

**BEFORE THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION**  
**NEW DELHI**

**PETITION NO.....**

**IN THE MATTER OF** : Petition Under Section 62 and 79 (1) (a) of the Electricity Act, 2003 read with Chapter-V of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Chapter-3, Regulation-9 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for approval of tariff of **Talcher Thermal Power Station (460 MW) for the period from 01.04.2019 to 31.03.2024.**

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**AND**  
**IN THE MATTER OF**

Petitioner: : NTPC Ltd.  
NTPC Bhawan  
Core-7, Scope Complex  
7, Institutional Area, Lodhi Road  
New Delhi-110 003.

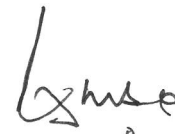
Respondents 1. GRIDCO Ltd.  
24, Janpath,  
Bhubaneswar  
Odisha – 751007





The Petitioner humbly states that:

- 1) The Petitioner herein NTPC Ltd., is a Government Company within the meaning of the Companies Act, 2013. Further, it is a 'Generating Company' as defined under Section 2(28) of the Electricity Act, 2003.
- 2) The Petitioner is having power stations/ projects at different regions and places in the country. Talcher Thermal Power Station (460MW) (hereinafter referred to as TTPS ) is one such station located in the State of Odisha. The power generated from TTPS is being supplied to the respondent herein mentioned above.
- 3) Section 62 of Electricity Act, 2003 provides for determination of tariff by the Appropriate Commission for supply of electricity by a generating company. The Hon'ble Commission, under Section 79(1)(a) of Electricity Act, 2003, is vested with the jurisdiction to regulate the tariff of the Generating Companies owned or controlled by the Central Government.
- 4) The Hon'ble Commission has notified the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2019 (hereinafter 'Tariff Regulations 2019') which came into force from 01.04.2019, specifying the terms & conditions and methodology of tariff determination under Section 62 & 79 of the Electricity Act, 2003.
- 5) Regulation 9(2) of Tariff Regulations 2019 provides as follows:  
*"(2) In case of an existing generating station or unit thereof, or transmission system or element thereof, the application shall be made by the generating company or the transmission licensee, as the case may be, by 31.10.2019, based on admitted capital cost including additional capital expenditure already admitted and incurred up to 31.3.2019 (either based on actual or projected additional capital expenditure) and estimated additional capital expenditure for the respective years of the tariff period 2019-24 along with the true up petition for the period 2014-19 in accordance with the CERC (Terms and Conditions of Tariff) Regulations, 2014."*



In terms of above, the Petitioner is filing the present petition for determination of tariff for TTPS for the period from 01.04.2019 to 31.03.2024 as per the Tariff Regulations 2019.

- 6) The tariff of the TTPS for the tariff period 1.4.2014 to 31.3.2019 was determined by the Hon'ble Commission vide its order dated 26.09.2016 in Petition No. 334/GT/2014 in accordance with the CERC (Terms & Conditions of Tariff) Regulations 2014. The Petitioner thereafter has filed an Appeal (being No. 12 of 2018 ) in Appellate Tribunal of Electricity on certain aspects of the order dated 26.09.2016. The appeal is under consideration of the Hon'ble Appellate Tribunal of Electricity. The petitioner has filed a separate true up petition for the period 01.04.2014 to 31.03.2019 for revision of tariff in line with the applicable provisions of Tariff Regulations 2014.
- 7) The Hon'ble Commission vide order dated 26.09.2016 in Petition no 334/GT/2016 had allowed a capital cost of Rs 1096.20 Cr. as on 31.03.2019 based on the admitted projected capital expenditure for the 2014-19 period. However, the actual closing capital cost as on 31.03.2019 has been worked out in the aforesaid true-up petition as Rs 1114.98 Crs based on the actual expenditure after trueing up exercise for the period 2014-19. Accordingly, the Petitioner has adjusted an amount of Rs.(+)1877.89 Cr in the admitted capital cost as on 31.03.2019 and the opening capital cost as on 01.04.2019 has been considered as Rs 1114.98 Cr. in the instant petition. The Hon'ble Commission may be pleased to adopt this adjustment in the admitted capital cost as on 31.3.2019 and determine the tariff in the present petition for the period 2019-24. Similarly Opening Equity and Opening loan as on 01.04.2019 has been considered by petitioner based on true-up petition filed for 2014-19 period, Hon'ble Commission may be pleased to consider the same while determining tariff for 2019-24 period.
- 8) The capital cost claimed in the instant petition is based on the opening capital cost as on 01.04.2019 considered as above and additional capital expenditures for the period 2019-24 have been projected based on the Regulation 25 and 26 of the Tariff Regulations, 2019.

- 9) The Petitioner further respectfully submits that as per Regulation 35(1)(6) of the Tariff Regulations 2019, the water charges, security expenses and capital spares consumed for thermal generating stations are to be allowed separately. The details in respect of water charges such as type of cooling water system, water consumption, rate of water charges as applicable for 2018-19 have been furnished below. In line with gazette notification dtd 24.09.2016 license fee/water rate for water consumption is to be escalated @10% per annum w.e.f from 01.04.2017 (Latest water charges rate notification attached at **Annexure-I**). Accordingly, water charges may be allowed in tariff period 2019-24. In accordance with provision of the Regulations, the petitioner shall be furnishing the details of actual for the relevant year at the time of truing up and the same shall be subject to retrospective adjustment.

**Details of water charges 2018-19**

Description	Remarks
Type of Plant	Thermal Power Plant
Type of cooling water system	Closed Cycle.
Consumption of Water	40338 Cum/day (Based on agreed quantity)
Rate of Water charges	Rs 5.40/ cum
Total Water Charges	Rs 795.15 Lakh

- 10) Similarly, the Petitioner is claiming the security expenses based on the estimated expenses for the period 2019-24. The actuals for the relevant year shall be furnished at the time of truing up. In respect of capital spares consumption, it is submitted that the same shall be claimed at the time of true-up in terms of the proviso to the Regulation 35 (1)(6) based on actual consumption of spares during the period 2019-24
- 11) The present petition is filed on the basis of norms specified in the Tariff Regulations 2019. It is submitted that the petitioner is in the process of installing the Emission Control Systems (ECS) in its various stations in compliance of the Revised Emission Standards as notified by MOEF vide notification dated 07.12.2015 as amended. Completion of these schemes in compliance of revised emission norms will effect the station APC, Heat Rate O&M expenses etc. In addition the availability of the unit/ station would be also effected

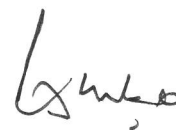
due to shutdown of the units for installation of ECS. The petitioner would be filing the details of the same in case any ECS system is installed at TTPS in a separate petition in terms of the Regulation 29 of Tariff Regulations 2019. The tariff of the instant petition would undergo changes consequent to the the order of the Hon'ble Commission in the said ECS petition.

- 12) A notification dated 25.01.2016 has been issued by Government of India, Ministry of Environment, Forest & Climate Change (MOEFCC) under the statutory provisions of Environment (Protection) Act 1986. The said notification of MOEFCC prescribed for bearing the transportation cost of Fly Ash generated at power stations. In this regard, Petitioner filed a petition, being no. 172/MP/2016, before the Hon'ble Commission seeking reimbursement of the additional expenditure for Fly Ash Transportation directly from the beneficiaries as the same was in the nature of statutory expense. Hon'ble Commission vide order dated 05.11.2018 disposed of the said petition and directed as follows :

*"31. Accordingly, we in exercise of the regulatory power hold that the actual additional expenditure incurred by the Petitioner towards transportation of ash in terms of the MOEFCC Notification is admissible under "Change in Law" as additional O&M expenses. However, the admissibility of the claims is subject to prudence check of the following conditions on case to case basis for each station:*

- a) Award of fly ash transportation contract through a transparent competitive bidding procedure. Alternatively, the schedule rates of the respective State Governments, as applicable for transportation of fly ash.*
- b) Details of the actual additional expenditure incurred on Ash transportation after 25.1.2016, duly certified by auditors.*
- c) Details of the Revenue generated from sale of fly ash/ fly ash products and the expenditure incurred towards Ash utilisation up to 25.1.2016 and from 25.1.2016 to till date, separately.*
- d) Revenue generated from fly Ash sales maintained in a separate account as per the MoEF notification.*

*32. The Petitioner is granted liberty to approach the Commission at the time of revision of tariff of the generating stations based on trueing -up exercise for the period 2014-19 in terms of Regulation 8 of the 2014 Tariff Regulations along with all details / information, duly certified by auditor."*



Petitioner has claimed the additional expenditure towards ash transportation charges for the period 2016-17, 2017-18 and 2018-19 in the true-up petition filed vide affidavit dated 25.10.2019 in respect of the instant station.

The expenditure towards the ash transportation charges are recurring in nature. The Petitioner has been incurring ash transportation expenditure in some of its stations in the current tariff period also. In case the same is permitted to be recovered at the end of the tariff period 2019-24, there will be additional liability on the beneficiary on account of the interest payment for the period till the time the true-up petitions for the period 2019-24 is decided. To avoid the interest payment liability of the beneficiaries it is prayed that the petitioner may be allowed to recover/ pass on the ash transportation charges after adjusting the revenue earned from sale of ash at the end of each quarter of financial year subject to true-up at the end of the period.

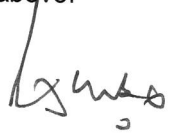
- 13) The Petitioner has already paid the requisite filing fee vide UTR No. CMS 1106438370 on 22.04.2019 for the year 2019-20 and the details of the same have been duly furnished to the Hon'ble Commission vide our letter dtd.25.04.2019. For the subsequent years, the fees shall be paid as per the provisions of the CERC (Payment of Fees) Regulations, 2012 as amended. Further Regulation 70 (1) of Tariff Regulations 2019 provides that the application fee and publication expenses may be allowed to be recovered directly from the beneficiaries at the discretion of the Hon'ble Commission. Accordingly, it is prayed that Hon'ble Commission may be pleased to allow recovery of filing fee and publication fee directly from the beneficiaries.
- 14) The petitioner has accordingly calculated the tariff for 2019-24 period based on the above and the same is enclosed as **Appendix-I** to this petition.
- 15) The Petitioner has served a copy of the Petition to the Respondents mentioned herein above and has posted the Petition on the company website i.e. [www.ntpc.co.in](http://www.ntpc.co.in)

- 16) It is submitted that the petitioner is filing this tariff petition subject to the outcome of its various appeals/ petitions pending before different courts. Besides, the petitions filed by NTPC for determination of capital base as on 31.3.2019 through true-up exercise are pending before the Hon'ble Commission and would take some time. The Petitioner, therefore, reserves its right to amend the tariff petition as per the outcome in such appeals/ petitions, if required.

### Prayers

In the light of the above submissions, the Petitioner prays that the Hon'ble Commission may be pleased to:

- i) Approve tariff of Talcher Thermal Power Station for the tariff period 01.04.2019 to 31.03.2024.
- ii) Allow the recovery of filing fees as & when paid to the Hon'ble Commission and publication expenses from the beneficiaries.
- iii) Allow reimbursement of Ash Transportation Charges directly from the beneficiaries quarterly on net basis.
- iv) Pass any other order as it may deem fit in the circumstances mentioned above.



**Petitioner**

New Delhi  
Date: 24.01.2020

BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION

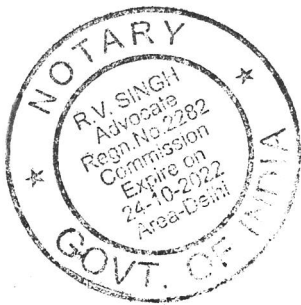
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Petitioner NTPC Ltd.  
NTPC Bhawan  
Core-7, Scope Complex  
7, Institutional Area, Lodhi Road  
New Delhi-110 003

Respondents: 1 GRIDCO Ltd.  
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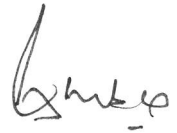


*Signature*

**Affidavit**

I, Rohit Chhabra, son of Sh. S M Chhabra, aged about 54 years, having office at NTPC Bhavan, SCOPE Complex, Lodhi Road, New Delhi do solemnly affirm and state as under:

1. That I am the Addl. General Manager (Commercial) in Petitioner Corporation NTPC Ltd. and am well conversant with the facts of the case and am competent to swear the present affidavit.
2. That I have read the contents of the accompanying Petition being filed by NTPC and have understood the same.
3. That the contents of the accompanying Petition being filed by NTPC are based on information available with the Petitioner in the normal course of business and believed by the deponent to be true.

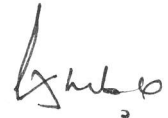


**Deponent**

**Verification**

I, the deponent above named, do hereby verify that the contents of the above affidavit are true to the best of my knowledge, no part of it is false and nothing material has been concealed therefrom.

Verified at New Delhi on this day 24<sup>th</sup> January 2020.



**Deponent**



Solemnly affirmed before me, read over & explained to the deponent.

Notary Public, DELHI



**TARIFF FILING FORMS (THERMAL)**

**FOR DETERMINATION OF TARIFF**

**FOR**

**Talcher Thermal power Station**

**(From 01.04.2019 to 31.03.2024)**

**PART-I**

**ANNEXURE-I**

**Checklist of Main Tariff Forms and other information for tariff filing for Thermal Stations**

Form No.	Title of Tariff Filing Forms (Thermal)	Tick
FORM- 1	Summary of Tariff	✓
FORM -1 (I)	Statement showing claimed capital cost	✓
FORM -1 (II)	Statement showing Return on Equity Form-I ( II A ) & Form-I (IIB)	✓
FORM-2	Plant Characteristics	✓
FORM-3	Normative parameters considered for tariff computations	✓
FORM-3A**	Statement showing O&M Expenses	✓
FORM-3B**	Statement of Special Allowance	NA
FORM- 4	Details of Foreign loans	NA
FORM- 4A	Details of Foreign Equity	NA
FORM-5	Abstract of Admitted Capital Cost for the existing Projects	✓
FORM-5A**	Abstract of Claimed Capital Cost for the existing Projects	✓
FORM- 6	Financial Package upto COD	NA
FORM- 7	Details of Project Specific Loans	NA
FORM- 8	Details of Allocation of corporate loans to various projects	✓
FORM-9A**	Summary of Statement of Additional Capitalisation claimed during the period	✓
FORM-9 ##	Statement of Additional Capitalisation after COD	✓
FORM- 10	Financing of Additional Capitalisation	✓
FORM- 11	Calculation of Depreciation on original project cost	NA
FORM- 12	Statement of Depreciation	✓
FORM- 13	Calculation of Weighted Average Rate of Interest on Actual Loans	✓
FORM- 14	Draw Down Schedule for Calculation of IDC & Financing Charges	✓
FORM- 15	Details of Fuel for Computation of Energy Charges	✓
FORM- 15A	Details of Secondary Fuel for Computation of Energy Charges	✓
FORM- 15B	Computation of Energy Charges	✓
FORM- 16	Details of Limestone for Computation of Energy Charge Rate	NA
FORM-17	Details of Capital Spares	***
FORM- 18	Non-Tariff Income	***
FORM-19	Details of Water Charges	***
FORM-20	Details of Statutory Charges	***

## Provided yearwise for the period 2019-24

\*\* Additional Forms

\*\*\* Shall be provided at the time of true up

PART-I

**List of Supporting Forms / documents for tariff filing for Thermal Stations**

Form No.	Title of Tariff Filing Forms (Thermal)	Tick
FORM-A	Abstract of Capital Cost Estimates	NA
FORM-B	Break-up of Capital Cost for Coal/Lignite based projects	NA
FORM-C	Break-up of Capital Cost for Gas/Liquid fuel based Projects	NA
FORM-D	Break-up of Construction/Supply/Service packages	NA
FORM-E	Details of variables , parameters , optional package etc. for New Project	NA
FORM-F	Details of cost over run	NA
FORM-G	Details of time over run	NA
FORM -H	Statement of Additional Capitalisation during end of the useful life	✓
FORM -I	Details of Assets De-capitalised during the period	***
FORM -J	Reconciliation of Capitalisation claimed vis-à-vis books of accounts	***
FORM -K	Statement showing details of items/assets/works claimed under Exclusions	***
FORM-L	Statement of Capital cost	✓
FORM-M	Statement of Capital Woks in Progress	✓
FORM-N	Calculation of Interest on Normative Loan	✓
FORM-O	Calculation of Interest on Working Capital	✓
FORM-P	Incidental Expenditure up to SCOD and up to Actual COD	NA
FORM-Q	Expenditure under different packages up to SCOD and up to Actual COD	NA
FORM-R	Actual cash expenditure	NA
FORM-S	Statement of Liability flow	✓
FORM-T	Summary of issues involved in the petition	✓

\*\*\* Shall be provided at the time of true up

<b>List of supporting documents for tariff filing for Thermal Stations</b>		
<b>S. No.</b>	<b>Information / Document</b>	<b>Tick</b>
1	Certificate of incorporation, Certificate for Commencement of Business, Memorandum of Association, & Articles of Association ( For New Station setup by a company making tariff application for the first time to CERC)	NA
2	A. Station wise and Corporate audited Balance Sheet and Profit & Loss Accounts with all the Schedules & annexures on COD of the Station for the new station & for the relevant years.	*
	B. Station wise and Corporate audited Balance Sheet and Profit & Loss Accounts with all the Schedules & annexures for the existing station for relevant years.	NA
3	Copies of relevant loan Agreements	NA
4	Copies of the approval of Competent Authority for the Capital Cost and Financial package.	NA
5	Copies of the Equity participation agreements and necessary approval for the foreign equity.	NA
6	Copies of the BPSA/PPA with the beneficiaries, if any	NA
7	Detailed note giving reasons of cost and time over run, if applicable.	NA
	List of supporting documents to be submitted:	
	a. Detailed Project Report	
	b. CPM Analysis	
	c. PERT Chart and Bar Chart	
d. Justification for cost and time Overrun		
8	Generating Company shall submit copy of Cost Audit Report along with cost accounting records, cost details, statements, schedules etc. for the Generating Unit wise /stage wise/Station wise/ and subsequently consolidated at Company level as submitted to the Govt. of India for first two years i.e. 2019-20 and 2020-21 at the time of mid-term true-up in 2021-22 and for balance period of tariff period 2019-24 at the time of final true-up in 2024-25. In case of initial tariff filing the latest available Cost Audit Report should be furnished.	*
9	Any other relevant information, (Please specify)	
10	Reconciliation with Balance sheet of any actual additional capitalization and amongst stages of a generating station	*
11	BBMB is maintaining the records as per the relevant applicable Acts. Formats specified herein may not be suitable to the available information with BBMB. BBMB may modify the formats suitably as per available information to them for submission of required information for tariff purpose.	NA
<p>* Information will be provided at true-up.</p> <p>1: Electronic copy of the petition (in words format) and detailed calculation as per these formats (in excel Note format) and any other information submitted has to be uploaded in the e-filing website and shall also be furnished in pen drive/flash drive.</p>		

**Summary of Tariff**

<b>Name of the Petitioner:</b>		<b>NTPC Limited</b>						
<b>Name of the Generating Station:</b>		<b>Talcher Thermal power Station</b>						
<b>Place (Region/District/State):</b>		<b>Eastern Region/ Angul/ Odisha</b>						
								<b>Amount in Rs. Lakhs</b>
S. No.	Particulars	Unit	Existing 2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
1	2	3	4	5	6	7	8	9
1.1	Depreciation	Rs Lakh	13,325.17	19,000.39	19,605.11	28.42	-	-
1.2	Interest on Loan	Rs Lakh	0.00	-	-	-	-	-
1.3	Return on Equity	Rs Lakh	9,351.30	8,929.80	8,967.66	6,358.23	6,358.23	6,358.23
1.4	Interest on Working Capital	Rs Lakh	3,723.74	3,441.07	3,468.72	3,151.01	3,168.81	3,187.07
1.5	O&M Expenses	Rs Lakh	29,310.45	29260.26	29572.17	29911.25	30277.61	30677.06
1.6	Special Allowance (If applicable)	Rs Lakh	0.00	0.00	0.00	0.00	0.00	0.00
1.7	Compensation Allowance (If applicable – relevant for column 4 only)	Rs. Lakh	0.00	0.00	0.00	0.00	0.00	0.00
1.8	Unserviced depreciation on account of dis-incentive and admissibility of depreciation up to 90 % to be recovered after life of the station ( As per order dtd 08.06.2013 in Pet no 91/2004)	Rs. Lakh				1299.00		
	<b>Total</b>	Rs Lakh	<b>55710.66</b>	<b>60631.53</b>	<b>61613.67</b>	<b>40747.91</b>	<b>39804.64</b>	<b>40222.35</b>
2.1	Landed Fuel Cost (coal/gas/RLNG/ liquid)	Rs/Ton	1898.77					
	(%) of Fuel Quantity	(%)	100.00					
2.2	Landed Fuel Cost Imported Coal as per FSA approved by beneficiaries		Nil					
	(%) of Fuel Quantity		0.00					
2.3	Landed Fuel Cost ( coal/gas /RLNG/liquid) other than FSA	Rs/Ton	NA					
	(%) of Fuel Quantity	(%)						
2.4	Landed Fuel Cost Imported Coal other than FSA.		NA					
	(%) of Fuel Quantity							
2.5	Secondary fuel oil cost	Rs/Unit	0.027					
	Energy Charge Rate ex-bus (Paise/kWh)	Rs/Unit	1.787					



