694.17	
20	Tpt veh rung	0.40	13.35	
21	Misc Exp	119.84	131.81	
22	Bank Charges	39.64	39.43	
23	IEDC trfd from CC	6,687.57	8,754.72	
A	**Total Expenses**	**25,887.30**	**37,613.66**	
B	**Income**			
1	Power Chrgs Recovered	20.29	32.10	
2	Sale tender	0.26	0.26	
3	Transit Hostel recoveries	0.15	0.15	
4	Misc Income	48.15	70.76	
5	Water Charges Recovered	0.05	0.06	
	Total Income	**68.91**	**103.33**	
	Total IEDC	**25,818.39**	**37,510.34**	

Annexure-XIX

Name of Utility:	**NTPC Ltd.**
Name of Generating Station:	**Tanda Thermal Power Station Stage-I**
Station Configuration:	**4 X 110 = 440 MW**
Capacity (MW):	**440 MW**
COD:	**COD : 14.01.2000 (date of Takeover)**

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)	%				92.62	89.58	93.06	93.51	89.16	84.46	95.16	89.56	94.63	94.60	94.71	91.84	92.74	95.65	91.90
2	Plant Load Factors (PLF)	%				92.08	89.09	92.36	92.58	87.67	83.36	92.85	85.44	84.43	87.10	85.04	61.53	53.28	40.65	37.80
2a	Loading factor ^	%														90.74	77.34	74.22	69.70	68.83
3	Scheduled Energy	MU				3,123.47	3,021.77	3,133.67	3,143.27	2,982.13	2,827.59	3,149.38	2,898.04	2,871.66	2,954.59	2,939.28	2,091.47	1,827.77	1,400.95	1,288.44
4	Scheduled Generation	MU				3,123.47	3,021.77	3,133.67	3,143.27	2,982.13	2,827.59	3,149.38	2,898.04	2,871.66	2,954.59	2,939.28	2,091.47	1,827.77	1,400.95	1,288.44
5	Actual Generation (Gross)	MU														3,277.96	2,371.79	2,059.31	1,566.69	1,456.86
6	Actual Generation (ex-bus)	MU														2,887.35	2,051.41	1,765.09	1,334.74	1,235.82
7	Actual energy supplied to beneficiaries (Long Term, Medium Term and Short Term)	MU	2,919.56	2,934.32	3,114.34	3,123.47	3,021.77	3,133.67	3,143.27	2,982.13	2,827.59	3,149.38	2,898.04	2,871.66	2,954.59	2,938.29	2,091.01	1,827.85	1,400.13	1,288.36
8	Quantum of coal consumption	MT	25,95,357	25,67,858	26,70,137	26,91,210	25,73,580	25,88,123	28,20,783	30,28,310	29,47,964	29,07,292	24,95,911	22,96,153	22,24,234	21,02,402	16,32,672	15,46,348	12,64,196	11,54,388
9	Value of coal	Rs. Lakh																		
10	Specific Coal Consumption	kg/kWh	0.78	0.77	0.76	0.76	0.75	0.73	0.79	0.89	0.82	0.81	0.79	0.73	0.69	0.64	0.69	0.75	0.81	0.79
11	Gross Calorific Value of Coal	(Kcal/ Kg)	3,516	3,562	3,612	3,601	3,644	3,740	3,449	3,109	3,340	3,425	3,521	3,740	4,042	4,246	4,122	3771 **	3551 **	3604 **
12	Heat Contribution of Coal	(Kcal/ kWh)	2,715	2,747	2,746	2,736	2,722	2,723	2,726	2,766	2,754	2,784	2,780	2,744	2,774	2,723	2,838	2,832	2,865	2,856
13	Cost Of Specific Coal Consumption – Finally admitted by CERC (Ex-Bus)	(Rs./kWh)																		
