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
1	Name of Company			NTPC Ltd.				
2	Name of Station/ Pit head or Non- Pit head			Solapur Super Thermal Power Station				
	Stage			Single Stage				
3	Installed Capacity and Configuration		MW	2 X 660 = 1320 MW				
3.1	Date of Commercial Operation - Unit Wise			U1- 25-09-2017 U2- 30-03-2019				
3.2	Effective COD			30-03-2019				
	Make of Turbine			GE				
4	Rated Steam Parameters (Also state the type of Steam turbine and Boiler)			Steam Tubrine-Impulse, Boiler-Tower type Steam rated pressure - 247 ksc, SH Steam rated temperature-565 deg C, RH Steam rated Temperature - 593 deg C				
5	Type of BFP		Per Unit	2 TDBFP				
	Quantity			2+2				
6	Circulating water system			Closed Cycle				
7	Any other Site specific feature							
	Design Unit heat rate		Kcal/Kwh	2140				
	Design Boiler efficiency		%	85.62%				
	Design Turbine cycle heat rate		Kcal/Kwh	1832				
8	**Fuels :**							
8.1	**Primary Fuel :**			Coal				
8.1.1	Annual Allocation under FSA		LMT	53.7				
	Annual Consumption		LMT	7.92	11.54	4.91	23.53	32.03
	Annual Requirment at NAPAF		LMT	16.80	30.95	56.02	61.86	59.90
8.1.2	Sources of supply/ procurement along with contracted quantity and grade of coal			MCL, SCCL, 5.37 MMT, (G08 TO G13)				
8.1.2.1	FSA	FSA	MT	1,71,624	4,96,041	1,73,797	-	4,24,996
		MOU-SCCL	MT	4,39,960	1,88,775	34,916	13,86,746	3,00,955
		MoU-WCL	MT	1,38,382	21,059	-	90,789	-
8.1.2.2	Imported*		MT	-	18,654	1,84,851	-	89,528
	Flexi		MT	34,772	7,538	30,807	-	11,09,618
	Div in		MT	15,409	1,32,059	70,372	31,998	1,28,290
	NTPC Captive mines		MT	54,879	1,18,373	4,38,465	7,26,932	4,83,699
	RCR		MT	-	-	-	-	1,48,215
8.1.2.	Spot Market/e-auction*		MT	82,959	5,20,930	43,540	-	-
8.1.3	Transportation Distance of the station from the sources of supply		KM	453 to 1984				
8.1.4	Mode of Transport			Rail				
8.1.5	Maximum Station capability to stock primary fuel (for days consider availability as NAPAF)		Days & LMT	40 days / 7.114 LMT				
8.1.6	Maximum stock maintained for primary fuel		MT	83,478	2,20,334	7,46,086	7,44,400	5,68,400
	Date			03-12-2017	11-03-2019	17-09-2019	08-12-2020	06-07-2021
8.1.7	Minimum Stock maintained for primary fuel		MT	-	-	2,04,669	5,30,987	-
	Date			25-09-2017	14-11-2018	01-04-2019	30-03-2021	26-10-2021
8.1.8	Average stock maintained for primary fuel		MT	28,120	80,640	6,01,184	6,70,208	2,16,943
8.2	**Secondary Fuel :**							
8.2.1	Annual Allocation/ Requirement		KL	1,265.62	2,457.18	4,927.82	4,914.36	4,914.36
8.2.2	Sources of supply			IOCL, BPCL, HPCL				