(Petitioner)



Name of the Petitioner: NTPC Limited  
Name of the Generating Station: Talcher Thermal power Station

Amount in Rs. Lakhs

**Statement showing claimed capital cost – (A+B)**

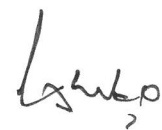
S. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
1	2	3	4	5	6	7
1	Opening Capital Cost	1,11,498.76	1,12,779.42	1,12,842.57	1,12,842.57	1,12,842.57
2	Add: Addition during the year/period	1,280.66	63.15	-	-	-
3	Less: De-capitalisation during the year/period	-	-	-	-	-
4	Less: Reversal during the year / period	-	-	-	-	-
5	Add: Discharges during the year/ period	-	-	-	-	-
6	Closing Capital Cost	1,12,779.42	1,12,842.57	1,12,842.57	1,12,842.57	1,12,842.57
7	<b>Average Capital Cost</b>	<b>1,12,139.09</b>	<b>1,12,811.00</b>	<b>1,12,842.57</b>	<b>1,12,842.57</b>	<b>1,12,842.57</b>

**Statement showing claimed capital cost eligible for RoE at normal rate (A)**

S. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
1	2	3	4	5	6	7
1	Opening Capital Cost	111498.76	112779.42	112842.57	112842.57	112842.57
2	Add: Addition during the year / period	1280.66	63.15	0.00	0.00	0.00
3	Less: De-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
4	Less: Reversal during the year / period	0.00	0.00	0.00	0.00	0.00
5	Add: Discharges during the year / period	0.00	0.00	0.00	0.00	0.00
6	Closing Capital Cost	112779.42	112842.57	112842.57	112842.57	112842.57
7	<b>Average Capital Cost</b>	<b>112139.09</b>	<b>112811.00</b>	<b>112842.57</b>	<b>112842.57</b>	<b>112842.57</b>

**Statement showing claimed capital cost eligible for RoE at weighted average rate of interest on actual loan portfolio (B)**

S. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
1	2	3	4	5	6	7
1	Opening Capital Cost	0.00	0.00	0.00	0.00	0.00
2	Add: Addition during the year / period	0.00	0.00	0.00	0.00	0.00
3	Less: De-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
4	Less: Reversal during the year / period	0.00	0.00	0.00	0.00	0.00
5	Add: Discharges during the year / period	0.00	0.00	0.00	0.00	0.00
6	Closing Capital Cost	0.00	0.00	0.00	0.00	0.00
7	<b>Average Capital Cost</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>



(Petitioner)



15

Name of the Petitioner: NTPC Limited

Name of the Generating Station: Talcher Thermal power Station

**Statement showing Return on Equity at Normal Rate**

S. No.	Particulars	Amount in Rs. Lakhs				
		2019-20	2020-21	2021-22	2022-23	2023-24
1	2	3	4	5	6	7
	<b>Return on Equity</b>					
1	Gross Opening Equity (Normal)	47,352.38	47,736.58	47,755.52	47,755.52	47755.52075
2	Less: Adjustment in Opening Equity	-				
3	Adjustment during the year		0.00	13902.75	13902.75	13902.75
4	Net Opening Equity (Normal)	47,352.38	47,736.58	33,852.77	33,852.77	33,852.77
5	Add: Increase in equity due to addition during the year / period	384.20	18.95	0.00	0.00	0.00
7	Less: Decrease due to De-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
8	Less: Decrease due to reversal during the year / period	0.00	0.00	0.00	0.00	0.00
9	Add: Increase due to discharges during the year / period	0.00	0.00	0.00	0.00	0.00
10	Net closing Equity (Normal)	47,736.58	47,755.52	33,852.77	33,852.77	33,852.77
11	Average Equity (Normal)	47,544.48	47,746.05	33,852.77	33,852.77	33,852.77
12	Rate of ROE (%)	18.782	18.782	18.782	18.782	18.782
13	Total ROE	<b>8,929.80</b>	<b>8,967.66</b>	<b>6,358.23</b>	<b>6,358.23</b>	<b>6,358.23</b>

  
 (Petitioner)



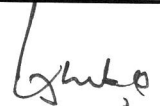
**Name of the Petitioner:** NTPC Limited

**Name of the Generating Station:** Talcher Thermal power Station

**Statement showing Return on Equity at weighted average rate of interest**

Amount in Rs. Lakhs

S. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
1	2	3	4	5	6	7
<b>Return on Equity (beyond the original scope of work excluding additional capitalization due to Change in Law)</b>						
1	Gross Opening Equity (Normal)	0.00	0.00	0.00	0.00	0.00
2	Less: Adjustment in Opening Equity	0.00	0.00	0.00	0.00	0.00
3	Adjustment during the year	0.00	0.00	0.00	0.00	0.00
4	Net Opening Equity (Normal)	0.00	0.00	0.00	0.00	0.00
5	Add: Increase in equity due to addition during the year / period	0.00	0.00	0.00	0.00	0.00
7	Less: Decrease due to De-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
8	Less: Decrease due to reversal during the year / period	0.00	0.00	0.00	0.00	0.00
9	Add: Increase due to discharges during the year / period	0.00	0.00	0.00	0.00	0.00
10	Net closing Equity (Normal)	0.00	0.00	0.00	0.00	0.00
11	Average Equity (Normal)	0.00	0.00	0.00	0.00	0.00
12	Rate of ROE (%)	9.981	9.981	9.981	9.981	9.981
13	Total ROE	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

  
(Petitioner)

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## Plant Characteristics

Name of the Petitioner							NTPC Ltd.						
Name of the Generating Station							TTPS						
Unit(s)/Block(s)/Parameters							Unit-I	Unit-II	Unit-III	Unit-IV	Unit-V	Unit-VI	
Installed Capacity ( MW)							60	60	60	60	110	110	
Schedule COD as per Investment Approval							NA				NA		
Date of Taken Over							03.06.95				03.06.95		
Pit Head or Non Pit Head							Pit Head				Pit Head		
Name of the Boiler Manufacture							Babcock Wilcox, USA				BHEL, India		
Name of Turbine Generator Manufacture							GE, USA				BHEL, India		
Main Steams Pressure at Turbine inlet (kg/Cm <sup>2</sup> ) abs.							Not applicable						
Main Steam Temperature at Turbine inlet (°C)													
Reheat Steam Pressure at Turbine inlet (kg/Cm <sup>2</sup> )													
Reheat Steam Temperature at Turbine inlet (°C)													
Main Steam flow at Turbine inlet under MCR condition (tons /hr) <sup>2</sup>													
Main Steam flow at Turbine inlet under VVO condition (tons /hr) <sup>2</sup>													
Unit Gross electrical output under MCR /Rated condition (MW)													
Unit Gross electrical output under VVO condition (MW)													
Guaranteed Design Gross Turbine Cycle Heat Rate (kCal/kWh)													
Conditions on which design turbine cycle heat rate guaranteed												Not applicable	
% MCR													
% Makeup Water Consumption													
Design Capacity of Make up Water System													
Design Capacity of Inlet Cooling System													
Design Cooling Water Temperature (°C)													
Back Pressure													
Steam flow at super heater outlet under BMCR condition (tons/hr)													
Steam Pressure at super heater outlet under													
BMCR condition) kg/Cm <sup>2</sup>													
Steam Temperature at super heater outlet under													
BMCR condition (°C)													
Steam Temperature at Reheater outlet at BMCR condition (°C)													
Design / Guaranteed Boiler Efficiency (%)													
Design Fuel (Domestic coal only)													
Type of Cooling Tower							Induced Draft Type		Induced Draft Type				
Type of cooling system							closed ckt cooling		closed ckt cooling				
Type of Boiler Feed Pump							Motor Driven - 2 nos.		Motor Driven - 2 nos.				
Fuel Details													
-Primary Fuel							Coal		Coal				
-Secondary Fuel							LDO		HFO				
-Alternate Fuels							NA		NA				
Special Features/Site Specific Features							Cross country conveyor belts & Railway wagons. Mine back-filling for Ash Utilization.						
Special Technological Features							No reheat in stage-I units, single cylinder turbine.						
Environmental Regulation related features							ESP						
Any other special features													


  
Petitioner



**Normative parameters considered for tariff computations**

<b>Name of the Petitioner:</b>	NTPC Limited
<b>Name of the Generating Station:</b>	Talcher Thermal power Station

Particulars	Unit	(Year Ending March)					
		Existing 2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
1	2	3	4	5	6	7	8
Base Rate of Return on Equity \$\$	%	15.50	15.50	15.50	15.50	15.50	15.50
Base Rate of Return on Equity on Add. Capitalization** \$\$	%	-	7.009	7.102	7.219	7.371	7.645
Effective Tax Rate	%	21.4588	17.4720	17.4720	17.4720	17.4720	17.4720
Target Availability	%	85.00	85.00				
<b>In High Demand Season</b>	%	-	-	85.00	85.00	85.00	85.00
Peak Hours	%	-	-	85.00	85.00	85.00	85.00
Off-Peak Hours	%	-	-	85.00	85.00	85.00	85.00
<b>In Low Demand Season</b>	%	-	-	85.00	85.00	85.00	85.00
Peak Hours	%	-	-	85.00	85.00	85.00	85.00
Off-Peak Hours	%	-	-	85.00	85.00	85.00	85.00
Auxiliary Energy Consumption	%	10.50	10.50	10.50	10.50	10.50	10.50
Gross Station Heat Rate	kCal/kWh	2850.00	2830.00	2830.00	2830.00	2830.00	2830.00
Specific Fuel Oil Consumption	ml/kWh	0.50	0.50	0.50	0.50	0.50	0.50
Cost of Coal/Lignite for WC1	in Days	45	40	40	40	40	40
Cost of Main Secondary Fuel Oil for WC1	in Months	2	2	2	2	2	2
Fuel Cost for WC2	in Months						
Liquid Fuel Stock for WC2	in Months						
O&M Expenses	Rs lakh/MW	55.09	56.34	56.34	56.34	56.34	56.34
Maintenance Spares for WC	% of O&M	20.00	20.00	20.00	20.00	20.00	20.00
Receivables for WC	in Days	60	45	45	45	45	45
Storage capacity of Primary fuel	Lakh MT	8.9					
SBI 1 Year MCLR plus 350 basis point <sup>3</sup>	%	13.50	12.05	12.05	12.05	12.05	12.05
Blending ratio of domestic coal/imported coal							

\*\* Rate of Return on Add - cap beyond original scope and excluding Change in Law

\$\$ Additional RoE due to better ramp rate would be claimed at the time of true-up or as per guidelines to be issued

  
Petitioner



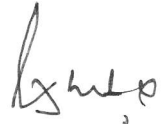
**Calculation of O&M Expenses**

<b>Name of the Company :</b>	<b>NTPC Limited</b>
<b>Name of the Power Station :</b>	<b>Talcher Thermal power Station</b>

		Amount in Rs. Lakhs				
S.No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
1	2	3	4	5	7	8
1	<b>O&amp;M expenses under Reg.35(1)</b>					
1a	Normative	25916.40	25916.40	25916.40	25916.40	25916.40
2	<b>O&amp;M expenses under Reg.35(6)</b>					
2a	Water Charges *	863.68	927.57	993.83	1060.08	1129.42
2b	Security expenses*	2480.18	2728.20	3001.02	3301.12	3631.24
2c	Capital Spares**	0.00	0.00	0.00	0.00	0.00
3	O&M expenses-Ash Transportation**	0.00	0.00	0.00	0.00	0.00
	<b>Total O&amp;M Expenses</b>	<b>29260.26</b>	<b>29572.17</b>	<b>29911.25</b>	<b>30277.61</b>	<b>30677.06</b>

\*Subject to true-up.

\*\* Shall be provided at the time of truing up



Petitioner

4/

**KFW ESP Loan**

Particulars												Total
Source of Loan	KWV ESP II	KWV ESP III	KWV ESP IV	KWV ESP V	KWV ESP VI	KWV ESP VIII	KWV ESP IX	KWV ESP XI	KWV ESP XIV	KWV ESP XV		<b>KWV ESP Loan #</b>
Drawal	70,00,000.00	50,00,000.00	50,00,000.00	50,00,000.00	50,00,000.00	1,00,00,000.00	1,00,00,000.00	50,00,000.00	50,00,000.00	50,00,000.00		95000000.00
Currency	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR		EUR
Amount of loan sanctioned												
Amount of Gross Loan drawn upto												95000000.00
Interest Type	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed		Fixed
Fixed Interest Rate, if applicable	3.19%	3.19%	3.19%	3.19%	3.19%	3.19%	3.19%	3.19%	3.19%	3.19%		3.19%
Base Rate, if floating interest	-	-	-	-	-	-	-	-	-	-		-
Margin, if floating interest rate	-	-	-	-	-	-	-	-	-	-		-
Are there any Caps / Floor	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO		NO
If above is Yes, specify Caps / Floor	-	-	-	-	-	-	-	-	-	-		-
Moratorium Period	4 Years 2½ Months	4 Years 2½ Months	4 Years 2½ Months	4 Years 2½ Months	4 Years 2½ Months	4 Years 2½ Months	4 Years 2½ Months	4 Years 2½ Months	4 Years 2½ Months	4 Years 2½ Months		4 Years 2½ Months
Moratorium effective from												27.06.13
Repayment period	Repayment in 8 Years (16 semi-annual instalments)	Repayment in 8 Years (16 semi-annual instalments)	Repayment in 8 Years (16 semi-annual instalments)	Repayment in 8 Years (16 semi-annual instalments)	Repayment in 8 Years (16 semi-annual instalments)	Repayment in 8 Years (16 semi-annual instalments)	Repayment in 8 Years (16 semi-annual instalments)	Repayment in 8 Years (16 semi-annual instalments)	Repayment in 8 Years (16 semi-annual instalments)	Repayment in 8 Years (16 semi-annual instalments)		Repayment in 8 Years (16 semi-annual instalments)
Repayment effective from	15.09.2017	15.09.2017	15.09.2017	15.09.2017	15.09.2017	15.09.2017	15.09.2017	15.09.2017	15.09.2017	15.09.2017		15.09.2017
Repayment frequency												One time
Repayment installment												59,37,500.00
Base Exchange Rate (31.03.2019)												78.84
Are foreign currency loan hedged												
If above is Yes, specify details	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO		NO
Drawal Date	14.02.14	29.04.14	22.09.14	23.12.14	19.03.15	20.04.15	17.08.15	09.02.16	08.09.16	12.01.17		-
Drawal Exchange Rate	85.01401	83.62076	78.12310	77.32945	66.55000	67.34541	72.34003	76.51337	74.57940	72.25470		
<b>Name of the Projects</b>												%
Anantpur Solar												
Farakka ESP						13.94230%	12.19552%	13.31480%	7.79180%	3.37690%		5.88004%
Korba STPS- ESP	37.34753%	13.62215%	32.39505%	17.38605%	32.61145%	5.12210%	10.57396%	21.68810%	18.80300%	25.92530%		21.30503%
Rihand-I ESP		16.12966%	18.88297%	19.10381%	13.80202%	20.30667%	22.65206%	3.55460%	8.85880%	8.04520%		12.01505%
Singrauli I & II ESP			6.80019%	9.73943%	38.77737%	53.02030%	41.60665%	54.37570%	37.15880%	31.38120%		38.07925%
Talcher STPP-I-ESP	18.91575%						2.82990%					2.95483%
TTPS -II ESP	5.49912%	3.96556%	9.21399%	3.34530%	7.91649%	0.42123%	0.49892%	1.22850%	3.48620%	1.76890%		2.12968%
Unchahar-I ESP			3.96507%		6.16078%	1.81156%	4.83787%	0.36020%				1.55082%
VSTPP I & II ESP	38.23760%	66.28264%	28.74275%	50.42542%	0.73190%	5.37584%	4.80512%	5.47810%	23.90340%	29.50250%		18.08529%
<b>Total</b>	<b>100.00000%</b>	<b>100.00001%</b>	<b>100.00002%</b>	<b>100.00000%</b>	<b>100.00000%</b>	<b>100.00000%</b>	<b>100.00000%</b>	<b>100.00000%</b>	<b>100.00000%</b>	<b>100.00000%</b>		<b>100.00000%</b>

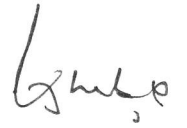
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**Abstract of Admitted Capital Cost for the existing Projects**

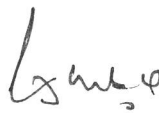
<b>Name of the Company :</b>	NTPC Limited	
<b>Name of the Power Station :</b>	Talcher Thermal power Station	
Last date of order of Commission for the project	<b>Date (DD-MM-YYYY)</b>	26.09.2016
Reference of petition no. in which the above order was passed	<b>Petition no.</b>	334/GT/2016
Following details (whether admitted and /or considered) as on the last date of the period for which tariff is approved, in the above order by the Commission:		
Capital cost (cash basis)	<b>(Rs. in lakh)</b>	109620.87
Amount of un-discharged liabilities included in above (& forming part of admitted capital cost)		
Amount of un-discharged liabilities corresponding to above admitted capital cost (but not forming part of admitted capital cost being allowed on cash basis)		
Gross Normative Debt		62831.86
Cumulative Repayment		62831.86
Net Normative Debt		0
Normative Equity		46789.01
Cumulative Depreciation		84485.24
Freehold land		2327.67



(Petitioner)



**Abstract of Claimed Capital Cost for the existing Projects**

<b>Name of the Company :</b>		<b>NTPC Limited</b>	
<b>Name of the Power Station :</b>		<b>Talcher Thermal power Station</b>	
Reference of Final True-up Tariff Petition		<b>Affidavit dated</b>	
Capital Cost as on 31.03.2019 as per Hon'ble Commission's Order dated 26.09.2016 In Pet. No.334/GT/2016.		<b>Rs. Lakhs</b>	109620.87
Adjustment as per Para (7) of this petition			(+) 1877.89
<b>Following details as considered by the Petitioner as on the last date of the period for which final true-up tariff is claimed:</b>			
Capital cost as on 01.04.2019		<b>(Rs. in lakh)</b>	111498.76
Amount of un-discharged liabilities included in above (& forming part of admitted capital cost)			0
Amount of un-discharged liabilities corresponding to above admitted capital cost (but not forming part of admitted capital cost being allowed on cash basis)			740.57
Gross Normative Debt			64146.38
Cumulative Repayment			64146.38
Net Normative Debt			0.00
Normative Equity			47352.38
Cumulative Depreciation			60892.96
Freehold land			2327.67
			 <b>(Petitioner)</b>

CV

**Statement Giving Details of Project Financed through a Combination of loan  
Form 8**

BP NO 5050000531

TRANCHE NO  
T00001

D0010

Unsecured Loan From SBI-IX		
Source of Loan :	SBI-IX	
Currency :	INR	
Amount of Loan :	30,00,00,00,000	
Total Drawn amount :	13,70,00,00,000	
Date of Drawal:	29.06.2018	
Interest Type :	Floating	
Fixed Interest Rate :	-----	
Base Rate, If Floating Interest	8.25%	
Margin, If Floating Interest :	0.00%	
Are there any Caps/ Floor :	Y/N	
Frequency of Intt. Payment	Monthly	
If Above is yes, specify Caps/ Floor :		
Moratorium Period :	3 Years	
Moratorium effective from :	29.06.2018	
Repayment Period (Inc Moratorium) :	12 Years	
Repayment Frequency :	9 Yearly Installments	
Repayment Type :	AVG	
First Repayment Date :	31.03.2021	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
<b>Project Code</b>	<b>Project Name</b>	<b>Amount</b>
	CC F&A	6,85,00,00,000
	BARH-I	40,00,00,000
	TAPOVAN VISHNUGARH	15,00,00,000
	BONGAIGAON	15,00,00,000
	SOLAPUR	20,00,00,000
	LARA-I	55,00,00,000
	GADARWARA	1,00,00,00,000
	NORTH KARANPURA	60,00,00,000
	DARLIPALLI	45,00,00,000
	TANDA II	60,00,00,000
	RAMMAM	10,00,00,000
	KHARGONE	75,00,00,000
	TELANGANA	75,00,00,000
	TTPS R&M	10,00,00,000
	VINDHYACHAL R&M	10,00,00,000
	FARAKKA R&M	50,00,00,000
	DADRI GAS R&M	45,00,00,000
<b>Total Allocated Amount</b>		<b>13,70,00,00,000.00</b>

*Gupta*

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**Form 8**  
**TRANCHE NO**  
**T00001**