14	Quantum of Oil Consumption	(KL)	2,443.00	2,061.00	1,405.00	1,544.00	2,396.00	1,549.00	2,498.00	1,647.00	1,889.00	1,513.00	1,247.00	1,011.00	1,427.00	1,036.00	1,622.00	1,142.00	1,273.00	1,410.00
15	Value of Oil	(Rs. lakh)																		
16	Gross calorific value of oil	(kcal/lit)	9,600	9,600	9,600	9,600	9,441	9,289	9,335	9,370	9,310	9,354	9,499	9,562	9,594	9,599	9,589	9,217	9,220	9,310
17	Specific Oil Consumption	(ml/kWh)	0.74	0.62	0.40	0.44	0.70	0.44	0.70	0.48	0.59	0.42	0.39	0.32	0.44	0.32	0.68	0.55	0.81	0.97
18	Cost Of Specific Oil Consumption –Finally admitted by CERC	(Rs./kWh)																		
19	Heat Contribution of Oil	(Kcal/ kWh)	7.07	5.94	3.85	4.18	6.59	4.05	6.53	4.53	5.46	3.96	3.75	3.09	4.22	3.03	6.56	5.11	7.49	9.01
20	Station Heat Rate	(Kcal/ kWh)	2,758	2,753	2,749	2,740	2,728	2,727	2,732	2,770	2,760	2,788	2,783	2,747	2,778	2,726	2,844	2,837	2,873	2,867
21	Auxiliary Energy Consumption	(%)	12.00	11.88	11.34	11.11	11.76	11.33	11.52	11.82	12.02	11.89	11.46	11.62	11.47	11.46	12.86	13.44	14.02	14.51
22	Debt at the end of the year	(Rs. Crore)	285.73	251.34	208.54	164.52	173.26	146.86	151.69	107.11	136.28	117.32	116.54	87.01	70.86	42.09	4.75	-	-	-
23	Equity - Average	(Rs. Crore)	237.67	244.70	250.24	254.97	271.82	288.59	305.04	318.71	331.95	344.97	353.63	361.20	366.39	372.69	375.23	373.48	373.83	374.17
24	Working Capital – finally admitted by CERC	(Rs. Crore)	141.87	143.10	145.04	197.35	199.56	345.13	348.42	353.92	351.38	357.44	317.71	323.30	328.26	339.32	344.51	322.40	326.65	331.02
25	Capital cost – finally admitted by CERC	(Rs. Crore)	792.23	815.68	834.13	849.89	906.07	961.96	1,016.82	1,062.38	1,106.49	1,149.90	1,178.76	1,204.00	1,221.30	1,242.30	1,250.78	1,245.82	1,248.67	1,250.60
26	Capacity Charges/ Annual Fixed Cost (AFC)	(Rs. Crore)	193.72	195.78	198.36	209.71	211.66	297.11	305.62	322.41	302.83	325.64	316.03	330.48	343.58	358.31	369.97	375.72	386.68	398.18
27	(a) Return on equity – post tax (admitted by CERC upto 2009) and Pre Tax post 2009																			
28	Absolute value	(Rs. Crore)	33.27	34.26	35.03	35.70	38.06	67.76	70.80	73.13	76.16	81.00	69.35	71.17	72.20	73.44	73.94	70.15	70.21	70.28
29	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%	19.71%	19.71%	18.78%	18.78%	18.78%
30	(b) interest on Loan																			
31	Absolute value	(Rs. Crore)	19.42	15.65	16.73	13.73	10.09	5.12	0.68	5.01	0.33	6.24	6.66	6.22	5.29	3.59	0.98	-	-	-
32	Rate – Weighted Average Rate	(%)	6.40%	5.83%	7.28%	7.36%	5.97%	3.22%	0.45%	3.87%	0.28%	5.15%	6.20%	7.04%	8.59%	10.1711	10.2029	8.25%	8.26%	8.26%
33	(c) Depreciation (finally allowed by CERC)																			