8.2.3	Transportation Distance of the station from the sources of supply		KM	700 -1500 approx. (dependig on availabiltiy at their depot)				
8.2.4	Mode of Transport			Rail				
8.2.5	Maximum Station capability to stock secondary fuels		KL	5000				
8.2.6	Maximum Stock of secondary oil actually maintained		KL	3500 approx				
8.2.7	Minimum Stock of secondary oil actually maintained		KL	2000 approx				
8.2.8	Average Stock of secondary oil actually maintained		KL	3042 approx				
9.	Cost of Spares :							
9.1	Cost of Spares capitalized in the books of accounts		(Rs. Lakh)	7,363.86	3,025.10	3,788.02	4,394.08	10,221.31
9.2	Cost of spares included in capital cost for the purpose of tariff		(Rs. Lakh)	995.29	2,370.57			
9.3	Initial spares-list, quantity and cost		(Rs. Lakh)	995.29	2,370.57			
9.4	Maintenance spares - cost		(Rs. Lakh)	612.23	1,663.70	1,435.54	1,975.85	3,070.05
9.5	Other spares procured with high lead procurement time		(Rs. Lakh)			1,141.23	1,938.28	2,628.88
10	**Generation :**							
10.1	-Actual Gross Generation at generator terminals		MU	1,165.48	1,783.35	817.20	3,586.26	5,081.30
10.2	-Actual Net Generation Ex-bus		MU	1,063.65	1,603.68	707.46	3,333.98	4,741.51
10.3	-Scheduled Generation Ex-bus		MU	1,082.82	1,710.55	762.99	3,354.08	4,788.04
11	Average Declared Capacity (DC)		MW	159.13	540.70	1,171.64	1,189.21	1,128.70
		DC HD peak	%	-	-	-	93.84	95.76
		DC HD offpeak	%	-	-	-	93.68	95.23
		DC LD peak	%	-	-	-	96.92	89.15
		DC LD-off peak	%	-	-	-	96.90	89.06
	Actual Declared Capacity		MU	1,393.98	4,736.51	10,291.64	10,417.52	9,887.44
	Deemed Declared Capacity		MU					
12	Actual Auxiliary Energy Consumption excluding colony consumption		MU	99.98	148.61	106.47	249.97	337.98
13	Actual Energy supplied to Colony from the station		MU	1.86	3.58	3.27	2.20	1.91
	Actual energy supplied to construction activities		MU					
	Actual energy supplied to long term and medium term beneficiaries		MU	1,030.88	1,616.13	759.32	3,633.36	5,105.93
	Actual energy supplied in short term		MU					
	Energy supplied under bilateral arrangements		MU					
	Energy supplied through excahnges		MU	0.60	12.69	0.04	27.03	31.34
	Energy supplied under DSM		MU	(19.17)	(106.87)	(55.53)	(20.10)	(46.53)
	Energy supplied SCED		MU			(9.39)	(215.70)	(237.59)
14	**Primary Fuel :**							
14.1	Consumption **:**							
14.1.1	Domestic coal	From Linked Mines	MT	1,64,000	4,73,000	1,10,000	-	3,11,000
		From Non-Linkd Mines	MT	6,28,318	6,80,731	3,74,294	22,65,782	26,60,479
		From Integerated Mines	MT	-	-	-	-	-
14.1.2	Imported coal		MT	-	-	6,335	74,164	2,01,940
14.1.3	Spot market/e-auction coal		MT	-	-	-	13,524	29,888
14.2	Gross Calorific Value (GCV) :							
14.2.1	Domestic Coal (for each type)	(As Billed) - EM Basis as per third party	kCal/kg		4,020	4,273	3,891	4,095
		(As Received) - TM Basis as per third party	kCal/kg		3,504	3,917	3,460	3,538
14.2.2	Imported Coal	(As Billed) - ADB Basis	kCal/kg		5,000	5,000		5,000
		(As Received) - ADB Basis	kCal/kg		5,010	4,805		4,802
14.2.3	Spot market/e- auction coal	(As Billed)	kCal/kg		3,957	4,451		
		(As Received)	kCal/kg		3,681	3,185		