**BP NO 5050000261**

**D00008**

<b>Unsecured Loan From SBI-VII</b>		
Source of Loan :	<b>SBI-VII</b>	
Currency :	INR	
Amount of Loan :	1,00,00,00,00,000	
Total Drawn amount :	5,00,00,00,00,000	
Date of Drawl	0	
Interest Type :	Floating	
Fixed Interest Rate :	-----	
Base Rate, If Floating Interest	D00008-9.30%	
Margin, If Floating Interest :	D00008=	
Are there any Caps/ Floor :	Y/N	
Frequency of Intt. Payment	Monthly	
If Above is yes, specify Caps/ Floor :		
Moratorium Period :	4 Years	
Moratorium effective from :	08.07.2011	
Repayment Period (Inc Moratorium) :	12 Years	
Repayment Frequency :	16 Half Yearly Instalments	
Repayment Type :	AVG	
First Repayment Date :	30.09.2015	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
<b>Project Code</b>	<b>Project Name</b>	<b>Amount</b>
	KOLDAM	35,00,00,000
	SOLAPUR	30,00,00,000
	VINDHYACHAL-V	38,00,00,000
	TAPOVAN	18,00,00,000
	BARH-I	57,00,00,000
	MOUDA-II	26,00,00,000
	RIHAND III	32,00,00,000
	KUDGI-I	38,00,00,000
	DADRI SOLAR PV	19,00,00,000
	A&N SOLAR PV	20,00,00,000
	LARA-I	20,00,00,000
	BONGAIGAON	34,00,00,000
	FARAKKA-III	27,00,00,000
	SIMHADRI-II	20,00,00,000
	SINGRAULI-R&M	10,00,00,000
	TTPS-R&M	15,00,00,000
	KAWAS-R&M	15,00,00,000
	GANDHAR-R&M	8,00,00,000
	TSTPP-R&M	10,00,00,000
	RAMAGUNDAM-R&M	8,00,00,000
	BADARPUR-R&M	20,00,00,000
<b>Total Allocated Amount</b>		<b>5,00,00,00,000.00</b>

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**Form 8- Domestic Bonds- Details  
of Allocation of corporate loans  
to various projects during the FY  
2014-19**

<b>Particulars</b>	<b>54</b>
Source of Loan <sup>1</sup>	BONDS
Currency <sup>2</sup>	INR
Amount of Loan sanctioned	<b>1030683</b>
Interest Type <sup>6</sup>	Fixed
Fixed Interest Rate, if applicable	8.49%
Base Rate, if Floating Interest <sup>7</sup>	N/A
Margin, if Floating Interest <sup>8</sup>	N/A
Are there any Caps/Floor <sup>9</sup>	No
If above is yes,specify caps/floor	N/A
Moratorium Period <sup>10</sup>	8
Moratorium effective from #	25-03-2015
Repayment Period <sup>11</sup>	Installments Due on 25/03/2023, 25/03/2024 & 25/03/2025
Repayment effective from	25-03-2023
Repayment Frequency <sup>12</sup>	Installments Due on 25/03/2023, 25/03/2024 & 25/03/2025
Repayment Instalment <sup>13,14</sup>	Installments 1st - 206,136.61 2nd - 412,273.22 3rd - 412,273.22
Base Exchange Rate <sup>16</sup>	N/A
Door to Door Maturity	10
<b>Name of the Projects</b>	
Anantpur Solar	5,600
ANTA	-
AURAIYA	-
Auraiya R & M	-
Badarpur R&M	2,300
BARH I	74,883
BARH II	63,500
Bhadla Solar	-
BONGAIGAON	54,000
Chatti Bariatu CMB	8,100
Dadri Gas R & M	600
DADRI GAS	-
DARLIPALLI	49,200
Dulanga CMB	-

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Lyudo



FARAKKA II	-
FARAKKA III	10,900
Farakka R & M	2,000
FARIDABAD	-
GADARWARA	81,000
GANDHAR	-
Gandhar R &M	4,300
Kahalgaon II Phase I	-
Kahalgaon II Phase II	1,800
Khstpp R & M	2,000
KAWAS	-
Kawas R & M	1,400
Khargone	45,000
KOLDAM	25,100
KORBA III	9,200
Korba R & M	4,400
Kudgi	1,23,300
LARA I	53,300
Lata Tapovan	1,600
LOHARINAGPALA	-
Mauda	21,900
Mauda II	45,800
Mandsaur Solar	-
NCTPP	-
NCTPP II	11,000
NCTPP R & M	3,700
NORTH KARANPURA	12,400
Pakri Barwadih CMB	26,600
Ramagundam I & II R & M	2,400
RAMAGUNDAM III	-
Rammam	3,100
RIHAND II	-
RIHAND III	28,300
Rihand R & M	2,500
SIMHADRI	-
Simhadari II	26,800
Simhadari R & M	900
Vidhyachal Hydro**	1,900
Singrauli R & M	1,600
Vindhyachal Solar**	4,800
SIPAT I	20,500
SIPAT II	-
SOLAPUR	70,300
TALCHER I	-
TALCHER II	12,000
Tanda II	9,000
Tanda R & M	-
Tapovan Vishnugad	26,400
Telangana	-
TSTPP R & M	1,600
TTPS R & M	1,000
Unchahar R & M	3,400
Unchahar IV	17,400
UNCHAHAR II	-
Unchahar III	-
VINDHYACHAL II	-
Vindhyachal III	-
Vindhyachal IV	17,200

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Vindhyachal V	33,500
Vindhyachal R & M	1,200
DADRI SOLAR	-
A&N SOLAR	-
RAMAGUNDAM SOLAR	-
TALCHER SOLAR	-
UNCHAHAR SOLAR	-
FARIDABAD SOLAR	-
RAJGARH SOLAR	-
Talaipali Coal Mine	-
CC	
<b>TOTAL</b>	<b>10,30,683</b>

*gupta*

*CA*

**Year wise Statement of Additional Capitalisation after COD**

<b>Name of the Petitioner</b>	<b>NTPC Limited</b>
<b>Name of the Generating Station</b>	<b>Talcher Thermal power Station</b>
<b>COD</b>	<b>01-04-2001</b>
<b>For Financial Year</b>	<b>2019-24 (Summary)</b>

**Amount in Rs Lakh**

Sl. No.	Head of Work /Equipment	ACE Claimed (Actual / Projected)					Justification	Admitted Cost by the Commission, if any
		2019-20	2020-21	2021-22	2022-23	2023-24		
1	2	3	4	5	6	7	8	9
<b>A. Works under Original scope, Change in Law etc. eligible for RoE at Normal Rate</b>								
1	Refurbishment of MP Rotor blades stage-II (2x110 MW)	328.92					Provided in respective Form 9.	Rs 5.57 cr in 2014-19
2	ESP Augmentation (2 x 110 MW)	312.67						Rs 36 Cr in 2014-19
3	Effluent Treatment Plant (ETP) and associated facilities	575.39	63.15					Rs 5 Cr in 2014-19
4	Augmentation of Fire Detection and Protection System for UCBs	63.68						Rs 2.48 Cr in 2014-19
<b>Total (A)</b>		<b>1,280.66</b>	<b>63.15</b>	-	-			
<b>B. Works beyond Original scope excluding add-cap due to Change in Law eligible for RoE at Wtd. Average rate of Interest</b>								
<b>Total (B)</b>		-	-	-	-			
<b>Total Add. Cap. Claimed (A+B)</b>		<b>1,280.66</b>	<b>63.15</b>	-	-			



  
**(Petitioner)**

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**Year wise Statement of Additional Capitalisation after COD**

<b>Name of the Petitioner</b>	NTPC Limited
<b>Name of the Generating Station</b>	Talcher Thermal power Station
<b>COD</b>	01-04-2001
<b>For Financial Year</b>	2019-20

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	Accrual basis as per IGAAP	ACE Claimed (Actual / Projected)			Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
			Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2	3	4	5= (3-4)	6	7	8	9
<b>A. Works under Original scope, Change in Law etc. eligible for RoE at Normal Rate</b>								
1	Refurbishment of MP Rotor blades stage-II (2x110 MW)	328.92		328.9191		Reg (25)(1)	Covered under original approved works of Ph-III R&M of the station. Work allowed by Hon'ble Commission vide order dtd 26.09.2016 in Pet No 334/GT/2014 for the period 2014-19. Hon,ble Commission has allowed Rs 557 Lakh for MP rotor & LP rotor refurbishment in 2014-19. The petitioner has capitalised Rs 328.92 Lakh towards MP rotor refurbishment 2018-19. The amount projected is towards balance payment towards MP rotor refurbishment claimed in 2018-19. Hon'ble Commission may be pleased to allow the same.	Rs 5.57 Cr in 2014-19

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**Year wise Statement of Additional Capitalisation after COD**

<b>Name of the Petitioner</b>	NTPC Limited
<b>Name of the Generating Station</b>	Talcher Thermal power Station
<b>COD</b>	01-04-2001
<b>For Financial Year</b>	2019-20

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed (Actual / Projected)			Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	Cash basis			
2	ESP Augmentation (2 x 110 MW)	312.67		312.67		ESP Renovation/Augmentation works taken up as per CPCB directive to meet the statutory (SPCB/CPCB norms). Work allowed by Hon'ble Commission vide order dtd 26.09.2016 in Pet No 334/GT/2014. In 2014-19 there is capitalisation of Rs 35.32 Cr against Rs 36 Cr allowed by Hon'ble Commission. To meet the statutory (SPCB/CPCB) requirement of SPM emission norms. Work Capitalized. Payment liability for PG Test & final completion of facilities. Hon'ble Commission may be pleased to allow the same.	Rs 36 Cr in 2014-19
3	ETP and associated facilities	575.39		575.39		The work was allowed by hon'ble commission in Tariff Period 2014-19 to meet the statutory (SPCB) requirement for ZERO effluent discharge outside factory premises ( Point F2.2 of latest SPCB consent dtd 26.03.2019, copy attached at Annexure-A). The work is to be capitalized in FY 19-20. Hon'ble Commission may be pleased to allow the same.	Rs 5 Cr in 2014-19.

**Year wise Statement of Additional Capitalisation after COD**

Name of the Petitioner	NTPC Limited
Name of the Generating Station	Talcher Thermal power Station
COD	01-04-2001
For Financial Year	2019-20

Sl. No.	Head of Work /Equipment	ACE Claimed (Actual / Projected)				Regulations under which claimed	Justification	Amount in Rs Lakh Admitted Cost by the Commission, if any
		Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
4	Augmentation of Fire Detection and Protection System for UCBs	63.68		63.68		Reg (26)(1) (b) &(d)	Augmentation of fire protection and detection system work was allowed by Commission vide order dtd 26.09.2016 in Pet No 334/GT/2014 for the period 2014-19. Out of Rs 2.48 Cr allowed by Commission in 2014-19 Rs 1.69 Cr was capitalised on cash basis during 2014-19 period. The Work has been Completed now and the amount towards Final payment & liabilities to be discharged is projected in add cap. Hon'ble Commission may be pleased to allow the same.	Rs 2.48 Cr in 2014-19.
<b>Total (A)</b>		<b>1,280.66</b>	<b>-</b>	<b>1,280.66</b>	<b>-</b>			
<b>B. Works beyond Original scope exluding add-cap due to Change in Law eligible for RoE at Wtd. Average rate of Interest</b>								
<b>Total (B)</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>			
<b>Total Add. Cap. Claimed</b>		<b>1,280.66</b>	<b>-</b>	<b>1,280.66</b>	<b>-</b>			

  
(Petitioner)

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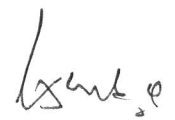


**Year wise Statement of Additional Capitalisation after COD**

Name of the Petitioner	NTPC Limited
Name of the Generating Station	Talcher Thermal power Station
COD	01-04-2001
For Financial Year	2020-21

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	Accrual basis as per IGAAP	ACE Claimed (Actual / Projected)			Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
			Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2	3	4	5= (3-4)	6	7	8	9
<b>A. Works under Original scope, Change in Law etc. eligible for RoE at Normal Rate</b>								
1	ETP and associated facilities	63.15		63.15		Reg (26)(1)(b)	This is balance capitalisation, the detailed justification , provided in Form 9 2019-20 SI No. A3.	Rs 5 Cr in 2014-19.
<b>Total (A)</b>		<b>63.15</b>		<b>63.15</b>	-			
<b>B. Works beyond Original scope exluding add-cap due to Change in Law eligible for RoE at Wtd. Average rate of Interest</b>								
<b>Total (B)</b>		-	-	-	-			
<b>Total Add. Cap. Claimed (A+B)</b>		<b>63.15</b>	-	<b>63.15</b>	-			

  
 (Petitioner)

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**Year wise Statement of Additional Capitalisation after COD**

Name of the Petitioner	NTPC Limited
Name of the Generating Station	Talcher Thermal power Station
COD	01-04-2001
For Financial Year	2021-22

								Amount in Rs Lakh
Sl. No.	Head of Work /Equipment	Accrual basis as per IGAAP	ACE Claimed (Actual / Projected)			Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
			Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2	3	4	5= (3-4)	6	7	8	9
<b>A. Works under Original scope, Change in Law etc. eligible for RoE at Normal Rate</b>								
	NA							
	<b>Total (A)</b>	-		-	-			
<b>B. Works beyond Original scope excluding add-cap due to Change in Law eligible for RoE at Wtd. Average rate of Interest</b>								
	<b>Total (B)</b>	-	-	-	-			
<b>Total Add. Cap. Claimed (A+B)</b>		-	-	-	-			



(Petitioner)

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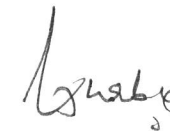
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**Year wise Statement of Additional Capitalisation after COD**

Name of the Petitioner	NTPC Limited
Name of the Generating Station	Talcher Thermal power Station
COD	01-04-2001
For Financial Year	2022-23

Sl. No.	Head of Work /Equipment	Accrual basis as per IGAAP	ACE Claimed (Actual / Projected)			Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
			Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2	3	4	5= (3-4)	6	7	8	9
<b>A. Works under Original scope, Change in Law etc. eligible for RoE at Normal Rate</b>								
1	NA							
	<b>Total (A)</b>	-		-	-			
<b>B. Works beyond Original scope excluding add-cap due to Change in Law eligible for RoE at Wtd. Average rate of Interest</b>								
	<b>Total (B)</b>	-	-	-	-			
<b>Total Add. Cap. Claimed (A+B)</b>		-	-	-	-			



(Petitioner)

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**Year wise Statement of Additional Capitalisation after COD**

<b>Name of the Petitioner</b>	NTPC Limited
<b>Name of the Generating Station</b>	Talcher Thermal power Station
<b>COD</b>	01-04-2001
<b>For Financial Year</b>	2023-24

Sl. No.	Head of Work /Equipment	Accrual basis as per IGAAP	ACE Claimed (Actual / Projected)			Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
			Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2	3	4	5= (3-4)	6	7	8	9
<b>A. Works under Original scope, Change in Law etc. eligible for RoE at Normal Rate</b>								
1	NA							
	<b>Total (A)</b>	-		-	-			
<b>B. Works beyond Original scope excluding add-cap due to Change in Law eligible for RoE at Wtd. Average rate of Interest</b>								
	<b>Total (B)</b>	-	-	-	-			
<b>Total Add. Cap. Claimed (A+B)</b>		-	-	-	-			

  
(Petitioner)

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<b>Name of the Petitioner</b>	<b>NTPC Limited</b>
<b>Name of the Generating Station</b>	<b>Talcher Thermal power Station</b>
<b>Date of Commercial Operation</b>	<b>01-04-2001</b>

Financial Year (Starting from COD)1	Amount in Rs Lakh									
	Actual					Admitted				
	2019-20	2020-21	2021-22	2022-23	2023-24	2019-20	2020-21	2021-22	2022-23	2023-24
1		3	4	5	6	7	8	9	10	11

Amount capitalised in Work/ Equipment

<b>Financing Details</b>	<p><b>Add cap is proposed to be finance in Debt:Equity ratio of 70:30</b></p>
Loan-1	
Loan-2	
Loan-3 and so on	
Total Loan2	
Equity	
Internal Resources	
Others (Pl. specify)	
Total	

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**(Petitioner)**

**Statement of Depreciation**

<b>Name of the Company :</b>	<b>NTPC Limited</b>
<b>Name of the Power Station :</b>	<b>Talcher Thermal power Station</b>

(Amount in Rs Lakh)

S. No.	Particulars	Existing 2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
1	2	3	4	5	6	7	8
1	Opening Capital Cost	111352.11	1,11,498.76	1,12,779.42	1,12,842.57	1,12,842.57	1,12,842.57
2	Closing Capital Cost	111498.76	1,12,779.42	1,12,842.57	1,12,842.57	1,12,842.57	1,12,842.57
3	Average Capital Cost	111425.44	1,12,139.09	1,12,811.00	1,12,842.57	1,12,842.57	1,12,842.57
1a	Cost of IT Equipments & Software included in (1) above		634.68	634.68	634.68	634.68	634.68
2a	Cost of IT Equipments & Software included in (2) above		634.68	634.68	634.68	634.68	634.68
3a	Average Cost of IT Equipments & Software		634.68	634.68	634.68	634.68	634.68
4	Freehold land	2,327.67	2,327.67	2,327.67	2,327.67	2,327.67	2,327.67
5	Rate of depreciation	5.280					
6	Depreciable value	98,187.99	98,893.75	99,498.46	99,526.88	99,526.88	99,526.88
7	Balance useful life at the beginning of the period	3.00	2.00	1.00	0.00	0.00	0.00
8	Remaining depreciable value	39,975.50	38,000.79	19,605.11	28.42	-	-
9	Depreciation (for the period)	0.00	19,000.39	19,605.11	28.42	-	-
10	Depreciation (annualised)	13,325.17	<b>19,000.39</b>	<b>19,605.11</b>	<b>28.42</b>	-	-
11	Cumulative depreciation at the end of the period		79,893.35	99,498.46	99,526.88	99,526.88	99,526.88
12	Less: Cumulative depreciation adjustment on account of un-discharged liabilities deducted as on 01.04.2009	0.31	-	-	-	-	-
13	Add: Cumulative depreciation adjustment on account of liability Discharge	0.00	-	-	-	-	-
14	Less: Cumulative depreciation adjustment on account of de-capitalisation	10,645.01	-	-	-	-	-
15	Net Cumulative depreciation at the end of the period after adjustments	60,892.96	79,893.35	99,498.46	99,526.88	99,526.88	99,526.88
16	Unserviced depreciation on account of dis-incentive and admissibility of depreciation up to 90 % to be recovered after life of the station ( As per order dtd 08.06.2013 in Pet no 91/2004)				1,299.00		

  
 (Petitioner)

<b>एनटीपीसी NTPC</b>		<b>PART-I FORM-13</b>				
<b>Calculation of Interest on Actual Loans</b>						
<b>Name of the Company</b>			<b>NTPC Limited</b>			
<b>Name of the Power Station</b>			<b>TTPS</b>			
	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>	
<b>KFW ESP</b>						
Gross Loan	1551.10	1551.10	1551.10	1551.10	1551.10	
Cum Repayment	387.77	581.66	775.55	969.43	1163.32	
Net Loan	1163.32	969.43	775.55	581.66	387.77	
Drawl	0.00	0.00	0.00	0.00	0.00	
Pre Payment	0.00	0.00	0.00	0.00	0.00	
Repayment	193.89	193.89	193.89	193.89	193.89	
Net Loan Closing	969.43	775.55	581.66	387.77	193.89	
Avg net loan	1066.38	872.49	678.60	484.72	290.83	
Rate of Interest	3.1900%	3.1900%	3.1900%	3.1900%	3.1900%	
Interest	34.02	27.83	21.65	15.46	9.28	
<b>SBI -VII</b>						
Gross Loan	1500.00	1500.00	1500.00	1500.00	1500.00	
Cum Repayment	750.00	937.50	1125.00	1312.50	1500.00	
Net Loan	750.00	562.50	375.00	187.50	0.00	
Drawl						
Pre Payment						
Repayment	187.50	187.50	187.50	187.50	0.00	
Net Loan Closing	562.50	375.00	187.50	0.00	0.00	
Avg net loan	656.25	468.75	281.25	93.75	0.00	
Rate of Interest	9.3000%	9.3000%	9.3000%	9.3000%	9.3000%	
Interest	61.03	43.59	26.16	8.72	0.00	
<b>SBI-IX</b>						
Gross Loan	1000.00	1000.00	1000.00	1000.00	1000.00	
Cum Repayment	0.00	0.00	111.11	222.22	333.33	
Net Loan	1000.00	1000.00	888.89	777.78	666.67	
Drawl	0.00	0.00	0.00	0.00	0.00	
Repayment	0.00	111.11	111.11	111.11	111.11	
Net Loan Closing	1000.00	888.89	777.78	666.67	555.56	
Avg net loan	1000.00	944.44	833.33	722.22	611.11	
Rate of Interest	8.2500%	8.2500%	8.2500%	8.2500%	8.2500%	
Interest	82.50	77.92	68.75	59.58	50.42	
<b>Bond -Series -54</b>						
Gross Loan	1000.00	1000.00	1000.00	1000.00	1000.00	
Cum Repayment	0.00	0.00	0.00	0.00	200.00	
Net Loan	1000.00	1000.00	1000.00	1000.00	800.00	
Drawl	0.00	0.00	0.00	0.00	0.00	
Repayment	0.00	0.00	0.00	200.00	400.00	
Net Loan Closing	1000.00	1000.00	1000.00	800.00	400.00	
Avg net loan	1000.00	1000.00	1000.00	900.00	600.00	
Rate of Interest	8.5200%	8.5200%	8.5200%	8.5200%	8.5200%	
Interest	85.20	85.20	85.20	76.68	51.12	
<b>TOTAL</b>						
Gross Loan	5051.10	5051.10	5051.10	5051.10	5051.10	
Cum Repayment	1137.77	1519.16	2011.66	2504.16	3196.65	
Net Loan	3913.32	3531.93	3039.44	2546.94	1854.44	
Drawl	0.00	0.00	0.00	0.00	0.00	
Repayment	381.39	492.50	492.50	692.50	705.00	
Net Loan Closing	3531.93	3039.44	2546.94	1854.44	1149.44	
Avg net loan	3722.63	3285.69	2793.19	2200.69	1501.94	
Rate of Interest	7.0582%	7.1383%	7.2231%	7.2906%	7.3781%	
Interest	262.75	234.54	201.75	160.44	110.81	