34	Absolute value	(Rs. Crore)	28.08	28.91	29.56	30.12	32.11	49.50	52.41	54.83	29.78	33.32	35.79	38.15	39.94	42.41	43.54	43.94	44.47	44.93
35	AAD																			
36	Rate	(%)	3.544%	3.544%	3.544%	3.544%	3.544%	5.146%	5.154%	5.161%										Spread over useful life
37	(d) Interest on working Capital																			
38	Absolute value	(Rs. Crore)	14.97	15.11	15.26	20.70	20.89	42.28	42.68	43.36	43.12	43.86	43.97	44.72	45.37	46.88	47.59	38.85	39.36	39.89
39	Rate	(%)	10.250%	10.250%	10.250%	10.250%	10.250%	12.250%	12.250%	12.250%	12.250%	12.250%	13.500%	13.500%	13.500%	13.500%	13.500%	12.05%	12.05%	12.05%
40	(e) Operation and maintenance cost (finally admitted by CERC)																			
41	Absolute value	(Rs. Crore)	73.25	76.18	79.22	82.39	85.69	115.50	122.10	129.10	136.49	144.28	160.27	170.21	180.77	191.99	203.92	222.76	232.55	242.98
42	Rate	(%)		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
43	(f) Compensation Allowances	(Rs. Crore)						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
44	(g) Special Allowance	(Rs. Crore)						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
45	h) Supplementary Tariff - Emission Control																			
46	Absolute value	(Rs. Crore)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
47	Rate	(%)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
48	i) Ash Utilisation Expenses *	(Rs. Crore)																89.16	4.74	154.94
49	AFC	(Rs./ kWh)	0.94	0.95	0.96	0.77	0.78	1.03	1.06	1.12	1.05	1.13	1.12	1.17	1.22	1.24	1.28	1.28	1.28	1.28
50	Energy Charge	(Rs./kWh)	1.65	1.66	1.77	1.67	2.03	2.06	2.09	2.91	2.48	3.02	3.31	2.89	2.86	3.16	3.35	4.25	5.19	5.57
51	Supplemental Energy Charges - Emission Control	(Rs./kWh)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
52	Total tariff	(Rs. kWh)	2.59	2.61	2.73	2.44	2.81	3.09	3.15	4.03	3.53	4.15	4.43	4.06	4.08	4.40	4.63	5.53	6.47	6.85
53	Revenue realisation before tax	(Rs. Crore)																		
54	Revenue realisation after tax	(Rs. Crore)																		
55	Profit/ loss *	(Rs. Crore)	52.13	210.16	151.95	100.19	95.42	93.66	203.91	147.82	116.27	49.42	40.26	77.39	201.49	317.58	73.12	251.22	455.23	456.45
56	DSM Generation	(MU)				25.31	20.05	18.85	15.13	20.13	7.79	2.27	(107.71)	(114.88)	(96.72)	(51.93)	(40.06)	(62.68)	(66.21)	(52.63)
57	DSM Rate	(Rs/kWh)																		
58	Revenue from DSM	(Rs. Crore)				(5.38)	(3.90)	(6.66)	(4.80)	(5.71)	(1.68)	(0.50)	22.90	23.05	17.60	8.74	11.42	18.14	17.11	17.44
59	Compensation received for operation below NAPAF	(Rs. Crore)														-	15.48	27.42	21.98	22.04