14.2.4	Weighted Average Gross Calorific value (Domestic+Imported+Spot/e-auction) **(As Billed)**		kCal/kg		4,084	4,346	3,891	4,126
14.2.5	Weighted Average Gross Calorific value (Domestic+Imported+Spot/e-auction) **(As Received)**		kCal/kg	3,447	3,618	3,987	3,460	3,635
	Ash content in coal (%)		%	40.86	38.68	37.68	41.70	38.50
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)		6,755.57	5,457.58	4,283.94	4,958.54
	Components of landed cost and break up		(Rs/MT)					
		1. Cost of coal	(Rs/MT)		5,638.07	2,444.23	2,324.88	2,839.19
		2. Transportation	(Rs/MT)		1,092.00	2,975.69	1,924.69	2,072.44
		3. Other charges	(Rs/MT)		25.50	37.66	34.37	46.91
14.3.2	Weighted Average Landed Price of Imported coal		(Rs/MT)		6,928.34	7,965.84		16,516.80
	Components of landed cost and break up							
14.3.3	Weighted Average Landed Price of Spot market / e-auction coal		(Rs/MT)		8,782.59	5,752.77		
	Components of landed cost and break up							
14.3.4	Weighted Average Landed Price of all the Coals		(Rs/MT)		6,768.07	5,692.60	4,283.94	5,346.30
14.4	Blending :		% and MT (of the total coal consumed)					
	Blending ratio of imported coal with domestic coal		Equivalent to domestic coal	-	-	1.29	3.15	6.30
14.4.2	Proportion of e-auction coal in the blending		% & MT	-	-	-	0.57	0.93
	Coal stockyard capacity		LMT			7.114 LMT		
14.5	Actual daily Average Coal stock maintained		MT	55,000	89,000	4,32,000	4,82,000	1,77,000
			Days	3.09	5.00	24.29	27.10	9.95
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
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	**Non-Pit Head station**							
14.5.2.1	Transit loss from linked mines		%		0.79	0.86		
14.5.2.2	Transit loss from non-linked mines including e-auction coal mines.		%					
14.5.2.3	Transit loss of imported coal		%					
15	**Secondary Fuel Oil :**							
15.1	Consumption	HFO	KL	2,061	3,044	3,911	2,480	2,641
		LDO	KL	2,078	1,437	2,451	1,344	2,243
15.2	Weighted Average Gross Calorific value **(As received)**	HFO	(kCal / Lit.)	8,871	9,762	9,820	9,834	9,826
		LDO	(kCal / Lit.)	9,177	9,542	9,419	9,377	9,394
15.3	Weighted Average Price	HFO	(Rs / KL)		42,689	36,635		48,692
		LDO	(Rs / KL)		53,200	49,482	33,389	51,842
15.4	Actual Average stock maintained	HFO	KL	1,854	1,435	3,011	2,550	1,433
		LDO	KL	778	541	880	887	1,837
16	**Weighted average duration of outages(unit-wise details)**:							
16.1	Planned Outages		(Days)	-	16.00	14.96	6.22	21.36
16.2	Forced Outages		(Days)	67.62	22.39	5.32	11.17	12.74
	Within control of generator		(Days)	0.30	0.19	0.02	-	-
	beyond control of generator		(Days)	67.32	22.20	5.30	11.17	12.74

16.3	Number of tripping		Nos.	18	17	9	13	9
16.4	Number of start-ups:		Nos.	18	18	18	21	24
16.4.1	Cold Start-up		Nos.	7	3	13	13	17
16.4.2	Warm Start-up		Nos.	3	4	-	3	4
16.4.3	Hot start-up		Nos.	8	11	5	5	3
17	NOx , SOx ,and other particulate matter emission in : at conditions specified							
17.1	Design value of emission control equipment (specify conditions)		mg/Nm3	Norms as per MoEF&CC: SOx: 100; NOx: 100				
	FGD installation date			Wet based FGD work under progress				
	NOX Control system installation date			Low NOx burners provided since inception.				
17.2	Actual emission (Stage-I)	SPM	mg/Nm3	Details as per Annexure-C				
		NOX	mg/Nm3					
		SOX	mg/Nm3					
	Actual emission (Stage-II)	SPM	mg/Nm3					
		NOX	mg/Nm3					
		SOX	mg/Nm3					
	Ash dyke capacity as on 31st March		LMT					
	Ash pond capacity as on 31st March							
	Fund avalable in Ash Fund Account as on 31st March			Details as per Annexure-B				
	Amount utilized from Ash Fund Account							
19	Detail of Ash utilization % of fly ash produced		(%)	59.71	127.21	117.65	98.02	75.53
	Ash available as on 31st March *		LMT	3.17	4.24	1.53	7.58	11.36
	Ash utilized for construction of ash dyke		LMT	-	-	-	-	-
	Ash utilized within plant premise, other than construction of ash dyke		LMT	-	-	-	-	-
	Ash transported		LMT	-	-	-	-	-
	Average Distance **		Km	-	-	-	-	-
19.1	Conversion of value added product		(%)	59.71	112.72	116.99	88.65	73.50
19.2	For making roads &embarkment		(%)	-	-	-	-	-
19.3	Land filling		(%)	-	-	-	-	-
19.4	Used in plant site in one or other form or used in some other site		(%)	-	-	-	-	-
19.5	Any other use , Please specify		(%)	-	14.50	0.65	9.37	2.02
20	Cost of spares actually consumed		(Rs. Lakh)				128.55	558.44
21	Average stock of spares		(Rs. Lakhs)	369.59	2,250.08	11,252.58	20,120.42	21,406.82
22	Number of employees deployed in O&M		Nos.	302	263	237	217	216
22.1	- Executives		Nos.	257	221	201	191	181
22.2	- Non Executives		Nos.	45	42	36	26	35
22.3	- Corporate office		Nos.	2,568	2,241	2,016	1,815	1,728
23	Man-MW ratio		Man/MW	0.46	0.20	0.18	0.16	0.16
	Total billed amount			Details as per Annexure-C				
	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			2 no's 400kv (GT-1R/1Y/1B & GT-2R/2Y/2B); 4 lines 400kv, 1 & 2 - 11.2 km , 3 & 4 - 12.1 km				
	No. of Bays voltagewise			18 no's 400kv and 17no's 132kv				