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<b>एनटीपीसी NTPC</b>		<b>PART-I FORM-13</b>				
<b>Calculation of Interest on Actual Loans</b>						
<b>Name of the Company</b>			<b>NTPC Limited</b>			
<b>Name of the Power Station</b>			<b>TTPS</b>			
	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>	
<b>KfW ESP II</b>						
Gross Loan	327.25	327.25	327.25	327.25	327.25	
Cum Repayment	81.81	122.72	163.63	204.53	245.44	
Net Loan	245.44	204.53	163.63	122.72	81.81	
Drawl						
Pre Payment						
Repayment	40.91	40.91	40.91	40.91	40.91	
Net Loan Closing	204.53	163.63	122.72	81.81	40.91	
Avg net loan	224.99	184.08	143.17	102.27	61.36	
Rate of Interest	3.1900%	3.1900%	3.1900%	3.1900%	3.1900%	
Interest	<b>7.18</b>	<b>5.87</b>	<b>4.57</b>	<b>3.26</b>	<b>1.96</b>	
<b>KfW ESP III</b>						
Gross Loan	165.80	165.80	165.80	165.80	165.80	
Cum Repayment	41.45	62.18	82.90	103.63	124.35	
Net Loan	124.35	103.63	82.90	62.18	41.45	
Drawl						
Pre Payment						
Repayment	20.73	20.73	20.73	20.73	20.73	
Net Loan Closing	103.63	82.90	62.18	41.45	20.73	
Avg net loan	113.99	93.26	72.54	51.81	31.09	
Rate of Interest	3.1900%	3.1900%	3.1900%	3.1900%	3.1900%	
Interest	<b>3.64</b>	<b>2.98</b>	<b>2.31</b>	<b>1.65</b>	<b>0.99</b>	
<b>KfW ESP IV</b>						
Gross Loan	359.91	359.91	359.91	359.91	359.91	
Cum Repayment	89.98	134.97	179.96	224.95	269.93	
Net Loan	269.93	224.95	179.96	134.97	89.98	
Drawl						
Pre Payment						
Repayment	44.99	44.99	44.99	44.99	44.99	
Net Loan Closing	224.95	179.96	134.97	89.98	44.99	
Avg net loan	247.44	202.45	157.46	112.47	67.48	
Rate of Interest	3.1900%	3.1900%	3.1900%	3.1900%	3.1900%	
Interest	<b>7.89</b>	<b>6.46</b>	<b>5.02</b>	<b>3.59</b>	<b>2.15</b>	
<b>KfW ESP V</b>						
Gross Loan	129.35	129.35	129.35	129.35	129.35	
Cum Repayment	32.34	48.50	64.67	80.84	97.01	
Net Loan	97.01	80.84	64.67	48.50	32.34	
Drawl						
Pre Payment						
Repayment	16.17	16.17	16.17	16.17	16.17	
Net Loan Closing	80.84	64.67	48.50	32.34	16.17	
Avg net loan	88.92	72.76	56.59	40.42	24.25	
Rate of Interest	3.1900%	3.1900%	3.1900%	3.1900%	3.1900%	
Interest	<b>2.84</b>	<b>2.32</b>	<b>1.81</b>	<b>1.29</b>	<b>0.77</b>	
<b>KfW ESP VI</b>						
Gross Loan	263.42	263.42	263.42	263.42	263.42	
Cum Repayment	65.86	98.78	131.71	164.64	197.57	
Net Loan	197.57	164.64	131.71	98.78	65.86	
Drawl						
Pre Payment						
Repayment	32.93	32.93	32.93	32.93	32.93	
Net Loan Closing	164.64	131.71	98.78	65.86	32.93	
Avg net loan	181.10	148.17	115.25	82.32	49.39	
Rate of Interest	3.1900%	3.1900%	3.1900%	3.1900%	3.1900%	
Interest	<b>5.78</b>	<b>4.73</b>	<b>3.68</b>	<b>2.63</b>	<b>1.58</b>	
<b>KfW ESP VIII</b>						
Gross Loan	28.37	28.37	28.37	28.37	28.37	
Cum Repayment	7.09	10.64	14.18	17.73	21.28	
Net Loan	21.28	17.73	14.18	10.64	7.09	
Drawl						
Pre Payment						
Repayment	3.55	3.55	3.55	3.55	3.55	
Net Loan Closing	17.73	14.18	10.64	7.09	3.55	
Avg net loan	19.50	15.96	12.41	8.86	5.32	
Rate of Interest	3.1900%	3.1900%	3.1900%	3.1900%	3.1900%	
Interest	<b>0.62</b>	<b>0.51</b>	<b>0.40</b>	<b>0.28</b>	<b>0.17</b>	

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<b>NTPC</b>		<b>PART-I FORM-13</b>				
<b>Calculation of Interest on Actual Loans</b>						
<b>Name of the Company</b>			<b>NTPC Limited</b>			
<b>Name of the Power Station</b>			<b>TTPS</b>			
	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>	
<b>KfW ESP IX</b>						
Gross Loan	36.09	36.09	36.09	36.09	36.09	
Cum Repayment	9.02	13.53	18.05	22.56	27.07	
Net Loan	27.07	22.56	18.05	13.53	9.02	
Drawl						
Pre Payment						
Repayment	4.51	4.51	4.51	4.51	4.51	
Net Loan Closing	22.56	18.05	13.53	9.02	4.51	
Avg net loan	24.81	20.30	15.79	11.28	6.77	
Rate of Interest	3.1900%	3.1900%	3.1900%	3.1900%	3.1900%	
Interest	0.79	0.65	0.50	0.36	0.22	
<b>KfW ESP XI</b>						
Gross Loan	47.00	47.00	47.00	47.00	47.00	
Cum Repayment	11.75	17.62	23.50	29.37	35.25	
Net Loan	35.25	29.37	23.50	17.62	11.75	
Drawl						
Pre Payment						
Repayment	5.87	5.87	5.87	5.87	5.87	
Net Loan Closing	29.37	23.50	17.62	11.75	5.87	
Avg net loan	32.31	26.44	20.56	14.69	8.81	
Rate of Interest	3.1900%	3.1900%	3.1900%	3.1900%	3.1900%	
Interest	1.03	0.84	0.66	0.47	0.28	
<b>KfW ESP XIV</b>						
Gross Loan	130.00	130.00	130.00	130.00	130.00	
Cum Repayment	32.50	48.75	65.00	81.25	97.50	
Net Loan	97.50	81.25	65.00	48.75	32.50	
Drawl						
Pre Payment						
Repayment	16.25	16.25	16.25	16.25	16.25	
Net Loan Closing	81.25	65.00	48.75	32.50	16.25	
Avg net loan	89.37	73.12	56.87	40.62	24.37	
Rate of Interest	3.1900%	3.1900%	3.1900%	3.1900%	3.1900%	
Interest	2.85	2.33	1.81	1.30	0.78	
<b>KfW ESP XV</b>						
Gross Loan	63.91	63.91	63.91	63.91	63.91	
Cum Repayment	15.98	23.96	31.95	39.94	47.93	
Net Loan	47.93	39.94	31.95	23.96	15.98	
Drawl						
Pre Payment						
Repayment	7.99	7.99	7.99	7.99	7.99	
Net Loan Closing	39.94	31.95	23.96	15.98	7.99	
Avg net loan	43.94	35.95	27.96	19.97	11.98	
Rate of Interest	3.1900%	3.1900%	3.1900%	3.1900%	3.1900%	
Interest	1.40	1.15	0.89	0.64	0.38	
<b>KfW ESP -Total</b>						
Gross Loan	1551.10	1551.10	1551.10	1551.10	1551.10	
Cum Repayment	387.77	581.66	775.55	969.43	1163.32	
Net Loan	1163.32	969.43	775.55	581.66	387.77	
Drawl	0.00	0.00	0.00	0.00	0.00	
Pre Payment	0.00	0.00	0.00	0.00	0.00	
Repayment	193.89	193.89	193.89	193.89	193.89	
Net Loan Closing	969.43	775.55	581.66	387.77	193.89	
Avg net loan	1066.38	872.49	678.60	484.72	290.83	
Rate of Interest	3.1900%	3.1900%	3.1900%	3.1900%	3.1900%	
Interest	34.02	27.83	21.65	15.46	9.28	

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**Computation of Energy Charges**

**Form-13F  
ADDITIONAL FORM**

<b>Name of the Company</b>	<b>NTPC Limited</b>
<b>Name of the Power Station</b>	<b>Talcher Thermal power Station</b>

**Computation of Energy Charges**

- 1 Rate of Energy Charge from Sec. Fuel Oil/ Alternate Fuel (p/kwh)  $(REC)_s = (Q_s)_n \times P_s$  2.675
- 2 Heat Contribution from SFO / Alternate Fuel  $(H_s) = (Q_s)_n \times (GCV)_s$  4.834
- 3 Heat Contribution from coal  $(H_p)_s = GHR - H_s$  2825.17
- 4 Specific Primary Fuel Consumption  $(Q_p)_n = H_p / (GCV)_p$  0.828
- 5 Rate of Energy charge from Primary Fuel (p/kwh)  $(REC)_p$  157.281
- 6 Rate of Energy charge ex-bus (p/kWh)  $(REC) = ((REC)_s + (REC)_p) / (1 - (AUX))$  178.722

		2019-20	2020-21	2021-22	2022-23	2023-24
No of Days in the year	Days	366	365	365	365	366
Sp. Oil consumption	ml/kwh	0.5	0.5	0.5	0.5	0.5
Auxiliary consumption	%	10.50	10.50	10.50	10.50	10.5
Heat Rate	Kcal/Kwh	2,830.00	2,830.00	2,830.00	2,830.00	2830

**Computation of Variable Charges**

Variable Charge (Coal)	p/kwh	175.733	175.733	175.733	175.733	175.733
Variable Charge (Oil)	p/kwh	2.989	2.989	2.989	2.989	2.989
<b>Total</b>	<b>p/kwh</b>	<b>178.722</b>	<b>178.722</b>	<b>178.722</b>	<b>178.722</b>	<b>178.722</b>

**Price of fuel from Form-15/15A**

Coal Cost	(Rs./MT)	1898.77	1898.77	1898.77	1898.77	1898.77
Oil Cost	(Rs./KL)	53506.59	53506.59	53506.59	53506.59	53506.59

**Computation of Fuel Expenses for Calculation of IWC:**

ESO in a year	(MUs)	3073.92	3065.52	3065.52	3065.52	3073.917
ESO for 40 days	(MUs)	335.947	335.947	335.95	335.95	335.947
Cost of coal for 45 Days	(Rs. Lakh)	5903.70	5903.70	5903.70	5903.70	5903.70
Cost of oil for 2 months	(Rs. Lakh)	153.14	152.72	152.72	152.72	153.14
Energy Expenses for 45 days	(Rs. Lakh)	6754.64	6754.64	6754.64	6754.64	6754.64

<b>Coal</b>		<b>3rd month</b>	<b>2nd month</b>	<b>1st month</b>	<b>Wtd. Avg.</b>
Wtd. Avg. Price of Coal	Rs./MT	1889.69	1888.60	1916.06	<b>1898.77</b>
Wtd. Avg. GCV of Coal as received	kCal/Kg	3403	3558	3526	<b>3495.67</b>
<b>Wtd. Avg. GCV of Coal as received after adjustment of 85 kcal/kg</b>					<b>3410.67</b>
<b>Sec. Oil</b>					
Wtd. Avg. Price of Secondary Fuel	Rs/KL	51535.13	54228.15	54756.49	<b>53506.59</b>
Wtd. Avg. GCV of Secondary Fuel	kCal/L	9678.00	9663.00	9665.00	<b>9668.67</b>

**PETITIONER**



Details of Source wise Fuel for Computation of Energy Charges

Name of the Company :		NTPC Limited									
Name of the Power Station :		Talcher Thermal power Station									
S. No.	Month	Unit	Oct-18			Nov-18			Dec-18		
			Domestic (Belt)	Domestic (Rail)	Imported	Domestic (Belt)	Domestic (Rail)	Imported	Domestic (Belt)	Domestic (Rail)	Imported
1	Quantity of Coal/Lignite supplied by Coal/Lignite Company*	(MMT)	166245.627	115262.65		205965.122	98986.1		205677.107	121379.41	
2	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	(MMT)									
3	Coal supplied by Coal/Lignite Company (1+2)	(MMT)	166245.627	115262.65		205965.122	98986.1		205677.107	121379.41	
4	Normative Transit & Handling Losses (For coal/ Lignite based projects)	(MMT)	281.034	922.101		272.446	791.889		288.95	971.035	
5	Net coal / Lignite Supplied (3-4)	(MMT)	165964.593	114340.549		205692.676	98194.211		205388.157	120408.375	
6	Amount charged by the Coal /Lignite Company*	(Rs.)	289129196.1	202826035		366343709.6	181465368		357794554.6	220104594	
7	Adjustment (+/-) in amount charged made by Coal/Lignite Company	(Rs.)									
8	Total amount Charged (6+7)	(Rs.)	289129196.1	202826035		366343709.6	181465368		357794554.6	220104594	
9	Transportation charges by rail/ship/road transport	(Rs.)	0	30433168	0	0	19171070		0	39412109	
10	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)									
11	Demurrage Charges, if any	(Rs.)								25579	
12	Cost of diesel in transporting coal through MGR system, if applicable	(Rs.)									
13	Total Transportation Charges (9+-10-11+12)	(Rs.)	0	30433168		0	19171070		0	39386530	
13A	Others (stone picking charges, Loco drivers salary,sampling charges etc)#	(Rs.)	4740085	2561991		4765731	2175292		4573588	2386626	
14	Total amount Charged for coal/lignite supplied including Transportation (8+13+13A)	(Rs.)	293869281.1	235821194		371109440.6	202811730		362368142.6	261877750	
15	Landed cost of coal	Rs./MT		1,889.69			1,888.60			1,916.06	
16	Blending Ratio (Domestic/Imported)		100			100			100		
17	Weighted average cost of coal for preceding three months	Rs./MT					1898.77				
18	GCV of Domestic Coal supplied as per bill of Coal Company	(kCal/Kg)	3881								
19	GCV of Imported Coal supplied as per bill Coal Company	(kCal/Kg)									
20	Weighted average GCV of coal/ Lignite as Billed	(kCal/Kg)		3881							
21	Weighted average GCV of coal as Received at station	(kCal/Kg)				3,403.00			3,558.00		3,526.00

\*This Includes opening balance.

# Additional data.

  
 (Petitioner)

**Details of Secondary Fuel for Computation of Energy Charges**

Name of the Company :	NTPC Limited
Name of the Power Station :	Talcher Thermal power Station

Sl.No.	Month	Unit	Oct-18		Nov-18		Dec-18	
			LDO	HFO	LDO	HFO	LDO	HFO
1	Quantity of Oil supplied by Oil Company*	KL	461	275	421	243	360	225
2	Adjustment(+/-) in quantity supplied made by Oil Company	KL	0	0	0	0	0	0
3	Oil supplied by Oil Company (1+2)	KL	461	275	421	243	360	225
4	Normative Transit & Handling Losses	KL	0	0	0	0	0	0
5	Net Oil Supplied (3-4)	KL	461	275	421	243	360	225
6	Amount charged by the Oil Company*	(Rs)	25670035	9680393	23961762	8553947	20338067	7920321
7	Adjustment(+/-) in amount charged made by Oil Company	(Rs)	0	0	0	0	0	0
8	Total amount charged (6+7)	(Rs)	25670035	9680393	23961762	8553947	20338067	7920321
9	Transportation charges by rail / ship / road transport	(Rs)						
10	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs)						
11	Demurrage Charges, if any	(Rs)						
12	Cost of diesel in transporting Oil through MGR system, if applicable	(Rs)						
13	Total Transportation Charges (9+/-10-11+12)	(Rs)	0	0	0	0	0	0
14	Others -Entry Tax on Oil	(Rs.)	0	0	0	0	0	0
15	Total amount Charged for fuel supplied including Transportation (8+13+14)	(Rs)	25670035	9680393	23961762	8553947	20338067	7920321
16	GCV of LDO/HFO							
17	Rate of LDO/HFO		55683	35201	56926	35201	56502	35201
18	Weighted average GCV of secondary fuel for the month.	(kCa/L)	9678		9663		9665	
19	Weighted average price of Secondary Fuel for the month.	Rs/KL	51535		54228		54756	
20	Wtd Avg GCV of secondary Fuel for preceding three months	(kCa/L)			9669			
21	Wtd Avg Price of secondary Fuel for preceding three months	Rs/KL			53507			

Note- In TTPS LDO is used as main fuel in Stage-I & HFO is used as main fuel in Stage-II.

\* Figures include opening balance.

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PETITIONER

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**Statement of Additional Capitalisation during five year before the end of useful life of the Project**

Name of the Company :	NTPC Limited
Name of the Power Station :	Talcher Thermal power Station
COD	01-04-2001

(Amount in Rs. Lakh)

S. No.	Year	Work / Equipment added during last five years of useful life of each Unit/Station	ACE Claimed (Actual / Projected)				Regulations under which claimed	Justification	Impact on life extension
			Accrual basis	Un-discharged Liability included in col. 4	Cash basis	IDC included in col. 4			
1	2	3	4	5	(6 = 4 - 5)	7	8	9	10

No new works have been claimed. The additional capitalisation as claimed in the enclosed Form-9 is towards already allowed works in 2014-19, for which balance capitalisation / delayed capitalisation is claimed. These works were planned and approved by Hon'ble Commisison during 2014-19 for sustaining the present useful life of station up to 01.04.2021.