60	Part load Compensation received from beneficiriaes	(Rs. Crore)														-	15.48	27.42	21.98	22.04
61	Amount received from SCED	(Rs Crore)														-	-	-	-	-

Tariff related details for the period 2019-20 to 2021-22 is as per Petition filed before CERC
** GCV of coal as received minus 85 kCal/Kg
^ Additional data related to Loading factor (%) submitted
* For entire Tanda Station
DSM Revenue (-)Received / (+) Paid

Annexure-XIX

Name of Utility:	**NTPC Ltd.**
Name of Generating Station:	**Tanda Thermal Power Station Stage-II**
Station Configuration:	**2 X 660 = 1320 MW**
Capacity (MW):	**1320**
Station COD:	**01.07.2021**

S.N	Particulars	Unit	2017-18	2018-19	2019-20	2020-21	2021-22
1	Plant Availability Factor (PAF)	%			91.41	93.48	93.66
2	Plant Load Factors (PLF)	%			77.14	72.16	68.91
2a	Loading factor ^	%			83.29	80.17	83.22
3	Scheduled Energy	MU			1,699.44	4,010.91	6,670.63
4	Scheduled Generation	MU			1,699.44	4,010.91	6,670.63
5	Actual Generation (Gross)	MU			1,783.99	4,171.98	6,974.68
6	Actual Generation (ex-bus)	MU			1,677.85	3,918.07	6,565.35
7	Actual energy supplied to beneficiaries (Long Term, Medium Term and Short Term)	MU			1,445.98	3,761.83	6,013.38
8	Quantum of coal consumption	MT			11,03,199	27,47,624	42,93,370
9	Value of coal	Rs. Lakh					
10	Specific Coal Consumption	kg/kWh			0.62	0.66	0.62
11	Gross Calorific Value of Coal	(Kcal/ Kg)			3704 **	3445 **	3638 **
12	Heat Contribution of Coal	(Kcal/ kWh)			2,290.42	2,268.87	2,239.50
13	Cost Of Specific Coal Consumption – Finally admitted by CERC (Ex-Bus)	(Rs./kWh)					
14	Quantum of Oil Consumption	(KL)			5,969.00	3,293.00	8,541.00
15	Value of Oil	(Rs. lakh)					
16	Gross calorific value of oil	(kcal/lit)			9,149.00	9,200.16	9,310.00
17	Specific Oil Consumption	(ml/kWh)			3.35	0.79	1.22
18	Cost Of Specific Oil Consumption – Finally admitted by CERC	(Rs./kWh)					
19	Heat Contribution of Oil	(Kcal/ kWh)			30.61	7.26	11.40
20	Station Heat Rate	(Kcal/ kWh)			2,321	2,276	2,252
21	Auxiliary Energy Consumption	(%)			5.95	6.09	5.87
22	Debt at the end of the year	(Rs. Crore)			3,071.45	3,063.03	5,263.87
23	Equity - Average	(Rs. Crore)			1,309.50	1,393.52	2,492.57
24	Working Capital – finally admitted by CERC	(Rs. Crore)			430.89	447.33	934.83
25	Capital cost – finally admitted by CERC	(Rs. Crore)			4,364.99	4,645.07	8,308.56

26	Capacity Charges/ Annual Fixed Cost (AFC)	(Rs. Crore)			815.82	831.60	1,557.88
27	(a) Return on equity – post tax (admitted by CERC upto 2009) and Pre Tax post 2009						
28	Absolute value	(Rs. Crore)			245.95	261.73	468.15
29	Rate	(%)			18.782%	18.782%	18.782%
30	(b) interest on Loan						
31	Absolute value	(Rs. Crore)			162.36	149.88	259.81
32	Rate – Weighted Average Rate	(%)			5.38%	4.89%	4.88%
33	(c) Depreciation (finally allowed by CERC)						
34	Absolute value	(Rs. Crore)			197.60	210.98	382.81
35	AAD						
36	Rate	(%)			4.58%	4.59%	4.61%
37	(d) Interest on working Capital						
38	Absolute value	(Rs. Crore)			51.92	50.33	98.16
39	Rate	(%)			12.05%	11.25%	10.50%
40	(e) Operation and maintenance cost (finally admitted by CERC)						
41	Absolute value	(Rs. Crore)			157.99	158.68	348.94
42	Rate	(%)			NA	NA	NA
43	(f) Compensation Allowances	(Rs. Crore)			NA	NA	NA
44	(g) Special Allowance	(Rs. Crore)			NA	NA	NA
45	h) Supplementary Tariff - Emission Control				NA	NA	NA
46	Absolute value	(Rs. Crore)			NA	NA	NA
47	Rate	(%)			NA	NA	NA
48	i) Ash Utilisation Expenses *	(Rs. Crore)			89.16	4.74	154.94
49	AFC	(Rs./ kWh)			1.76	1.80	1.68
50	Energy Charge	(Rs./kWh)			3.19	3.12	3.38
51	Supplemental Energy Charges - Emission Control	(Rs./kWh)			NA	NA	NA
52	Total tariff	(Rs. kWh)			4.95	4.91	5.06
53	Revenue realisation before tax	(Rs. Crore)					
54	Revenue realisation after tax	(Rs. Crore)					
55	Profit/ loss *	(Rs. Crore)			251.22	455.23	456.45
56	DSM Generation	(MU)			(21.59)	(92.83)	(105.28)

57	DSM Rate	(Rs/kWh)					
58	Revenue from DSM	(Rs. Crore)			(20.83)	14.38	0.20
59	Compensation received for operation below NAPAF	(Rs. Crore)			7.17	16.56	27.23
60	Part load Compensation received from beneficiriaes	(Rs. Crore)			7.17	16.56	27.23
61	Amount received from SCED	(Rs Crore)			5.44	3.76	4.13