	ICT - nos and rating			2no's 200MVA 400kv/132kv/33kv
	Dedicated transmission line - voltage and length			Not Applicable

* 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: **Solapur Super Thermal Power Station**

(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**	Solapur Super Thermal Power Station				
1	Type of Plant	Coal Based Plant				
2	Type of Cooling Tower	IDCT				
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 6	Water Allocation/Annual Contracted (Million M3)	68.33/27.82	68.33/25.00	68.33/17.10	68.33/24.56	68.33/21.30
7	Actual water Consumption - Cubic meter (Million M3)	3.96	11.02	6.71	15.22	15.08
8.	Rate of Water Charges (Rs/M3)	Industrial: 4.8 Rs/m3 Domestic: 0.15 Rs /m3	Industrial: 5.28 Rs/m3 Domestic: 0.17 Rs /m3	Industrial: 5.76 Rs/m3 Domestic: 0.18 Rs /m3	Industrial: 5.76 Rs/m3 Domestic: 0.18 Rs /m3	Industrial: 5.76 Rs/m3 Domestic: 0.18 Rs /m3
9	Other charges/Fees , if paid as part of Water Charges	**224.61 ***	**1,918.73**	**1,624.02**	**1,633.47**	**1,675.55**
10	**Total water Charges Paid (Rs Lakhs)**					

**** COD of Unit 1 on 25.09.2017***

Annexure-VI (D)

Detais of capital Spares

Name of Company- NTPC Limited
Name of Power station :Solapur STPS (1320 MW)

Rs. Lakhs

Sl . No.	ITEM	2017-18	2018-19	2019-20	2020-21	2021-22
(A)	Details of capital spares in Opening stock		7364	10389	14177	18443
(B)	Details of capital spares procured during the year	7364	3025	3788	4394	10221
(C)	Details of capital spares consumed during the year	0	0	0	129	558
(D)	Details of capital spares closing at the end of the year	7364	10389	14177	18443	28105

Annexure XVI A

Details of Incidental Expenses during Construction (IEDC) with break-up for the Generating stations for which COD is declared after 1.4.2017 (SOLAPUR STPS)

Sl. No.	Item-wise details of expenditure with break-up	Expenditure as on SCOD (18.01.2017) - in Rs Lakhs	Expenditure as on actual COD of unit/station (29.3.2019) - In Rs Lakhs	Time Overrun
1	Advertisement	75.42	135.90	
2	Books & Periodicals	12.94	14.60	
3	Brockerage & Commission	3.70	4.61	
4	CC	0.79	0.79	
5	Communication Exps	245.03	354.97	
6	Community Devl.	9.18	9.18	
7	Dep	4,405.16	5,810.50	
8	EDP Charges	67.64	90.93	
9	Education Exps	20.44	27.20	
10	Employee Benefits	20,646.10	33,222.09	
11	Entertainment	100.65	175.46	
12	Guest House	373.35	445.68	
13	Insurance	43.41	52.28	
14	Legal Expenses	13.11	40.34	
15	Misc			
15.1	Bank charges	130.09	157.59	
15.2	Land Development	290.40	350.42	
15.3	Misc Exps	1,199.66	1,498.01	
15.4	Tpt Vehicle Running	0.35	0.35	
15.5	Vehicle Hire	887.61	1,132.88	
15.6	Workshops	1.38	2.88	
15.7	Others	(57.73)	(57.73)	
16	Power charges	5,278.05	7,799.47	
17	Printing Expenses	108.59	125.03	
18	Professional Charges	96.36	293.92	26 Months (which was beyond the control of Generator)
19	Rates & Taxes	933.91	1,198.63	
20	Rent	94.73	105.63	
21	Repair & Maint			
21.1	Building	580.77	746.08	
21.2	Construction Equip	2.28	2.40	
21.3	Others	1,371.14	2,320.33	
22	Security	1,547.32	2,918.30	
23	Tender	616.37	639.81	
24	Travel Expenses	1,333.33	1,926.29	
25	Water Charges	1,292.77	1,723.97	
26	IEDC transferred from CC	8,864.44	9,164.04	
	Total (A)	**50,588.74**	**72,432.83**	
	Less:			
27	Actual Gain/Loss	(214.65)	(344.74)	
28	Guest House	22.27	33.58	
29	Hire Charges	0.47	3.65	
30	Interest			
30.1	Contractor	1,216.93	1,269.47	
30.2	Others	84.89	158.02	
31	Misc Income	1,178.46	1,489.23	
32	Power charges	141.84	185.06	
33	PP Ex	25.73	25.73	
34	Sale of Scrap	27.44	38.88	
35	Tender	7.81	7.94	
36	Water Charges Recovered	0.01	0.01	
	Total (B)	**2,491.20**	**2,866.83**	
	EDC (A-B)	**48,097.54**	**69,566.00**	