(Petitioner)

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Name of the Petitioner  
Name of the Generating Station

NTPC Ltd  
TTPS (460 MW)

**Statement of Capital cost**

(To be given for relevant dates and year wise)

(Amount in Rs. Lakh)

S. No.	Particulars	As on relevant date		
		Accrual Basis	Un-discharged Liabilities	Cash Basis
A	a) Opening Gross Block Amount as per books	121977.60	948.64	121028.96
	b) Amount of IDC in A(a) above	1407.85		
	c) Amount of FC in A(a) above	0.00		
	d) Amount of FERV in A(a) above	1049.39		
	e) Amount of Hedging Cost in A(a) above	0.00		
	f) Amount of IEDC in A(a) above	0.00		
B	a) Addition in Gross Block Amount during the period (Direct purchases)			
	b) Amount of IDC in B(a) above			
	c) Amount of FC in B(a) above			
	d) Amount of FERV in B(a) above			
	e) Amount of Hedging Cost in B(a) above			
	f) Amount of IEDC in B(a) above			
C	a) Addition in Gross Block Amount during the period (Transferred from CWIP)			
	b) Amount of IDC in C(a) above			
	c) Amount of FC in C(a) above			
	d) Amount of FERV in C(a) above			
	e) Amount of Hedging Cost in C(a) above			
	f) Amount of IEDC in C(a) above			
D	a) Deletion in Gross Block Amount during the period			
	b) Amount of IDC in D(a) above			
	c) Amount of FC in D(a) above			
	d) Amount of FERV in D(a) above			
	e) Amount of Hedging Cost in D(a) above			
	f) Amount of IEDC in D(a) above			
E	a) Closing Gross Block Amount as per books			
	b) Amount of IDC in E(a) above			
	c) Amount of FC in E(a) above			
	d) Amount of FERV in E(a) above			
	e) Amount of Hedging Cost in E(a) above			
	f) Amount of IEDC in E(a) above			

(Petitioner)

Name of the Petitioner  
Name of the Generating Station

NTPC Ltd  
TTPS (460 MW)

**Statement of Capital Woks in Progress**

(To be given for relevant dates and year wise)

(Amount in Rs. Lakh)

S. No.	Particulars	As on relevant date		
		Accrual Basis	Un-discharged Liabilities	Cash Basis
A	a) Opening CWIP as per books	2521.41	465.05	2056.36
	b) Amount of IDC in A(a) above	98.20		
	c) Amount of FC in A(a) above	0.00		
	d) Amount of FERV in A(a) above	0		
	e) Amount of Hedging Cost in A(a) above	0		
	f) Amount of IEDC in A(a) above	0		
B	a) Addition in CWIP during the period			
	b) Amount of IDC in B(a) above			
	c) Amount of FC in B(a) above			
	d) Amount of FERV in B(a) above			
	e) Amount of Hedging Cost in B(a) above			
	f) Amount of IEDC in B(a) above			
C	a) Transferred to Gross Block Amount during the period			
	b) Amount of IDC in C(a) above			
	c) Amount of FC in C(a) above			
	d) Amount of FERV in C(a) above			
	e) Amount of Hedging Cost in C(a) above			
	f) Amount of IEDC in C(a) above			
D	a) Deletion in CWIP during the period			
	b) Amount of IDC in D(a) above			
	c) Amount of FC in D(a) above			
	d) Amount of FERV in D(a) above			
	e) Amount of Hedging Cost in D(a) above			
	f) Amount of IEDC in D(a) above			
E	a) Closing CWIP as per books			
	b) Amount of IDC in E(a) above			
	c) Amount of FC in E(a) above			
	d) Amount of FERV in E(a) above			
	e) Amount of Hedging Cost in E(a) above			
	f) Amount of IEDC in E(a) above			

*[Handwritten Signature]*

(Petitioner)

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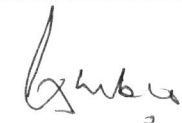
**Calculation of Interest on Normative Loan**

**Name of the Company :** NTPC Limited

**Name of the Power Station :** Talcher Thermal power Station

(Amount in Rs Lakh)

S. No.	Particulars	Existing	2019-20	2020-21	2021-22	2022-23	2023-24
		2018-19					
1	2	3	4	5	6	7	8
1	Gross Normative loan – Opening	64,043.73	64,146.38	65,042.85	65,087.05	65,087.05	65,087.05
2	Cumulative repayment of Normative loan up to previous year	64,043.73	64,146.38	65,042.85	65,087.05	65,087.05	65,087.05
3	<b>Net Normative loan – Opening</b>	-	-	-	-	-	-
4	Add: Increase due to addition during the year / period	263.03	896.46	44.21	-	-	-
5	Less: Decrease due to de-capitalisation during the year / period	-192.30	0.00	0.00	0.00	0.00	0.00
6	Less: Decrease due to reversal during the year / period						
7	Add: Increase due to discharges during the year / period	31.92	0.00	0.00	0.00	0.00	0.00
8	Less: Repayment of Loan	102.65	896.46	44.21	0.00	0.00	0.00
9	<b>Net Normative loan - Closing</b>	-	-	-	-	-	-
10	<b>Average Normative loan</b>	-	-	-	-	-	-
11	Weighted average rate of interest	8.2366	7.0582	7.1383	7.2231	7.2906	7.3781
12	<b>Interest on Loan</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>



(Petitioner)

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**Calculation of Interest on Working Capital**

Name of the Company :	NTPC Limited
Name of the Power Station :	Talcher Thermal power Station

(Amount in Rs Lakh)

S. No.	Particulars	Existing 2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
1	2	3	4	5	6	7	8
1	Cost of Coal/Lignite	4,122.45	5903.70	5903.70	5903.70	5903.70	5903.70
2	Cost of Main Secondary Fuel Oil	149.06	153.14	152.72	152.72	152.72	153.14
3	Fuel Cost						
4	Liquid Fuel Stock						
5	O & M Expenses	2,442.54	2438.35	2464.35	2492.60	2523.13	2556.42
6	Maintenance Spares	5,862.09	5852.05	5914.43	5982.25	6055.52	6135.41
7	Receivables	15,007.11	14209.34	14350.85	11618.21	11662.06	11700.01
8	Total Working Capital	27583.24	28556.59	28786.06	26149.49	26297.15	26448.69
9	Rate of Interest	13.5000	12.0500	12.0500	12.0500	12.0500	12.0500
10	Interest on Working Capital	3723.74	3441.07	3468.72	3151.01	3168.81	3187.07

  
Petitioner

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**Statement of Liability Flow**

**Name of Petitioner : NTPC LTD**

**Name of station : TTPS**

**Capital liabilities as on 01.04.2019**

**a) For Assets Eligible for Normal ROE**

				Form-S	
				Amount (RS)	
Sr. No.	Name of the Party	Name of the work	Year of creation	Allowed/Disa allowed/claimed	Undischarged liabilities relating to GB 31.03.2019
(1)	(2)	(3)	(4)	(5)	(6)
<b>Liability for capitalisation prior to 31.03.2004</b>					
1	NTPC-ABB ALSTOM POWER SERVICES	ERECTION WORKS OF (R&M) C&I PACKAGE UNIT-1,2&3.	2003-04	Allowed	0
<b>Liability for capitalisation in 2004-09</b>					
2	NEW FIRE ENGINEERS LTD	ERECTION ,TESTING& COMMISSIONING OF ADDRESSABLE TF	2005-06	Allowed	154985
2	NEW FIRE ENGINEERS LTD	SUPPLY OF ADDRESSABLE TF	2005-06	Allowed	111612
3	HCL INFOSYSTEMS LTD	PERSONAL COMPUTER & MS OFFICE	2007-08	Disallowed	0
3	RAO WELDING WORKS	EREC/COMM, OF ASH DISPOSAL LINE	2008-09	Allowed	0
4	M.J.PATEL (INDIA) LTD	Capital spares of Steam generator	2008-09	Allowed	0
4	PRADHAN ENTERPRISES	AIR CONDITIONER 1.5 TONNES	2008-09	Disallowed	0
5	PROGRESSIVE INFOTECH PVT LTD	PERSONAL COMPUTERS & OTHER PERIPHERALS	2008-09	Disallowed	0
5	GODREJ & BOYCE MFG CO LTD	GODREJ FILING CABINET (4 DRAWER)	2008-09	Disallowed	0
6	GODREJ & BOYCE MFG CO LTD	GODREJ 4 DOOR BOOK CASE	2008-09	Disallowed	0
<b>Liability for capitalisation in 2009-14</b>					
7	MEERA INDUSTRIES	COMPOSITE DUEL DESK & BENCH	2009-10	Disallowed	0
8	WPIL LTD	VERTICAL SOLID SHAFT CW MAKE UP PUMP	2009-10	Disallowed	0
9	WPIL LTD	VERTICAL SOLID SHAFT CW MAKE UP PUMP	2009-10	Disallowed	0
10	CMS DITL LTD	WIRELESS CCTV SYSTEM	2009-10	Disallowed	0
11	PATWARI VARITIES	AIR CONDITIONER 3TON MULTI SPLIT TYPE AC	2009-10	Disallowed	0
12	PATWARI VARITIES	AIR CONDITIONER 3TON MULTI SPLIT TYPE AC	2009-10	Disallowed	0
13	PATWARI VARITIES	AIR CONDITIONER 2 TON WINDOW TYPE	2009-10	Disallowed	0
14	GODREJ & BOYCE MFG CO LTD	Godrej Furnitures For IT Dept	2009-10	Disallowed	0
15	GODREJ & BOYCE MFG CO LTD	GODREJ SENATE CONFERENCE TABLE/ CHAIR / BOOK CASE	2009-10	Disallowed	0
16	GODREJ & BOYCE MFG CO LTD	DINNING CHAIR	2009-10	Disallowed	0
17	Vision Secure Technologies	DOOR FRAME METAL DETECTOR	2009-10	Disallowed	0
18	EMBEE SOFTWARE PVT LTD	MULTIMEDIA LCD PROJECTOR	2009-10	Disallowed	0
19	GODREJ & BOYCE MFG CO LTD	GODREJ 4 DOOR BOOK CASE	2009-10	Disallowed	0
20	NAGARAJ TECHNOLOGIES Pvt Ltd	HP OPEN VIEW NETWORK NOTE MANAGER LATEST	2009-10	Disallowed	0
21	SYLVESA INFOTECH PVT LTD	UPS 15 KVA TRUE ONLINE	2009-10	Disallowed	0
22	SANDEEP TRADERS	AIR MOTOR - 24.5V(T) 57.5 APH	2009-10	Disallowed	0

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**Statement of Liability Flow**

**Name of Petitioner : NTPC LTD**

**Name of station : TTPS**

**Capital liabilities as on 01.04.2019**

**a) For Assets Eligible for Normal ROE**

				Form-S	
				Amount (RS)	
Sr. No.	Name of the Party	Name of the work	Year of creation	Allowed/Disallowed/claimed	Undischarged liabilities relating to GB 31.03.2019
(1)	(2)	(3)	(4)	(5)	(6)
23	G S ENTERPRISES	WALL SOOT BLOWER SET	2009-10	Disallowed	0
24	STAR LINK COMMUNICATION PVT LTD	CARD PUNCHING MACHINE	2010-11	Disallowed	0
25	STAR LINK COMMUNICATION PVT LTD	CARD PUNCHING MACHINE	2010-11	Disallowed	0
26	WIPRO LTD	ADVANCE DUEL CPU LAN SERVER	2010-11	Disallowed	0
27	BDK ENGINEERING INDUSTRIES LTD	GATE VALVE 10" CL300,IS:10611	2010-11	Disallowed	0
28	L V HEAT EXCHANGERS	TUBE NEST FOR LPH 3/4/5 OF 110 MW BHEL	2010-11	Disallowed	0
29	SUNDERDAS D HUNRAJ	ACB LT MAKE TYPE CNCS 3200AMP	2010-11	Disallowed	0
30	GE Energy Parts Inc.	JUST IN TIME MATERIALS FOR STATOR REWINDING OF 62.5MW GENERATOR,TTPS	2011-12	Allowed	0
31	Bharat Heavy Electricals Ltd	M4901020020-GUIDE WHEEL	2011-12	Allowed	0
32	QUALITY ENGINEERS	SPARES FOR CEP,MODEL 150CJNV	2011-12	Disallowed	0
33	STEEL TEK	WOODEN FURNITURES	2011-12	Disallowed	0
34	SYLVESA INFOTECH PVT LTD	PLOTTER- HP	2011-12	Disallowed	0
35	MICROCARE COMPUTERS PVT. LTD.,	APPLICATION SOFTWARES	2011-12	Disallowed	0
36	MERCK SPECILITIES PRIVATE	PORTABLE SPECTROPHOTOMETER WITH ACCESSOR	2011-12	Allowed	0
37	Bharat Heavy Electricals Ltd	COMPLETE MP ROTOR ASSEMBLY FOR 110 MW	2012-13	Allowed	0
38	PHULCHAND AGARWALLA & CO	SMALL RAISING OF CONTINGENCY ASH DYKE.	2012-13	Allowed	0
39	Bharat Heavy Electricals Ltd	GUIDE WHEEL FOR 110 MW LP TURBINE	2012-13	Allowed	0
40	Bharat Heavy Electricals Ltd	MODIFIED GUIDE WHEEL STAGE-3	2012-13	Allowed	0
41	VANJAX SALES PVT LTD	AERIAL WORKING PLATFORM LIFT 8MTR/ 100KG	2012-13	Disallowed	0
42	GANGOTRI TURBO TECH ENGG	RC FOR ST I BFP CARTRIDGE RECONDITIONING	2012-13	Disallowed	0
43	NARASIMHA ENGG WORKS	RECONDITIONING OF BFP INSIDE STOTOR ASSY-ST II	2012-13	Disallowed	0
44	ROCKWELL INDUSTRIAL SERVICES	8.5 EX MILL GEAR BOX FOR 8.5 E9 MILL	2012-13	Disallowed	0
45	Bharat Heavy Electricals Ltd	SAFETY VALVE FOR HRH,TYPE-1775 QWD	2012-13	Disallowed	0
46	EMERSON PROCESS MANAGEMENT CHENNAI	PNEU.ACTR.,TYPE:667,SIZE:46,TRAVEL:2"	2012-13	Disallowed	0
47	EMERSON PROCESS MANAGEMENT	ELECTRONIC ASSEMBLY FOR ZIRCONIA OXYGEN-ZCSP	2012-13	Disallowed	0
48	VARDHAMAN TRADERS	SQ CAGE INDUCTION MOTOR,150KW,415V AC-ZCSP	2012-13	Disallowed	0
49	R K TRADINGS	RELY NUMRC 110V,1&5A:MICOM(AREVA):P220	2012-13	Disallowed	0

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**Statement of Liability Flow**

**Name of Petitioner : NTPC LTD**

**Name of station : TTPS**

**Capital liabilities as on 01.04.2019**

**a) For Assets Eligible for Normal ROE**

					<b>Form-S</b>	
					Amount (RS)	
<b>Sr. No.</b>	<b>Name of the Party</b>	<b>Name of the work</b>	<b>Year of creation</b>	<b>Allowed/Disallowed/claimed</b>	<b>Undischarged liabilities relating to GB 31.03.2019</b>	
(1)	(2)	(3)	(4)	(5)	(6)	
50	N K Fire & Safety	PETROL/KEROS PORTABLE PUMP,500 LPM,H22M	2012-13	Disallowed	0	
51	Amalgamated Biotech	Conductivity meter (Bench Top)	2012-13	Disallowed	0	
52	GODREJ & BOYCE MFG CO LTD	STUDY TABLE:GODREJ MODEL- T - 31.	2012-13	Disallowed	0	
53	GODREJ & BOYCE MFG CO LTD	GODREJ ELAN MAIN DESK 3	2012-13	Disallowed	0	
54	HCL INFOSYSTEMS LTD	PHOTO COPIER MACHINE(TOSHIBA-ESTUDIO-305)	2012-13	Disallowed	0	
55	PATWARI VARITIES	AIR CONDITIONER 1.5 T SPLIT- LG (3 STAR)	2012-13	Disallowed	0	
56	SEC Communications Pvt Ltd	VIDEO CONFERENCING SYSTEM-HD (RADVISION)	2012-13	Disallowed	69600	
57	Maxim Systems	MULTIFUNCTIONAL FAX MACHINE-RICOH	2012-13	Disallowed	0	
58	Dell India Pvt Ltd	LAPTOP: DELL i.5 MODEL-E6320	2012-13	Disallowed	0	
59	GEMINI COMMUNICATION LTD	SWITCH GIGABIT WORKGROUP -	2012-13	Disallowed	0	
60	ZENITH CONTROLS & SYSTEMS PVT LTD	SMART CARD BASED ACCESS CONTROL SYSTEM	2012-13	Disallowed	0	
61	ZENITH CONTROLS & SYSTEMS PVT LTD	SMART CARD BASED ACCESS CONTROL SYSTEM	2012-13	Disallowed	0	
62	TOSHNIWAL INDUSTRIES PVT LTD	INFRA RED THERMOMETER:RAYTECH 3i SERIES-MBOA	2012-13	Disallowed	0	
					0	
63	A P CONSTRUCTION	MISC CIVIL WORKS REQUIRED FOR DECANTATION SYSTEM AT S B MINES	2013-14	Allowed	0	
64	RABI NARAYAN PATRA	Power Supply to Jagannath Quarry-7	2013-14	Allowed	0	
65	JYOTI ENGINEERING WORKS	ERECTION OF 300NB MSERW PIPELINE	2013-14	Allowed	0	
66	RAO WELDING WORKS	E&C OF ASH DISPOSAL LINE TO MINE	2013-14	Allowed	0	
67	SADHANA ENTERPRISES	LAYING OF ASH WATER RECIRCULATION PIPELINE FROM SOUTH BALANDA MINE VOIDS TO PLANT.	2013-14	Allowed	0	
68	Bharat Heavy Electricals Ltd	GUIDE WHEEL ST.#4A FOR 110 MW LP TURBINE-R&M SPARE	2013-14	Allowed	0	
69	YOKOGAWA INDIA LTD	Supply, Erection & Commissioning of Unit#4 DCS Upgradation of TTPS	2013-14	Allowed	0	
70	DEL PD PUMPS & GEARS PVT LTD	MATERIAL SUPPLY ERECTION & COMMISSIONING OF STAGE II PA FAN LUB OIL SYSTEM(2 nos)	2013-14	Allowed	0	
71	PHULCHAND AGARWALLA & CO	CONSTRUCTION OF STORM WATER DRAIN AT SB MINES FROM QUARRY 2 TO RAILWAY CULVERT.	2013-14	Allowed	0	
72	NTPC ELECTRIC SUPPLY COMPANY LTD	SUPPLY OF ELECTRICITY IN 5KM AREA AROUND NTPC-TTPS.	2013-14	Allowed	0	
73	VERDER SCIENTIFIC PRIVATE LTD	THERMOGRAVIMETERIC ANALYZER(Make-ELTRA(THERMOSTEP))	2013-14	Disallowed	0	
74	SRI SIDDHI INSTRUMENTS & CHEMICALS	HUMIDITY CABINET CHAMBER (Make:- SIDDHI)	2013-14	Disallowed	0	
75	NEVCO ENGINEERS PVT LTD	HYDROGEN PURITY MONITORING KIT (NOVA- 380K)	2013-14	Disallowed	0	
76	TRITECH	PORTABLE H2 LEAK DETECTOR(SP-210 RIKEN KEIKI)	2013-14	Disallowed	0	

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**Statement of Liability Flow**

**Name of Petitioner : NTPC LTD**

**Name of station : TTPS**

**Capital liabilities as on 01.04.2019**

**a) For Assets Eligible for Normal ROE**

				Form-S	
				Amount (RS)	
Sr. No.	Name of the Party	Name of the work	Year of creation	Allowed/Disallowed/claimed	Undischarged liabilities relating to GB 31.03.2019
(1)	(2)	(3)	(4)	(5)	(6)
77	BYTE INFOSYS	BARCODE PRINTER Make:- BROTHER QL-700	2013-14	Disallowed	0
78	BENZFAB TECHNOLOGIES PVT LTD	COMPUTER- Make:- ACER (VERITON M6620G)	2013-14	Disallowed	0
79	BENZFAB TECHNOLOGIES PVT LTD	PRINTER LASER Make:- SAMSUNG ML 2161	2013-14	Disallowed	0
80	SWAN SURGICALS & PHARMACEUTICALS	MULTISITE PROBE FOR PULSE OXYMETER	2013-14	Disallowed	0
81	SWAN SURGICALS & PHARMACEUTICALS	AUTOCALVE VERTICAL MANUAL OPERATION	2013-14	Disallowed	0
82	GLOBAL MEDICAL SYSTEMS	INFANT WARMER	2013-14	Disallowed	0
83	VAANSARI MARKETING SERVICES	ENT OPD UNIT(Make-COMPACTA PLATINO Mod-VMS)	2013-14	Disallowed	0
84	SWAN SURGICALS & PHARMACEUTICALS	AUTOMATED EXTERNAL DEFIBRILLATOR(Make-SCHILLER)	2013-14	Disallowed	0
85	HOSPITAL SUPPLY COMPANY PVT.LTD.	SHORT WAVE MEDICAL DIATHERMY EQUIPMENT	2013-14	Disallowed	8500
86	NATIONAL SCIENTIFIC CORPORATION	MICROSCOPE- BINOCULAR- Make-OLYMPUS Model-CH-20i	2013-14	Disallowed	0
87	ECOTECH INSTRUMENTS	STACK MONITORING KIT(ECHOTECH Model-ESS100)-WTP	2013-14	Disallowed	0
88	Bharat Heavy Electricals Ltd	MILL DISCHARGE VVSSY. FOR XRP-623MILL	2013-14	Disallowed	0
89	M.J.PATEL (INDIA) LTD	BOILER BANK BEND TUBE- HH 23-(68 NOS.)	2013-14	Disallowed	0
90	Flowserve India Controls Pvt Ltd	MPELLER FOR CONDENSATE EXTRACTION PUMP(60MW)	2013-14	Disallowed	0
91	G.B.ENGG.ENTERPRISES PVT.	FINNED ECONOMISER COIL TYPE-I, 110MW BLR (48 Nos.)	2013-14	Disallowed	100000
92	Electronics Corporation of India	SPEED MEASUREMENT DEVICE FOR TG ST-I(Unit-3)	2013-14	Disallowed	0
93	ELECTRO THERAPY	EL OP. HOIST-10.01-12.5T:LIFT 25.01-30M	2013-14	Disallowed	0
94	TRF LTD	DRIVE PULLEY 500 DIA NON MAGNETIC	2013-14	Disallowed	0
95	ORBINOX INDIA PVT LTD	KNIFE EDGE GATE V/V 300 NB BIDIRECTIONAL	2013-14	Disallowed	0
96	UNICON TECHNO SOLUTIONS PVT LTD	CW MOTOR 1SQL3.3KV860KW:10P:V1/CACA:VTP	2013-14	Disallowed	0
97	AMES IMPEX ELECTRICALS PVT LTD	EXCITATION:650KVA 13.8/0.370KV,AN COOLING	2013-14	Disallowed	0
98	ABB India Ltd.	MEASRG UNIT BOARD,UNS2881AP FOR ABB,SEE	2013-14	Disallowed	0
99	SHAPOTOOLS	PHOS DOSING P/P WITH MOTOR, DP/60/18.2	2013-14	Disallowed	0
	<b>Liability in additional capitalisation 01.04.2014 onwards</b>				0
100	SAMAL BUILDERS PVT LTD	CONSTRUCTION OF BARRIER AT PILOT QUARRY OF SOUTH BALANDA MINES OF TTPS.	2014-15	Claimed	0
101	A P CONSTRUCTION	CONSTRUCTION OF APPROACH ROAD & STORM WATER DRAIN AT S.B. MINES FOR ASH WATER DECANTATION SYSTEM"	2014-15	Claimed	0
102	BUDHRAJA MINING & CONSTRUCTION LTD	RAISING OF ASH DYKE AT LAGOON 1.	2014-15	Claimed	260084
103	PHULCHAND AGARWALLA & CO	CONSTRUCTION OF STORM WATER DRAIN AT SB MINES FROM QUARRY 2 TO RAILWAY CULVERT.	2014-15	Claimed	0