Tariff related data is provided as per Amended Petition filed before CERC based on audited figure as on COD of Station

** GCV of coal as received minus 85 kCal/Kg

^ Additional data related to Loading factor (%) submitted

* For entire Tanda Station

DSM Revenue (-)Received / (+) Paid

Annexure-XXII

DETAILS OF EMISSION CONTROL SYSTEM

Generating company: NTPC Ltd
Name of Generating station: Tanda Thermal Power Station Stage-2
Installed Capacity (MW) : 1320 MW

Type of Emission Control System: Wet Based FGD System

Under Operation/Anticipated Operation Date:

S.No.	Particulars	Units	2017-18	2018-19	2019-20	2020-21	2021-22
A							
1	Gross Generation	MU			1783.99	4171.98	6974.68
2	Auxiliary Consumption - emission control (Actual)	MU			NA	NA	NA
	Auxiliary Consumption - emission control (Actual)	%			NA	NA	NA
3	Auxiliary Consumption (Normative)	%			NA	NA	NA
4	Hours of Operation	Hrs			NA	NA	NA
5	O&M Expenses (Actual) with Breakup as per format	Rs. Crore			NA	NA	NA
6	Other maintenace spares consumed^	Rs. Crore			NA	NA	NA
7	Initial Spares consumed*	Rs. Crore			NA	NA	NA

S.No.	Particulars	Units	2017-18		2018-19		2019-20		2020-21		2021-22	
			Investment Approval	Approved	Investment Approval	Approved	Investment Approval	Approved	Investment Approval	Approved	Investment Approval	Approved
1	Capital Cost of Emission Control System											
1.1	Hard Cost (incl GST)	Rs. Crore										597.43
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										37.69
1.3	IEDC	Rs. Crore										17.92
1.4	Others. Pls specify	Rs. Crore										
1.4	**Completed Cost as per Investment Approval**	**Rs. Crore**										**653.04**

Annexure- XXIII

DETAILS OF REAGENT USED FOR EMISSION CONTROL:

Generating company: NTPC Ltd
Name of Generating station: Tanda Thermal Power Station Stage-2
Installed Capacity (MW) : 1320 MW

Reagent Type: Limestone
Type of Emission Control System: Wet based FGD System

S.No.	Particulars	Unit	2017-18	2018-19	2019-20	2020-21	2021-22
A.							
1	Average Stock of Reagent	MT	NA	NA	NA	NA	NA
2	Maximum Storage at Site	MT	NA	NA	NA	NA	NA
3	Maximum Storage at Site	Days	NA	NA	NA	NA	NA
B.			NA	NA	NA	NA	NA
1	Opening Stock of Reagent as on 1st April	MT	NA	NA	NA	NA	NA
2	Purity of Opening Stock (Reagent)	%	NA	NA	NA	NA	NA
3	Quantity of Reagent Supplied by Supplier	MT	NA	NA	NA	NA	NA
4	Adjustment (+/-) in Quanity Supplied	MT	NA	NA	NA	NA	NA
5	Net Quantity of Reagent Received	MT	NA	NA	NA	NA	NA
6	Total Cost of Reagent Received	Rs. Crore	NA	NA	NA	NA	NA
7	Cost of Reagent Received	Rs./MT	NA	NA	NA	NA	NA
8	Qty of Reagent Consumed	MT	NA	NA	NA	NA	NA
9	Closing Stock of Reagent as on 31st March	MT	NA	NA	NA	NA	NA
10	Purity of Reagent received	%	NA	NA	NA	NA	NA
11	Gross Generation	MU			1,784	4,172	6,975
12	Fuel Type (coal/lignite)		Coal				
13	Sulphur content of Fuel	%	0.32	0.35	0.31	0.39	0.48
14	Gross SHR	kCal/kWh					
15	Design SO2 removal efficiency (Applicable for Wet FGD)	%	SO2 Efficiency guaranty is taken considering applicable New Environmental norm of that plant.				
16	SO2 removal norm (100/200/600 mg/Nm3)	mg/Nm3	100	100	100	100	100
17	Weigthed Average Gross GCV of Fuel Received	kCal/kg	As per Annexure I				

NA = Not Applicable