Annexure-XIX

Name of Utility:	**NTPC Ltd.**
Name of Generating Station:	**Solapur Super Thermal Power Station**
Station Configuration:	**2 X 660 = 1320 MW**
Capacity (MW):	**1320 MW**
COD:	**30-03-2019**

S.N	Particulars	Unit	2017-18 (25.9.17-31.3.18)	2018-19 (01.04.18-29.03.19)	2018-19 (30.3.19-31.3.19)	2019-20	2020-21	2021-22
1	Plant Availability Factor (PAF)	%	49.67		86.45	94.68	96.10	91.21
2	Plant Load Factors (PLF)	%	39.14		30.68	7.05	31.01	43.94
2a	Loading Factor ^	%	61.68		70.30	61.87	70.62	70.22
3	Scheduled Energy	MU	1,082.82		1,710.55	762.99	3,354.08	4,788.04
4	Scheduled Generation	MU	1,082.82		1,710.55	762.99	3,354.08	4,788.04
5	Actual Generation (Gross)	MU	1,165.48		1,783.35	817.20	3,586.26	5,081.30
6	Actual Generation (ex-bus)	MU	1,063.65		1,603.68	707.46	3,333.98	4,741.51
7	Actual energy supplied to beneficiaries (Long Term, Medium Term and Short Term)	MU	1,030.88		1,616.13	759.32	3,633.36	5,105.93
8	Quantum of coal consumption	MT	7,92,318		11,53,730.90	4,90,629	23,53,470	32,03,307
9	Value of coal	Rs. Lakh			19,411.14	49,069.40	95,064.34	1,41,731.95
10	Specific Coal Consumption	kg/kWh	0.68		0.65	0.60	0.66	0.63
11	Gross Calorific Value of Coal	(Kcal/ Kg)	3,447		3,618	3902**	3375**	3550**
12	Heat Contribution of Coal	(Kcal/ kWh)	2,343		2,341	2,342	2,215	2,238
13	Cost Of Specific Coal Consumption – Finally admitted by CERC (Ex-Bus)	(Rs./kWh)						
14	Quantum of Oil Consumption	(KL)	4,138.89		4,481.38	6,362.07	3,823.41	4,884.02
15	Value of Oil	(Rs. lakh)			1,927.45	2,819.36	399.94	3,096.67
16	Gross calorific value of oil	(kcal/lit)	9,024.47		9,691.38	9,665.63	9,673.59	9,627.43
17	Specific Oil Consumption	(ml/kWh)	3.55		2.51	7.79	1.07	0.96
18	Cost Of Specific Oil Consumption –Finally admitted by CERC	(Rs./kWh)						
19	Heat Contribution of Oil	(Kcal/ kWh)	32.05		24.35	75.25	10.31	9.25
20	Station Heat Rate	(Kcal/ kWh)	2,375		2,365	2,418	2,226	2,249
21	Auxiliary Energy Consumption	(%)	8.58		8.33	13.03	6.97	6.65
22	Debt at the end of the year	(Rs. Crore)	3,612.61	3,581.18	5,815.51	5,666.19	5,342.64	5,310.15
23	Equity - Average	(Rs. Crore)	1,577.42	1,650.65	2,657.29	2,723.69	2,822.72	2,955.14
24	Working Capital – finally admitted by CERC	(Rs. Crore)	652.80	666.77	1,692.99	1,367.00	1,374.48	1,383.23
25	Capital cost – finally admitted by CERC	(Rs. Crore)	5,258.07	5,502.15	8,857.63	9,078.95	9,409.06	9,850.49