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**Statement of Liability Flow**

**Name of Petitioner : NTPC LTD**

**Name of station : TTPS**

**Capital liabilities as on 01.04.2019**

**a) For Assets Eligible for Normal ROE**

				Form-S	
				Amount (RS)	
Sr. No.	Name of the Party	Name of the work	Year of creation	Allowed/Disallowed/claimed	Undischarged liabilities relating to GB 31.03.2019
(1)	(2)	(3)	(4)	(5)	(6)
104	Ohm Enterprises	CONSTRUCTION OF AAQMS ROOM-TTPS.	2014-15	Claimed	0
105	UTILITY POWERTECH LTD	Construction of 3 nos. analyser rooms for CEMS	2014-15	Claimed	0
106	SUNJRAY INFOSYSTEM PVT LTD	REAL TIME DATA TRANSMISSION TO SPCB SERVER.	2014-15	Claimed	0
107	BHARAT HEAVY ELECTRICALS LTD	Supply of Main Equipment for Upgradation of ESP Package for Talcher Thermal Power Station Stage - II ( 2X 110 MW)	2014-15	Claimed	760090
108	BHARAT HEAVY ELECTRICALS LTD	Supply of Main Equipment for Upgradation of ESP Package for Talcher Thermal Power Station Stage - II ( 2X 110 MW)	2014-15	Claimed	760089
109	MECH-WELL INDUSTRIES LTD	AMMONIA BASED FLUE GAS CONDITIONING SYSTEM(AFGC).	2014-15	Claimed	0
110	Chembond Ashland Water	CW CHEMICAL TREATMENT STAGE - 2.	2014-15	Claimed	0
111	PHULCHAND AGARWALLA & CO	CONSTRUCTION OF TWO NOS OF TRANSFORMER OIL COLLECTION PITS.	2014-15	Claimed	0
112	Basil Powertek Pvt Ltd	DC DROUSER EARTH FAULT LOCATOR; MODEL : T-DCEFL; MAKE : CSD INSTRUMENTS	2014-15	Not Claimed	0
113	KORES INDIA LTD	BLACK BOARD; SIZE :8'X 4'	2014-15	Not Claimed	0
114	KORES INDIA LTD	BLACK BOARD; SIZE :8'X 4'	2014-15	Not Claimed	0
115	KORES INDIA LTD	BLACK BOARD; SIZE :8'X 4'	2014-15	Not Claimed	0
116	KORES INDIA LTD	BLACK BOARD; SIZE :8'X 4'	2014-15	Not Claimed	0
117	KORES INDIA LTD	BLACK BOARD; SIZE :8'X 4'	2014-15	Not Claimed	0
118	KORES INDIA LTD	BLACK BOARD; SIZE :8'X 4'	2014-15	Not Claimed	0
119	TECHNOCRATS SECURITY SYSTEMS PVT	TWIN BRUSH AUTOMATIC SHOE POLISH MACHINE.	2014-15	Not Claimed	0
120	TECHNOCRATS SECURITY SYSTEMS PVT	TWIN BRUSH AUTOMATIC SHOE POLISH MACHINE.	2014-15	Not Claimed	0
121	RECORDERS & MEDICARE SYSTEMS	COMPUTERIZED SPIRO METER; MODEL : HELIOS 702; MAKE : RMS	2014-15	Not Claimed	0
122	ROCKWELL INDUSTRIAL SERVICES	GEAR BOX FOR DRAG LINK COAL FEEDER (8.59MILL)	2014-15	Not Claimed	0
123	Bharat Heavy Electricals Ltd	RACK AND PINION ASSY. FOR 25.5 VI APH	2014-15	Not Claimed	0
124	Bharat Heavy Electricals Ltd	BLADE ASSY. : COMP SET MOVING BLADES - STG 16	2014-15	Not Claimed	0
125	Electronics Corporation of India	SPEED MEASUREMENT DEVICE FOR TG ST-I(Unit-3)	2014-15	Not Claimed	0
126	GE POWER SERVICES (INDIA) PVT LTD	SPARE ROTOR ASSEMBLY FOR 62.5 MW STEAM TURBINE	2014-15	Not Claimed	0
127	TECHNICAL SYSTEMS & SERVICES	WIRE ROPE ELECTRIC HOIST,CAP:2MT	2014-15	Not Claimed	34650
128	FLOWMORE LTD	HP ASH WATER P/P IMPELLER	2014-15	Not Claimed	0
129	FLOWMORE LTD	HP ASH WATER P/P IMPELLER	2014-15	Not Claimed	0
130	FLOWMORE LTD	HP ASH WATER P/P IMPELLER	2014-15	Not Claimed	0

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**Statement of Liability Flow**

**Name of Petitioner : NTPC LTD**

**Name of station : TTPS**

**Capital liabilities as on 01.04.2019**

**a) For Assets Eligible for Normal ROE**

Sr. No.	Name of the Party	Name of the work	Year of creation	Form-S	Undischarged liabilities relating to GB 31.03.2019
				Amount (RS)	
(1)	(2)	(3)	(4)	(5)	(6)
131	FLOWMORE LTD	HP ASH WATER P/P IMPELLER	2014-15	Not Claimed	0
132	VACUNAIR ENGG CO PVT LTD	KVL600:VACCUM PUMP COMPLETE ASSY	2014-15	Not Claimed	0
133	FORBES MARSHALL CODEL PVT LTD	COMPLETE OPACITY MONITOR(Make-FORBES MARSHAL)	2014-15	Not Claimed	0
134	S R DYNAMICS	RTA BOARD FOR ABB OS.-PU515.(C&I SYSTEMS)	2014-15	Not Claimed	0
135	ROTORK CONTROLS (INDIA) PVT LTD	ACTUATOR K150	2014-15	Not Claimed	0
136	NEVCO ENGINEERS PVT LTD	HYDROGEN PURITY MONITORING KIT (NOVA- 380K)	2014-15	Not Claimed	0
137	ENCON ENTERPRISES PVT LTD	FINNED ECONOMISER COIL TYPE-I, 110MW BLR (48 nos.)	2014-15	Not Claimed	0
138	DIGITAL WEIGHING SYSTEMS PVT LTD	SENSOR MOUNTED RAIL FOR IN MOTION WEIGHBRIDGE	2014-15	Not Claimed	0
139	COAL CITY AUTOMOBILES PVT LTD	BATTERY-LEAD ACID,2V-200AH,182CELL,364 V	2014-15	Not Claimed	0
140	JAYEM MANUFACTURING COMPANY	PROCUREMENT OF ASH BRICK MAKING MACHINE.	2014-15	Not Claimed	0
141	JAYEM MANUFACTURING COMPANY	PROCUREMENT OF ASH BRICK MAKING MACHINE.	2014-15	Not Claimed	0
142	SWAN ENVIRONMENTAL PVT LTD	EMISSION QUALITY MONITORING SYSTEM (EQMS)	2015-16	Claimed	10787
143	Jai Anjaneya Gas Containers Ltd	EMPTY CYLINDER AMMONIA GR.2-For AFGC System	2015-16	Claimed	0
144	BHARAT HEAVY ELECTRICALS LTD	Supply of Main Equipment for Upgradation of ESP	2015-16	Claimed	13677706
145	ANALYSER INSTRUMENT CO PVT LTD & 2003540 FUJI ELECTRIC CO., LTD	CONTINUOUS EMISSION MONITORING SYSTEM (CEMS)	2015-16	Claimed	0
146	SUNJRAY INFOSYSTEM PVT LTD	REAL TIME DATA TRANSMISSION TO SPCB SERVER	2015-16	Claimed	0
147	SAMAL BUILDERS PVT LTD	CONSTRUCTION OF BARRIER AT PILOT QUARRY OF SOUTH BALANDA MINES OF TTPS.	2015-16	Claimed	0
148	UTILITY POWERTECH LTD	Construction of Storage reservoir for AWRS at TTPS.	2015-16	Claimed	0
149	THE ENERGY & RESOURCES INSTITUTE	BIOMETHANATION PLANT AT TTPS	2015-16	Claimed	15000
150	Chembond Ashland Water	CW CHEMICAL TREATMENT OF STAGE I.	2015-16	Claimed	0
151	Chembond Ashland Water	CW CHEMICAL TREATMENT OF STAGE II.	2015-16	Claimed	0
152	ELECTRO-M	AUTO OIL BDV TEST KIT(100KV) (Make-UDEYRAJ)	2015-16	Claimed	0
153	SARTECH INTL	Automatic Bomb Calorimeter (MODEL No: 5E C5500)	2015-16	Claimed	142000
154	RADIANT AGENCIES	GODREJ:STORWEL MINOR-DESK-TABLE-CHAIR	2015-16	Claimed	0
155	RADIANT AGENCIES	DINNING TABLE FOR GUEST HOUSE	2015-16	Claimed	0
156	Maxim Systems	PHOTO COPIER COLOR CUM B&W(RICOH- MP C3003SP)	2015-16	Claimed	71800
157	HAFI ELEKTRA PVT LTD	VACUUM CLEANER:INDUSTRIAL(HEAVY DUTY) VACKLIN 60	2015-16	Claimed	0
158	P.K.KANSIL & CO.	METAL DETECTOR HAND HELD FOR CISF	2015-16	Claimed	0
159	GODREJ & BOYCE MFG CO LTD	WINDOW AIR CONDITIONER 1.5 TON(GODREJ-18TGZ3RWOT)	2015-16	Claimed	0
160	CCS COMPUTERS PVT LTD	LAPTOP DELL Latitude E5440 i5 3.0GHZ,TFT-14"	2015-16	Claimed	48111
161	CCS COMPUTERS PVT LTD	LAPTOP Dell Latitude E5440 I-5,2.1-3.0GHZ,TFT-14"	2015-16	Claimed	0
162	BENZFAB TECHNOLOGIES PVT LTD	COMPUTER- Make:- ACER (VERITON M6630G) & UPS	2015-16	Claimed	345781
163	CCS COMPUTERS PVT LTD	SERVER - SINGLE CPU, WITH OS (Make-DELL R 630)	2015-16	Claimed	0
164	CCS COMPUTERS PVT LTD	SERVER - INTEL XEON,DUAL CPU,WITH OS	2015-16	Claimed	0
165	OTIS ELEVATOR CO INDIA LTD	RETROFITTING OF LIFTS FOR STAGE-I AND II BOLILERS	2015-16	Claimed	0

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**Statement of Liability Flow**

**Name of Petitioner : NTPC LTD**

**Name of station : TTPS**

**Capital liabilities as on 01.04.2019**

**a) For Assets Eligible for Normal ROE**

Sr. No.	Name of the Party	Name of the work	Year of creation	Form-S	Undischarged liabilities relating to GB 31.03.2019
				Amount (RS)	
(1)	(2)	(3)	(4)	(5)	(6)
166	THERMOSYSTEMS PVT LTD	Installation of Fire Detection & Protection system of Stacker-cum-Reclaimer, R-1 & R-2 Conveyors in CHP at TTPS.	2015-16	Claimed	0
167	FORBES MARSHALL PVT LTD	SUPPLY-COMMISSIONING OF CT FAN VIBRATION MONITORING SYSTEM	2015-16	Not claimed	0
168	SUBHASREE PROJECTS PVT LTD	PROCUREMENT OF GENERATOR DISTURBANCE RECORDER.	2015-16	Not claimed	0
169	OMEGA INDUSTRIES PVT LTD	TENDER FOR HP BEARING LINER FOR STAGE-I	2015-16	Not claimed	3923
170	PPA MARKETING PVT LTD	PROCUREMENT OF ASH SLURRY P/P COMPLETE ASSEMBLY	2015-16	Not claimed	0
171	ANDREW YULE & CO LTD	PROCUREMENT OF ROTOR ASSEMBLY FOR PA FAN 2B & 2C	2015-16	Not claimed	58000
172	SARTECH INTL	PROCUREMENT OF COMPLETE OPACITY MONITOR FOR ST.-2.	2015-16	Not claimed	0
173	ROCKWELL INDUSTRIAL SERVICES	PROCUREMENT OF 8.5 EX MILL GEAR BOX FOR 8.5 E9 MILL.	2015-16	Not claimed	0
174	SORREL SOFT	PROCUREMENT OF CAPITAL SPARES FOR ST#1 FSSS PLC	2015-16	Not claimed	1376
175	TEST & MEASUREMENT CO.	PROCUREMENT OF ULTRASONIC FLOW METER.	2015-16	Not claimed	0
176	TPP BOILERS PVT LTD	PROCUREMENT OF FINNED ECONOMISER COIL TYPE- I TO IV,110MW BLR	2015-16	Not claimed	0
177	SARTECH INTL	PROCUREMENT OF COMPLETE OPACITY MONITOR.	2015-16	Not claimed	0
178	GE POWER SERVICES (INDIA) PVT LTD	PROCUREMENT OF SPARES FOR TURBINE STAGE-I, 60 MW (GE MAKE)	2016-17	Not claimed	73083
179	PRAYOG ELECTRICALS (PVT) LTD	PROCUREMENT OF NEUTRAL GROUNDING TRANSFORMER.	2016-17	Not claimed	0
180	DIGITAL WEIGHING SYSTEMS PVT LTD	PROCUREMENT OF STANDBY INMOTION WEIGHBRIDGE	2016-17	Not claimed	144679
182	TESTUBES MECHANICAL INDUSTRIES	PROCUREMENT OF BOILER BANK TUBES.	2016-17	Not claimed	0
183	ROCKWELL INDUSTRIAL SERVICES	PROCUREMENT OF 8.5 EX MILL GEAR BOX FOR 8.5 E9 MILL.	2016-17	Not claimed	430000
184	EIP ENVIRO LEVEL CONTROL PVT LTD	PROCUREMENT OF ULTRASONIC LEVEL TRANSMITTER	2016-17	Not claimed	0
186	Bharat Heavy Electricals Ltd	PROCUREMENT OF EXCITATION CARDS	2016-17	Not claimed	0
187	GE T&D INDIA LIMITED	Procurement of Areva Make SF6 Breaker Pole Assy. alongwith Mechanism.	2016-17	Not claimed	0
188	SQUAREM ELECTRA PVT LTD	PROCUREMENT OF WORKSTATION INCLUDING ALL ACCESSORIES.	2016-17	Not claimed	0
189	PROGILITY TECHNOLOGIES PVT LTD	PROCUREMENT OF LARGE VIDEO SCREEN FOR ST-II.	2016-17	Not claimed	0
190	S R DYNAMICS	PROCUREMENT OF CAPITAL SPARES FOR ABB DCS.	2016-17	Not claimed	0
191	SHAPOTOOLS	PROCUREMENT OF AMMONIA/HYDRAZINE DOSING PUMPS	2016-17	Not claimed	0
192	MASIBUS AUTOMATION AND	PROCUREMENT OF DISTURBANCE RECORDER.	2016-17	Not claimed	0
181	PYROTECH ELECTRONICS PVT. LTD.	PROCUREMENT OF CCTV SYSTEM FOR EQMS	2016-17	Claimed	0
185	MICROTEK INSTRUMENTS	PROCUREMENT OF MOTOR CHECKER(DIGITAL TYPE).	2016-17	Claimed	0
193	NEVCO ENGINEERS PVT LTD	PROCUREMENT OF OPTICAL PYROMETER.	2016-17	Claimed	0
194	TOSHNIWAL INDUSTRIES PVT LTD	PROCUREMENT OF INFRARED THERMOGRAPHY CAMERA.	2016-17	Claimed	0
195	BYTE INFOSYS	PROCUREMENT OF MULTIFUNCTIONAL FAX MACHINE.	2016-17	Claimed	23800
196	MALATI ENTERPRISES	PROCUREMENT OF PHOTO COPIER MACHINE.	2016-17	Claimed	19935
197	BENZFAB TECHNOLOGIES PVT LTD	PROCUREMENT OF AUDIO CONFERENCE SYSTEM.	2016-17	Claimed	49500

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**Statement of Liability Flow**

**Name of Petitioner : NTPC LTD**

**Name of station : TTPS**

**Capital liabilities as on 01.04.2019**

**a) For Assets Eligible for Normal ROE**

Sr. No.	Name of the Party	Name of the work	Year of creation	Form-S	Undischarged liabilities relating to GB 31.03.2019
				Amount (RS)	
(1)	(2)	(3)	(4)	(5)	(6)
198	CCS COMPUTERS PVT LTD	PROCUREMENT OF DESKTOP PC.	2016-17	Claimed	0
199	VISHVA ELECTROTECH LTD	PROCUREMENT OF FAN:CEILING:1200MM SWEEP.	2016-17	Claimed	0
200	GITA TRADING COMPANY	PROCUREMENT OF PRINTERS.	2016-17	Claimed	64022
201	SAMAL BUILDERS PVT LTD	CONSTRUCTION OF BARRIER AT PILOT QUARRY OF SOUTH BALANDA MINES OF TTPS	2016-17	Claimed	0
202	BUDHRAJA MINING & CONSTRUCTION LTD	RAISING OF ASH DYKE AT LAGOON 1	2016-17	Claimed	260084
203	B B KAR	Laying of 4th Ash Disposal Line to Mine end.	2016-17	Claimed	0
204	BISHNU MOHAN RATH	LED fittings	2016-17	Claimed	0
205	BHARAT HEAVY ELECTRICALS LTD	Supply of Main Equipment for Upgradation of ESP Package for Talcher Thermal Power Station Stage - II ( 2X 110 MW)	2016-17	Claimed	9240745
206	1006668 BHARAT HEAVY ELECTRICALS LTD	Supply of Main Equipment for Upgradation of ESP Package for Talcher Thermal Power Station Stage - II ( 2X 110 MW)	2017-18	Claimed	6827986
207	1056092-KASI SALES & SERVICES PVT LTD	PROCUREMENT OF HIGH PRESSURE MOTORISED GATE V/V	2017-18	Not claimed	9670
208	1056092-KASI SALES & SERVICES PVT LTD	PROCUREMENT OF 1200mm DISCHARGE VALVE (BUTTERFLY TYPE)	2017-18	Not claimed	47000
209	1089430-MECATECHNICO INCORPORATED	Procurement of Clinker Grinder Assembly	2017-18	Not claimed	128000
210	1131495-AMES IMPEX ELECTRICALS PVT LTD	PROCUREMENT OF 500KVA DISTRIBUTION TRANSFORMER.	2017-18	Not claimed	227000
211	1131463-CAIR EUROMATIC AUTOMATION PVT LTD	PROCUREMENT OF ELECTRICAL ACTUATOR.	2017-18	Not claimed	0
212	1077484-THERMO FISHER SCIENTIFIC INDIA	PROCUREMENT OF CO2 GAS ANALYSER FOR AAQMS	2017-18	Not claimed	53410
213	1032565-SCOPE T & M PVT. LTD.	PROCUREMENT OF WINDING RESISTANCE KIT.	2017-18	Not claimed	0
214	1074125-Amalgamated Biotech	PROCUREMENT OF PH METER - RANGE: -2.00 TO +20.00.	2017-18	Claimed	2030
215	1128485-S R DYNAMICS	PROCUREMENT OF SPARES FOR ABB DCS.	2017-18	Not claimed	0
216	1002204-HBL POWER SYSTEMS LTD	PROCUREMENT OF NiCd BATTERIES FOR STAGE-II DCS <(>&<)> UPS	2017-18	Not claimed	22382
217	1116211-ABB INDIA LTD	PROCUREMENT OF SF6 CIRCUIT BREAKER	2017-18	Not claimed	0
218	1000079-ABB India Limited	PROCUREMENT OF ENERGY EFFICIENT MOTORS.	2017-18	Not claimed	149423
219	1000362-ANDREW YULE & CO LTD	PROCUREMENT OF ROTOR ASSEMBLY FOR 2340 SIBCB 11 PA FAN.	2017-18	Not claimed	8700
220	1091191-INTERACTIVE DATA SYSTEMS LIMITED	Procurement of Face <(>&<)> Finger Scanning based Time Attendance	2017-18	Claimed	39580
221	1056138-RADIANT AGENCIES	PROCUREMENT OF FURNITURE (MBOA-2017)	2017-18	Not claimed	883
222	1150481-SCRUM SYSTEM PVT LTD	PROCUREMENT OF SAFETY:KIOSK WITH STANDARD FEATURES.	2017-18	Claimed	34500
223	1143812-SRSG BROADCAST INDIA PVT LTD	Procurement of IPAD	2017-18	Claimed	0
224	1139825-MERCURY MOTORS	PROCUREMENT FOR ACs	2017-18	Claimed	0
225	1068686-STEEL TEK	PROCUREMENT OF PLASTIC CHAIRS, WAVE SLIDE, MERRY GO ROUND(OUT DOOR), WET	2017-18	Claimed	0
226	1030395 A P CONSTRUCTION	GST Incorporation and Provisional Time Extension - Diversion of existing	2017-18	Not claimed	1306664
227	1021200 KIRLOSKAR CORROCOAT PVT LTD	ANTI-CORROSION/ENERGY EFFICIENCY IMPROVEMENT COATING OF PUMPS IN	2017-18	Claimed	127335
228	1128778 LOGICLADDER TECHNOLOGIES PVT LTD	Data transmission from AAQMS, CEMS (including opacity), EQMS parameters	2017-18	Claimed	49865
229	1030395 A P CONSTRUCTION	Final deviation, Final Time Extension <(>&<)> GST amendment -	2017-18	Not claimed	134316
230	1052680-BISHNU MOHAN RATH	Replacement of existing conventional fittings with LED light fittings.	2017-18	Claimed	23504
	<b>Works 2018-19</b>				

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**Statement of Liability Flow**

**Name of Petitioner : NTPC LTD**

**Name of station : TTPS**

**Capital liabilities as on 01.04.2019**

**a) For Assets Eligible for Normal ROE**

Sr. No.	Name of the Party	Name of the work	Year of creation	Form-S	Undischarged liabilities relating to GB 31.03.2019
				Amount (RS)	
(1)	(2)	(3)	(4)	(5)	(6)
231	1052663 Bharat Heavy Electricals Ltd	Refurbishment of IPT Rotor, 110 MW of NTPC, TTPS of Stage-II Units.	2018-19	Allowed	32891910
232	1103978 THERMOSYSTEMS PVT LTD	Supply of Maint Equip.for Fire Detection and Protection System for TTPS	2018-19	Allowed	6368359
233	1001419 DEMECH CHEMICAL PRO	ENERGY EFFICIENT COATING OF CW PUMP	2018-19	claimed	22130
234	1123408-HINDUSTAN SYSTEM	Design, Supply, Erection and Commissioning of Grid connected Roof Top Solar PV Panels at Talcher Thermal.	2018-19	claimed	752500
	<b>MBOA claimed</b>				
235	1002204-HBL POWER SYSTEMS LTD	PROCUREMENT OF 200AH ST#1 UPS BATTERY BANK.	2018-19	claimed	5900
236	1002204-HBL POWER SYSTEMS LTD	PROCUREMENT OF NiCd BATTERIES FOR STAGE-II DCS UPS	2018-19	claimed	22382
237	1000196-AIMIL LTD	PROCUREMENT OF DUAL CHANNEL FFT ANALYSER	2018-19	claimed	462040
238	1124857-HITACHI SYSTEMS MICRO CLINIC	Procurement of SERVER under corporate Rate Contract No.	2018-19	claimed	17767
239	1129285-MASS-TECH CONTROLS PVT LTD	SUPPLY AND INSTALLATION OF EV CHARGER STATION	2018-19	claimed	2200
240	1120908-ASHIRBAD COMPUTERS & SERVICES	PROCUREMENT OF A4 COLOR SCANNER HD COLOR SCANNER.	2018-19	claimed	68342
241	1167695-GITA INFOVISION PRIVATE LIMITED	PROCUREMENT OF PRINTERS.	2018-19	claimed	152295
242	1167695-GITA INFOVISION PRIVATE LIMITED	Procurement of DESKTOP PC.	2018-19	claimed	48990
243	1155705-HIRAL TEKTRONIX PVT LTD.	PROCUREMENT OF CLIMS SYSTEM	2018-19	claimed	121700
244	1131011-BINAYAK CONSTRUCTION	Construction of ODIA Medium School (Shifting due to Stage-III expansion).	2018-19	Not claimed	2366692
245	1157608-ASIAN PRESCIENCE ELECTRICAL	Electrification of ODIA Medium School (Shifting due to Stage-III expansion).	2018-19	Not claimed	1013088
246	1052663-Bharat Heavy Electricals Ltd	PROCUREMENT OF WORM SHAFTGEARKEYNUT FOR XRP-623 MILL.	2018-19	Not claimed	580000
247	1001584-ELECON ENGINEERING CO LTD	PROCUREMENT OF 8.5 EX MILL GEAR BOX FOR 8.5 E9 MILL.	2018-19	Not claimed	941000
248	1132985-ISA ADVANCE INSTRUMENTS INDIA	PROCUREMENT OF 3 PHASE AUTOMATIC RELAY TESTING KIT.	2018-19	Not claimed	45000
249	1001584-ELECON ENGINEERING CO LTD	PROCUREMENT OF ELECON:KCH-160:GR 100:1-COMP ASSY.	2018-19	Not claimed	941000
250	1056614-PPA MARKETING PVT LTD	PROCUREMENT OF HP <(><> LP SEAL WATER PUMPS.	2018-19	Not claimed	1200
251	1052663-Bharat Heavy Electricals Ltd	PROCUREMENT OF HIGH PRESSURE MOTORISED V/V	2018-19	Not claimed	128452
252	1160717-ENCON ENTERPRISES PVT. LTD	Procurement of Economiser Coil	2018-19	Not claimed	5501160
253	1087419-TPP BOILERS PVT LTD	PROCUREMENT OF BB TUBE.	2018-19	Not claimed	3356717
254	1006452-SARTECH INTL	PROCUREMENT OF COMPLETE OPACITY MONITORS.	2018-19	Not claimed	174000
255	1053168-SIEMENS LTD	SUPPLY AND INSTALLATION OF FIRE DETECTION ALARM SYSTEM	2018-19	Not claimed	130787
256	1002204-HBL POWER SYSTEMS LTD	PROCUREMENT OF U#6 UPS BATTERY.	2018-19	Not claimed	2616128
		Total liabilities for allowed works prior to 2004			0
		Total liabilities for allowed works 2004-09			266597

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**Statement of Liability Flow**

**Name of Petitioner : NTPC LTD**

**Name of station : TTPS**

**Capital liabilities as on 01.04.2019**

**a) For Assets Eligible for Normal ROE**

				Form-S	
				Amount (RS)	
Sr. No.	Name of the Party	Name of the work	Year of creation	Allowed/Disallowed/claimed	Undischarged liabilities relating to GB 31.03.2019
(1)	(2)	(3)	(4)	(5)	(6)
		Total liabilities for allowed/ claimed works 2009-14			0
		Total liabilities for claimed works 2014-15			1780263
		Total liabilities for claimed works 2015-16			14311185
		Total liabilities for claimed works 2016-17			9658086
		Total liabilities for claimed works 2017-18			7104800
		Total liabilities for claimed works 2018-19			40936515
		<b>Total liabilities for allowed/ claimed works</b>			<b>74057447</b>
		Total liabilities for disallowed works prior to 2009			0
		Total liabilities for disallowed works prior to 2009-14			178100
		Total liabilities for not claimed works 2014-15			34650
		Total liabilities for not claimed works 2015-16			63299
		Total liabilities for not claimed works 2016-17			647762
		Total liabilities for not claimed works 2017-18			2087448
		Total liabilities for not claimed works 2018-19			17795224
		<b>Total liabilities for not allowed/not claimed works</b>			<b>20806483</b>
		<b>SUM TOTAL</b>			<b>94863929</b>
					<b>94863929</b>

*Signature*

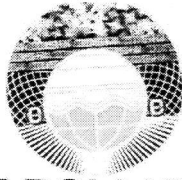
*Signature*

**Summary of issue involved in the petition**

Name of the Company :		NTPC Limited	
Name of the Power Station :		Talcher Thermal power Station	
1	Petitioner:	NTPC Limited	
2	Subject	Tariff petition for 2019-24	
3	<p>Prayer:</p> <p>i) Approve tariff of Talcher Thermal Power Station for the tariff period 01.04.2019 to 31.03.2024.</p> <p>ii) Allow the recovery of filing fees as &amp; when paid to the Hon'ble Commission and publication expenses from the beneficiaries.</p> <p>iii) Allow reimbursement of Ash Transportation Charges directly from the beneficiaries quarterly on net basis.</p>		
4	Respondents		
	Name of Respondents		
	a. GRIDCO Ltd		
	b.		
	c.		
5	Project Scope	NA	
	Cost		
	Commissioning		
	Claim		
	AFC		
	Capital cost		
	Initial spare		
	NAPAF (Gen)		
	Any Specific		

*Signature*

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CONSENT ORDER

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Annexure-A

**STATE POLLUTION CONTROL BOARD, ODISHA**

[DEPARTMENT OF FOREST &amp; ENVIRONMENT, GOVERNMENT OF ODISHA]

A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar-751012

Phone-0674-2564033 / EPABX : 2561909/2562847

E-mail: [paribesh1@ospboard.org/](mailto:paribesh1@ospboard.org/) Website: [www.ospboard.org](http://www.ospboard.org)No. 3039 / IND-I-CON-90 Dt. 26.03.2019**CONSENT ORDER**

**Sub : Consent for discharge of sewage and trade effluent under section 25/26 of Water(P&CP) Act, 1974 and for existing/new operation of the plant under section 21 of Air(P&CP) Act, 1981.**

Ref : Your online application ID No. 1951379, dd. 21.12.2017

Consent is hereby granted under section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of Air (Prevention & Control of Pollution) Act, 1981 and rules framed thereunder to

Name of the Industry M/s Talcher Thermal Power Station (TTPS)Name of the Occupier & Designation Sri M K Singh, General ManagerAddress AT/PO-Talcher Thermal , Angul-759 101This consent order is valid for the period from 01.04.2019 to 31.03.2020

***This consent is granted without prejudice to the case already filed in the court of S.D.J.M. Bhubaneswar vide Case No. 2(C)CC-664 & 665/1991.***

This consent order is valid for the product quantity, specified outlets, discharge quantity and quality, specified chimney/stack, emission quantity and quality of emissions as specified below. This consent is granted subject to the general and special conditions stipulated therein.

**A. Details of Products Manufactured**

Sl.No.	Product	Quantity
1.	Electric Power ( Unit-I,II,III, IV,V & VI)	460 MW



**B. Discharge permitted through the following outlet subject to the standard**

Outlet No.	Description of outlet	Point of discharge	Quantity of discharge KL/hr	Prescribed standard				
1.	DM Plant Re-generation	To be recycled completely	--	/				
2.	Cooling Tower blow-down	To be recycled completely	--					
3.	Boiler Blow Down	To be recycled completely	--					
4.	Treated effluent from ETP	Used for slurry making	--					
5.	Ash water recirculation	To be recycled for ash slurry making	--					
6.	Domestic effluent after treatment in STP	To be used for plantation/ gardening	--					

pH	6.5-9.0
BOD	less than 30mg/l
TSS	less than 100mg/l
Fecal Coliform (FC) (most probable number per 100 millilitre, MPN/100ml)	less than 1000

**C. Emission permitted through the following stack subject to the prescribed standard**

Chimney Stack No.	Description of Stack	Stack height (m)	Quantity of emission (m3/hr)	Prescribed Standard (mg/Nm <sup>3</sup> )			
				PM	SO <sub>2</sub>	NO <sub>x</sub>	Hg
1.	Stacks attached to Boiler –I & II	60	5,43,840	100	600	600	0.03
2.	Stack attached to Boiler –III & IV	60	5,51,115	100	600	600	0.03
3.	Stack attached to Boiler – V & VI	125	12,04,522	100	600	600	0.03

**D. Disposal of solid waste permitted in the following manner**

Sl.No.	Type of Solid waste	Quantity generated (TPD)	Quantity to be reused on site (TPD)	Quantity to be reused off site (TPD)	Quantity disposed off (TPD)	Description of disposal site.
1.	Fly ash	3000	--	--	3000	Abandoned quarry void of South Balanda open cast mine

**E. GENERAL CONDITIONS FOR ALL UNITS**

1. The consent is given by the Board in consideration of the particulars given in the application. Any change or alternation or deviation made in actual practice from the particulars furnished in the application will also be the ground liable for review/variation/revocation of the consent order under section 27 of the Act of Water (Prevention & Control of Pollution) Act, 1974 and section 21 of Air (Prevention & Control of Pollution) Act, 1981 and to make such variations as deemed fit for the purpose of the Acts.
2. The industry would immediately submit revised application for consent to operate to this Board in the event of any change in the quantity and quality of raw material / and products / manufacturing process or quantity /quality of the effluent rate of emission / air pollution control equipment / system etc.
3. The applicant shall not change or alter either the quality or quantity or the rate of discharge or temperature or the route of discharge without the previous written permission of the Board.
4. The application shall comply with and carry out the directives/orders issued by the Board in this consent order and at all subsequent times without any negligence on his part. . In case of non-compliance of any order/directives issued at any time and/or violation of the terms and conditions of this consent order, the applicant shall be liable for legal action as per the provisions of the Law/Act.
5. The applicant shall make an application for grant of fresh consent at least 90 days before the date of expiry of this consent order.
6. The issuance of this consent does not convey any property right in either real or personal property or any exclusive privileges nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Central, State laws or regulation.
7. This consent does not authorize or approve the construction of any physical structure or facilities or the undertaking of any work in any natural water course.
8. The applicant shall display this consent granted to him in a prominent place for perusal of the public and inspecting officers of this Board.
9. An inspection book shall be opened and made available to Board's Officers during their visit to the factory.
10. The applicant shall furnish to the visiting officer of the Board any information regarding the construction, installation or operation of the plant or of effluent treatment system / air pollution control system / stack monitoring system any other particulars as may be pertinent to preventing and controlling pollution of Water / Air.
11. Meters must be affixed at the entrance of the water supply connection so that such meters are easily accessible for inspection and maintenance and for other purposes of the Act provided that the place where it is affixed shall in no case be at a point before which water has been tapped by the consumer for utilization for any purposes whatsoever.
12. Separate meters with necessary pipe-line for assessing the quantity of water used for each of the purposes mentioned below:
  - a) Industrial cooling, spraying in mine pits or boiler feed,
  - b) Domestic purpose
  - c) Process
13. The applicant shall display suitable caution board at the place where the effluent is entering into any water-body or any other place to be indicated by the Board, indicating therein that the area into which the effluents are being discharged is not fit for the domestic use/bathing.
14. Storm water shall not be allowed to mix with the trade and/or domestic effluent on the upstream of the terminal manholes where the flow measuring devices will be installed.



CONSENT ORDER

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15. The applicant shall maintain good house-keeping both within the factory and the premises. All pipes, valves, sewers and drains shall be leak-proof. Floor washing shall be admitted into the effluent collection system only and shall not be allowed to find their way in storm drains or open areas.
16. The applicant shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems install or used by him to achieve with the term(s) and conditions of the consent.
17. Care should be taken to keep the anaerobic lagoons, if any, biologically active and not utilized as mere stagnation ponds. The anaerobic lagoons should be fed with the required nutrients for effective digestion. Lagoons should be constructed with sides and bottom made impervious.
18. The utilization of treated effluent on factory's own land, if any, should be completed and there should be no possibility of the effluent gaining access into any drainage channel or other water courses either directly or by overflow.
19. The effluent disposal on land, if any, should be done without creating any nuisance to the surroundings or inundation of the lands at any time.
20. If at any time the disposal of treated effluent on land becomes incomplete or unsatisfactory or create any problem or becomes a matter of dispute, the industry must adopt alternate satisfactory treatment and disposal measures.
21. The sludge generated from treatment units shall be dried in sludge drying beds and the drained liquid shall be taken to equalization tank of treatment plant.
22. The effluent treatment units and disposal measures shall become operative at the time of commencement of production.
23. The applicant shall provide port holes for sampling the emissions and access platform for carrying out stack sampling and provide electrical outlet points and other arrangements for chimneys/stacks and other sources of emissions so as to collect samples of emission by the Board or the applicant at any time in accordance with the provision of the Act or Rules made therein.
24. The applicant shall provide all facilities and render required assistance to the Board staff for collection of samples / stack monitoring / inspection.
25. The applicant shall not change or alter either the quality or quantity or rate of emission or install, replace or alter the air pollution control equipment or change the raw material or manufacturing process resulting in any change in quality and/or quantity of emissions, without the previous written permission of the Board.
26. No control equipments or chimney shall be altered or replaced or as the case may be erected or re-erected except with the previous approval of the Board.
27. The liquid effluent arising out of the operation of the air pollution control equipment shall be treated in the manner to the meet the prescribed standards by the Board in accordance with the provisions of Water (Prevention and Control of Pollution) Act, 1974 (as amended).
28. The stack and ambient monitoring system installed by the applicant shall be opened for inspection to this Board at any time.
29. There shall not be any fugitive or episodal discharge from the premises.
30. In case of such episodal discharge/emissions the industry shall take immediate action to bring down the emission within the limits prescribed by the Board in conditions/stop the operation of the plant. Report of such accidental discharge /emission shall be brought to the notice of the Board within 24 hours of occurrence.
31. The applicant shall keep the premises of the industrial plant and air pollution control equipments clean and make all hoods, pipes, valves, stacks/chimneys leak proof. The air pollution control equipments, location, inspection chambers, sampling port holes shall be made easily accessible at all times.
32. Any upset condition in any of the plant/plants of the factory which is likely to result in increased effluent discharge/emission of air pollutants and / or result in violation of the standards mentioned above shall be reported to the Headquarters and Regional Office of the Board by fax / speed post within 24 hours of its occurrence.
33. The industry has to ensure that minimum three varieties of indigenous species of trees are planted at the density of not less than 1000 trees per acre. The trees may be planted along boundaries of the industries or industrial premises. This plantation is stipulated over and above the bulk plantation of trees in that area.
34. The solid waste such as sweeping, wastage packages, empty containers residues, sludge including that from air pollution control equipments collected within the premises of the industrial plants shall be disposed off scientifically to the satisfaction of the Board, so as no to cause fugitive emission, dust problems through leaching etc., of any kind.





35. All solid wastes arising in the premises shall be properly classified and disposed off to the satisfaction of the Board by :
- Land fill in case of inert material, care being taken to ensure that the material does not give rise to leachate which may percolate into ground water or carried away with storm run-off.
  - Controlled incineration, wherever possible in case of combustible organic material.
  - Composting, in case of bio-degradable material.
36. Any toxic material shall be detoxicated if possible, otherwise be sealed in steel drums and buried in protected areas after obtaining approval of this Board in writing. The detoxication or sealing and burying shall be carried out in the presence of Board's authorized persons only. Letter of authorization shall be obtained for handling and disposal of hazardous wastes.
37. If due to any technological improvement or otherwise this Board is of opinion that all or any of the conditions referred to above requires variation (including the change of any control equipment either in whole or in part) this Board shall after giving the applicant an opportunity of being heard, vary all or any of such condition and thereupon the applicant shall be bound to comply with the conditions so varied.
38. The applicant, his/heirs/legal representatives or assignees shall have no claim whatsoever to the condition or renewal of this consent after the expiry period of this consent.
39. The Board reserves the right to review, impose additional conditions or condition, revoke change or alter the terms and conditions of this consent.
40. Notwithstanding anything contained in this conditional letter of consent, the Board hereby reserves to it the right and power under section 27(2) of the Water (Prevention & Control of Pollution) Act, 1974 to review any and/or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Act by the Board.
41. The conditions imposed as above shall continue to be in force until revoked under section 27(2) of the Water (Prevention & Control of Pollution) Act, 1974 and section 21 A of Air (Prevention & Control of Pollution) Act, 1981.
42. The industry shall comply to all the conditions stipulated under Charter on Corporate Responsibility for Environmental Protection (CREP) guidelines in a time bound manner as envisaged there in. (if applicable)
43. The industry shall comply to the conditions stipulated in CTE order issued by ODISHA State Pollution Control Board .
44. The industry shall abide by E(P) Act, 1986 and Rules framed there-under
45. In case the consent fee is revised upward during this period, the industry shall pay the differential fees to the Board (for the remaining years) to keep the consent order in force. If they fail to pay the adequate amount within the period stipulated by the Board the consent order will be revoked without prior notice.
46. The Board reserves the right to revoke/refuse consent to operate at any time during period for which consent is granted in case any violation is observed and to modify/ stipulate additional conditions as deemed appropriate.

**GENERAL CONDITIONS FOR UNITS WITH INVESTMENT OF MORE THAN Rs 50 CRORES, AND 17 CATEGORIES OF HIGHLY POLLUTING INDUSTRIES (RED A).**

- The applicant shall analyse the effluent / emissions and Ambient Air Quality every month through approved laboratory for the parameters indicated in TABLE- 'B', 'C' & Part -'B' as mentioned in this order and shall furnish the report thereof to the Board on monthly basis.
- The following information shall be forwarded to the Member Secretary on or before 10<sup>th</sup> of every month.
  - Performance / progress of the treatment plant.
  - Monthly statement of daily discharge of domestic and/or trade effluent.
- Non-compliance with effluent limitations
  - If for any reason the applicant does not comply with or is unable to comply with any effluent limitations specified in this consent, the applicant shall immediately notify the consent issuing authority by telephone and provide the consent issuing authority with the following information in writing within 5 days of such notification.
    - Causes of non-compliance
    - A description of the non-compliance discharge including its impact on the receiving waters.
    - Anticipated time of continuance of non-compliance if expected to continue or if such condition has been corrected the duration or period of non-compliance.
    - Steps taken by the applicant to reduce and eliminate the non-complying discharge and
    - Steps to be taken by the applicant too prevent the condition of non-compliance.