26	Capacity Charges/ Annual Fixed Cost (AFC)	(Rs. Crore)	1,021.72	1,067.71	1,866.76	1,857.81	1,889.11	1,934.83
27	(a) Return on equity – post tax (admitted by CERC upto 2009) and Pre Tax post 2009							
28	Absolute value	(Rs. Crore)	310.83	326.13	525.03	511.56	530.16	555.03
29	Rate	(%)	19.71	19.76	19.76	19.76	18.78	18.78
30	(b) interest on Loan							
31	Absolute value	(Rs. Crore)	249.53	258.11	424.13	420.16	404.68	391.12
32	Rate – Weighted Average Rate	(%)	6.90	7.18	7.29	7.32	7.35	7.34
33	(c) Depreciation (finally allowed by CERC)							
34	Absolute value	(Rs. Crore)	245.84	257.66	447.96	459.16	475.85	498.18
35	AAD							
36	Rate	(%)	4.68	4.68	5.06	5.06	5.06	5.06
37	(d) Interest on working Capital							
38	Absolute value	(Rs. Crore)	82.25	84.01	206.54	164.72	165.62	166.68
39	Rate	(%)	12.60	12.60	12.20	12.05	12.05	12.05
40	(e) Operation and maintenance cost (finally admitted by CERC)							
41	Absolute value	(Rs. Crore)	145.49	162.67	283.97	302.20	312.79	323.82
42	Rate	(%)						
43	(f) Compensation Allowances	(Rs. Crore)	Not Applicable					
44	(g) Special Allowance	(Rs. Crore)						
45	h) Supplementary Tariff - Emission Control	(Rs. Crore)						
46	Absolute value	(Rs. Crore)						
47	Rate	(%)						
48	i) Ash Utilisation Expenses	(Rs. Crore)				-	-	-
49	AFC	(Rs./ kWh)	2.22	2.32	2.03	2.02	2.05	2.10
50	Energy Charge	(Rs./kWh)	3.20	3.89	3.89	3.43	3.15	3.67
51	Supplemental Energy Charges - Emission Control	(Rs./kWh)	Not Applicable					
52	Total tariff	(Rs. kWh)	5.42	6.21	5.92	5.45	5.20	5.77
53	Revenue realisation before tax	(Rs. Crore)						
54	Revenue realisation after tax	(Rs. Crore)						
55	Profit/ loss	(Rs. Crore)	(147.80)		152.15	477.65	451.90	425.70
56	DSM Generation	(MU)	(19.17)		(106.87)	(55.53)	(20.10)	(46.53)
57	DSM Rate	(Rs/kWh)						
58	Revenue from DSM	(Rs. Crore)	(16.65)		7.07	17.06	7.91	17.22

59	Compensation received for operation below NAPAF	(Rs. Crore)	8.07	16.97		9.48	3.76	19.96
60	Part load Compensation received from beneficiriaes	(Rs. Crore)	8.07	16.97		9.38	3.61	18.62
61	Amount received from SCED	(Rs. Crore)	-	-		2.12	2.36	2.24

Tariff related data for 2017-18 to 2021-22 is as Petition filed before CERC
** GCV of coal as received minus 85 kCal/Kg
^ Additional data related to Loading factor (%) submitted
DSM Revenue (-)Received / (+) Paid

Annexure-XXII

DETAILS OF EMISSION CONTROL SYSTEM :

Generating company: NTPC Ltd
Name of Generating station: Solapur Super Thermal Power Station
Installed Capacity (MW) : 1320 MW

Type of Emission Control System: Wet type 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	1165.48	1783.35	817.20	3586.26	5081.30
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	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										566.40
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										42.93
1.3	IEDC	Rs. Crore										16.99
1.4	Others. Pls specify	Rs. Crore										
1.4	Completed Cost as per Investment Approval	Rs. Crore										626.32

Annexure- XXIII

DETAILS OF REAGENT USED FOR EMISSION CONTROL

Generating company: NTPC Ltd
Name of Generating station: Solapur Super Thermal Power Station
Installed Capacity (MW) : 1320 MW

Reagent Type: Limestone
Type of Emission Control System: Wet type 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	1165.48	1783.35	817.20	3586.26	5081.30
12	Fuel Type (coal/lignite)		Coal				
13	Sulphur content of Fuel	%	0.66	0.65	0.69	0.49	0.85
14	Gross SHR (Actual)	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				
17	Weigthed Average Gross GCV of Fuel Received	kCal/kg	As per Annexure I				

NA= Not Applicable