- b) The applicant shall take all reasonable steps to minimize any adverse impact to natural waters resulting from non-compliance with any effluent limitation specified in this consent including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.
- c) Nothing in this consent shall be construed to relieve the applicant from civil or criminal penalties for non-compliance whether or not such non-compliance is due to factors beyond his control, such as break-down, electric failure, accident or natural disaster.
4. Proper housekeeping shall be maintained inside the factory premises including process areas by a dedicated team.
5. The industry must constitute a team of responsible and technically qualified personnel who will ensure continuous operation of all pollution control devices round the clock (including night hours) and should be in a position to explain the status of operation of the pollution control measures to the inspecting officers of the Board at any point of time. The name of these persons with their contact telephone numbers shall be intimated to the concerned Regional Officer and Head Office of the Board and in case of any change in the team it shall be intimated to the Board immediately.
6. The industry shall engage dedicated qualified manpower to ensure continuous and effective operation of online stack / Ambient Air Quality / Effluent monitoring stations for maintenance of database, real time data transfer to SPCB server, data analysis and co-ordination with concerned personnel of process units for taking corrective measures in case of non-compliances and to respond to the instructions of SPCB in this matter.

**F. SPECIAL CONDITIONS**  
**F1 (Air Pollution Control)**

1. All air pollution control devices shall be operated and maintained properly so that, the particulate matter emission from stack attached to ESPs of the Boiler shall not exceed  $100\text{mg}/\text{Nm}^3$ .
2. Air pollution control measures installed at different potential dust generating points shall be operated continuously and effectively to control fugitive dust emission.
3. All the online continuous stack emission monitoring systems (CEMS) for measurement of particulate matter and gaseous pollutants shall be operated effectively and un-interruptedly. The online monitoring data so generated shall be transmitted to SPCB and CPCB sever on a continuous basis.
4. All the online continuous ambient air quality monitoring stations (CAAQMS) shall be operated effectively and uninterruptedly and the online monitoring data so generated shall be transmitted to SPCB and CPCB server on a continuous basis.
5. The unit shall install adequate dust extraction system as well as dust suppression system at all potential dust generating points to control fugitive dust emission and the ambient air quality inside the factory premises shall conform to the National Ambient Air Quality standard.
6. Steps shall be taken for regular monitoring of Mercury (Hg) in the stack of boilers and submit data to the Board.
7. The unit shall provide low NOx burners to reduce NOx emission to keep the level within the prescribed standard by MoEF & CC vide Notification dtd. 07.12.2015.
8. Steps shall be taken for installation of Flue Gas Desulphurisation (FGD) system in future if required to keep the SO<sub>2</sub> level within  $600\text{mg}/\text{Nm}^3$  to confirm the MoEF &





CC Notification dtd. 07.12.2015. This shall also include management and disposal of effluent / solid waste to be generated from FGD system.

9. Proper dust extraction system and dry fog system shall be installed in the coal handling plant to control fugitive emission.
10. Adequate water sprinkling arrangement shall also be made at coal handling area as stand by measures to control generation of fugitive emission.
11. All the internal roads of the unit shall be blacktopped / concreted.
12. Proper housekeeping shall be maintained by a dedicated team.
13. Separate energy meter shall be installed for all the pollution control equipments and the records shall be maintained for verification of the Board from time to time.
14. All raw material, product and waste material shall be transferred through covered vehicles without any spillage or leakages on the way, in case any accidental spillage on the road, waste shall be lifted by the industry and suitably disposed off in designated solid waste dumping area.
15. Appropriate device like pneumatic dust handling system shall be provided at the hoppers of ESPs and pulse jet bag filters for continuous evacuation of dust from the hoppers without creating fugitive emission near the ESP and bag filter area. The collected dusts from air pollution control equipment shall be utilized or disposed off in abandoned mine pit of MCL or at designed land fill area. Until capping of land fill, the dust shall be kept in wet condition with water sprinklers to avoid re-entrainment into the surrounding area due to wind.
16. Ambient air quality shall conform to the National Ambient Air Quality standards as prescribed under E (P) Rules, 1986.
17. A green belt of adequate width and density preferably with local species along the periphery of the plant shall be raised so as to provide protection against particulates and noise. It must be ensured that at least 33% of the total land area shall be under permanent green cover. The proponent shall ensure the maintenance of green belt throughout the year and for all time to come. It is advised that they may engage professionals in this field for creation and maintenance of the green belt.
18. The unit shall submit fly ash utilization status to the Board annually and shall comply to the provisions of revised fly ash Notification No. SO.254 (E), dt. 25.01.2016 of MoEF, Govt. of India.
19. Supply of fly ash to Brick Manufacturing units shall be done on free of cost. Further, transportation cost of fly ash within 100km radius of your plant shall be borne by you or a subsidy of Rs.150/- per ton of fly ash shall be provided to all the fly ash brick, tile, road construction or other fly ash based construction materials manufacturing units or for use in road making if utilizing your fly ash.
20. In case the consent fee is revised upward during this period, the industry shall pay the differential fees to the Board (for the remaining years) to keep the consent order in force. If they fail to pay the amount within the period stipulated



by the Board the consent order will be revoked without prior notice.

21. The Board reserves the right to revoke/refuse consent to operate at any time during period for which consent is granted in case any violation is observed and to modify/ stipulate additional conditions as deemed appropriate.

#### **F-2 (Water Pollution Control)**

1. Specific water consumption shall be limited within 3.5m<sup>3</sup>/MWh as per MoEF & CC vide Notification dtd. 07.12.2015.
2. Under no circumstances there shall be any discharge of effluent to outside the factory premises.
3. There shall not be any discharge of effluent from CHP area by passing the coal settling tanks.
4. The blow down of power plant shall meet the following standards before it is discharged to the common monitoring basin and shall be reused for ash handling, dust suppression and green belt.

##### **Boiler Blow down**

Suspended Solids	100.0 mg/l (Max.)
Oil & Grease	20.0mg/l (Max.)
Copper(Total)	1.0mg/l (Max.)
Iron(Total)	1.0mg/l (Max.)

##### **Cooling Tower Blow down**

Free available Chlorine	0.5 mg/l (Max.)
Zinc	1.0mg/l(Max.)
Chromium (Total)	2.0mg/l(Max.)
Phosphate	5.0mg/l(Max.)

5. Domestic effluent generated from the plant and township shall be properly treated in Sewage treatment plant and shall be reused for gardening after meeting with the prescribed standard of Board. The industry shall ensure continuous power supply for proper treatment of effluent in STP.
6. The online continuous effluent quality monitoring system (EQMS) shall be operated effectively and uninterruptedly and the online monitoring data so generated shall be transmitted to SPCB and CPCB server on a continuous basis.
7. All the cooling water shall be completely recirculated.
8. Wastewater generated from leakages, blow down and D.M. plant shall be treated individually to meet the prescribed standard of effluent discharged to inland surface water and stored in a common basin (i.e. guard pond) for utilization for plantation , dust suppression ash handling and green belt purpose inside the factory premises. Lining shall be provided in guard pond to prevent any seepage into ground to avoid ground water contamination.
9. Concrete parapet wall of adequate height should be provided all along the concreted drains on its both the sides with rain cuts at regular intervals to prevent entry of dust/ash from the road and work zone into the drainage system. All the industrial drains shall be cleaned regularly.



10. All the safety measures applicable in mines as per DGMS shall be implemented during disposal of fly ash in abandoned coal mine void.
11. The settling tank provided in the track hopper area shall be cleaned regularly and made functional all the time.
12. Ground water monitoring around the solid waste disposal site/secured land fill shall be carried out regularly and report submitted to the Ministry's Office at Bhubaneswar, CPCB & SPCB.
13. Rain water harvesting structure shall be developed inside the plant premises and maximum effort shall be made to reuse harvesting rain water with a definite plan and programme to reduce the drawl of fresh water from water bodies.
14. Oil catch pits shall be provided in oil handling area of power plant for collection of spillage.
15. Storm water drain shall be maintained separately without being mixed up with the industrial effluent or sewage effluent.
16. The runoff water from the factory premises and solid waste dumping area generated during rainy season shall be adequately treated in a series of settling tanks so as to meet the prescribed standard of the Board before discharged to outside/reused.
17. The industry shall directly adhere to the conditions and stipulation made by MCL authorities for dumping of ash in abandoned mine pit.
18. The industry shall abide by E(P) Act, 1986 and Rules framed there-under.
19. In case the consent fee is revised upward during this period, the industry shall pay the differential fees to the Board (for the remaining years) to keep the consent order in force. If they fail to pay the amount within the period stipulated by the Board the consent order will be revoked without prior notice.
20. The Board reserves the right to revoke/refuse consent to operate at any time during period for which consent is granted in case any violation is observed and to modify/stipulate additional conditions as deemed appropriate.
21. The industry shall take steps for fulfillment of all the stipulations and necessary measures to check pollution.
22. Consent to operate is subject to availability of all other statutory clearances required under relevant Acts/Rules and fulfilment of required procedural formalities.

**G) Additional Conditions:**

- a) Online CEMS for Hg (Mercury) shall be installed in the stacks by end of **June 2019**.
- b) Domestic solid waste generated from colony, canteen, office complex etc. shall be processed through mechanically operated waste convertors with facility for recovery of useful products like oil/ gas/ carbon/ metal/ compost etc. The products to be used by the industry or sold and the inorganic residues is to be used for captive consumption/ sold/ disposed in sanitary landfill developed inside the premises. **This shall be achieved by June, 2019.**



- c) The industry shall install mechanized wheel washing system along with effluent treatment and recycling system **by 31.05.2019** for the material transport vehicles at the exit gates to avoid carrying dust/ ash along the wheels to the nearby public roads.
- d) Surface runoff treatment system consisting of sedimentation through settling tanks/ ponds followed by high rate clarification through clari-floculator/ tube settlers shall be installed to meet the discharge norms and shall be completely recycled during dry season/ partly discharged specially during monsoon if unavoidable. **This shall be completed by 31.05.2019.**
- e) Online monitoring system for PM, SO<sub>2</sub>, NO<sub>x</sub> for thermal power plants as per CPCB guideline for OCEMS August, 2018 and Standards prescribed for these parameters by MoEF & CC Dt 7.12.2015 shall be complied and water consumption with the adoption of appropriate technology.
- f) The industry shall strictly follow the guideline of CPCB dated July 2018 for Online Continuous Effluent Monitoring Systems (OCEMS) and Guidelines for Continuous Emission Monitoring Systems dtd. August 2018 for PM and other gaseous parameters.
- g) The industry shall ensure tampered proof real time transmission of online monitoring data to the server of CPCB and SPCB and maintain the health of the analyzers and data connectivity through valid AMC.

***The occupier must comply with the conditions stipulated in section A,B,C,D,E F & G to keep this consent order valid.***

To,

**The General Manager,  
M/s Talcher Thermal Power Stations (TTPS),  
AT/PO- Talcher Thermal,  
Dist:Angul-759101.**

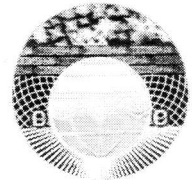
Encl : As above

*Handwritten signature*  
**MEMBER SECRETARY  
STATE POLLUTION CONTROL BOARD, ODISHA**

Memo No. \_\_\_\_\_ /Dt.

Copy forwarded to:

- i) Regional Officer, State Pollution Control Board, Angul.
- ii) District Collector, **Angul**
- iii) Director of Mines, Govt. of Odisha, Bhubaneswar
- iv) Director Factories and Boilers, Bhubaneswar
- v) D.F.O, **Angul**
- vi) Consent Register
- vii) Sr. Env. Scientist (L)



**CHIEF ENV. ENGINEER  
STATE POLLUTION CONTROL BOARD, ODISHA**

**GENERAL STANDARDS FOR DISCHARGE OF ENVIRONMENTAL POLLUTANTS PART -A : EFFLUENTS**

SI.No.	Parameters	Standards			
		Inland surface	Public sewers	Land for irrigation	Marine Costal Areas
		(a)	(b)	(c)	(d)
1.	Colour & odour	Colourless/Odourless as far as practicable	-----	See 6 of Annex-1	See 6 of Annex-1
2.	Suspended Solids (mg/l)	100	600	200	For process wastewater – 100 b. For cooling water effluent 10% above total suspended matter of influent.
3.	Particular size of SS	Shall pass 850	-----	-----	
5.	pH value	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0
6.	Temperature	Shall not exceed 5°C above the receiving water temperature	-----	-----	Shall not exceed 5°C above the receiving water temperature
7.	Oil & Grease mg/l max.	10	20	10	20
8.	Total residual chlorine	1.0	---	-----	1.0
9.	Ammonical nitrogen (as N) mg/l max.	50	50	-----	50
10.	Total Kjeldahl nitrogen (as NH <sub>3</sub> ) mg/1 max.	100	---	-----	100
11.	Free ammonia (as NH <sub>3</sub> ) mg/1 max.	5.0	---	-----	5.0
12.	Biochemical Oxygen Demand (5 days at 20°C) mg/1 max.	30	350	100	100
13.	Chemical Oxygen Demand, mg/1 max.	250	---	-----	250
14.	Arsenic (as As) mg/1 max.	0.2	0.2	0.2	0.2
15.	Mercury (as Hg) mg/1 max.	0.01	0.01	-----	0.001
16.	Lead (as pb) mg/1 max.	01.	1.0	-----	2.0



## CONSENT ORDER

Pg-12

17.	Cardmium (as Cd) mg/l max.	2.0	1.0	----	2.0
18.	Hexavalent Chromium (as Cr + 6) mg/l max.	0.1	2.0	-----	1.0
19.	Total Chromium (as Cr) mg/l max.	2.0	2.0	-----	2.0
20.	Copper (as Cu) mg/l max.	3.0	3.0	-----	3.0
21.	Zinc (as Zn) mg/l max.	5.0	15	-----	15
22.	Selenium (as Sc) mg/l max.	0.05	0.05	-----	0.05
23.	Nickel (as Nil) mg/l max.	3.0	3.0	-----	5.0
24.	Cyanide (as CN) mg/l max.	0.2	2.0	0.2	0.02
25.	Fluoride ( as F) mg/l max.	2.0	15	-----	15
26.	Dissolved Phosphates (as P) mg/l max.	5.0	-----	-----	-----
27.	Sulphide (as S) mg/l max.	2.0	-----	-----	5.0
28.	Phenolic compounds as (C <sub>6</sub> H <sub>5</sub> OH) mg/l max.	1.0	5.0	-----	5.0
29.	Radioactive materials a. Alpha emitter micro curie/ml. b. Beta emitter micro curie/ml.	10 <sup>7</sup> 10 <sup>6</sup>	10 <sup>7</sup> 10 <sup>6</sup>	10 <sup>8</sup> 10 <sup>7</sup>	10 <sup>7</sup> 10 <sup>6</sup>
30.	Bio-assay test	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent
31.	Manganese (as Mn)	2 mg/l	2 mg/l	-----	2 mg/l
32.	Iron (Fe)	3 mg/l	3 mg/l	-----	3 mg/l
33.	Vanadium (as V)	0.2 mg/l	0.2 mg/l	-----	0.2 mg/l
34.	Nitrate Nitrogen	10 mg/l	-----	-----	20 mg/l





**PART- B: NATIONAL AMBIENT AIR QUALITY STANDARDS**

Sl. No.	Pollutants	Time Weighed Average	Concentrate of Ambient Air		
			Industrial Residential, Rural and other Area	Ecologically Sensitive Area (notified by Central Government)	Methods of Measurement
(1)	(2)	(3)	(4)	(5)	(6)
1.	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Annual * 24 Hours **	50 80	20 80	-Improved west and Gaeke - Ultraviolet fluorescence
2.	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Annual * 24 Hours **	40 80	30 80	- Modified Jacob & Hochheiser (Na-Arsenite) - Chemiluminescence
3.	Particulate Matter (size less than 10µm) or PM <sub>10</sub> µg/m <sup>3</sup>	Annual * 24 Hours **	60 100	60 100	-Gravimetric - TOEM - Beta Attenuation
4.	Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub> µg/m <sup>3</sup>	Annual * 24 Hours **	40 60	40 60	-Gravimetric - TOEM - Beta Attenuation
5.	Ozone (O <sub>3</sub> ) µg/m <sup>3</sup>	8 Hours ** 1 Hours **	100 180	100 180	- UV Photometric - Chemiluminescence - Chemical Method
6.	Lead (Pb) µg/m <sup>3</sup>	Annual * 24 Hours **	0.50 1.0	0.50 1.0	-AAS/ICP method after sampling on EMP 2000 or equivalent filter paper. - ED-XRF using Teflon filter
7.	Carbon Monoxide (CO) mg/m <sup>3</sup>	8 Hours ** 1 Hours **	02 04	02 04	- Non Dispersive Infra Red (NDIR) Spectroscopy
8.	Ammonia (NH <sub>3</sub> ) µg/m <sup>3</sup>	Annual* 24 Hours**	100 400	100 400	-Chemiluminescence - Indophenol Blue Method
9.	Benzene (C <sub>6</sub> H <sub>6</sub> ) µg/m <sup>3</sup>	Annual *	05	05	-Gas Chromatography based continuous analyzer - Adsorption and Desorption followed by GC analysis
10.	Benzo (a) Pyrene (BaP)- Particulate phase only, ng/m <sup>3</sup>	Annual*	01	01	-Solvent extraction followed by HPLC/GC analysis
11.	Arsenic (As), ng/m <sup>3</sup>	Annual*	06	06	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper
12.	Nickel (Ni),ng/m <sup>3</sup>	Annual*	20	20	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper

\*\* Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

\*\* 24 hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year, 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

**Office of the Engineer-in-Chief, Water Resources,  
Odisha, Bhubaneswar**

No-WS-CSAR-1/2016  
From

9543/WF

Date 29.03.19

Er. Bibhuni Bhusan Dhal, Chief Engineer,  
Head, Directorate of Water Services.

To

**The Executive Engineers,**

Jaraka Irr. Division, Jaraka/ Mahanadi North Division-1, Jagatpur, Cuttack/Mahanadi South Division No.1, Joba Cuttack / Khurda Irr. Division, Khurda /Baragarh Canal Division , Baragarh/Main Dam Division, Burla/Burla Irr. Division Burla/Sundargarh Irr. Division, Sundargarh/Head Works Division, Samal/Rengali Dam Division, Rengali/Angul Irr. Division, Angul/Rengali Right Canal Division II, henkanal/Balasore Irr. Division, Balasore/Baitarani Irr. Division, Salapada/Salandi Canal Division, Bhadrak/Berhampur Irr. Division, Berhampur/Bhanjanagar Irr. Division, Bhanjangan/Harbhangi Irr. Division, Adava/Kalahandi Irr. Division, Bhawanipatna/Upper Kolab Head Works Division, Kolabnagar/UILCD-1, Kusumakhunti/Earth Dam Division, Chitrakonda/Prachi Division, Bhubaneswar/Balangir Irr. Division, Balangir/Boudh Irr. Division, Boudh/Rairangpur Irr. Division, Rairangpur/Mayubhanj Irr. Division, Baripada/Puri Irr. Division, Puri/Jagatsinghpur Irr. Division, Jagatsinghpur/Jajpur Irr. Division, Jajpur/Kendrapara Irr. Division, Kendrapada/Nuapad Irr. Division, Nuapada/Upper Kolab Irr. Division, Borigumma/Patteru Irr. Division No.1, Balimela.

Sub: Enhancement of licence fee/Special water rate w.e.f.1.4.2019.

Ref: Letter No-Irr.II-WRC-48/19-8535/WR Dt.26.3.2019 of DoWR.

Sir,

In enclosing herewith the copy of letter No-Irr-II-WRC-48/19-8535/WR Dt-26.3.2019 of Department of Water Resources along with the enhanced licence fees and special water rates in Schedule-II and Schedule-III format, it is to inform that the prevailing licence fees and special water rates have been enhanced at the rate of 10 per centum per annum, which will be applicable for the period from 1.4.2019 to 31.3.2020, as per sub-rule 2(f) of Rule 23A of the Odisha Irr. Rules, 1961. Besides the enhanced licence fees/special water rates for the period from 1.4.2019 to 31.3.2020, these formats also, contain the enhanced rates for the period from 1.4.2017 to 31.3.2018, 1.4.2018 to 31.3.2019 and this have been given for clarifying the fact that the enhancement at the rate of 10 per centum per annum shall be effected only on and over the original rates provided in the Schedule-II and Schedule-III of the Odisha Irr. Rules, 1961 from the 1<sup>st</sup> day of April every year.

Hence, it is requested that the enhanced licence fees and special water rates shall be followed scrupulously against all drawal and uses of water by the industrial, commercial and other establishments w.e.f. 1.4.2019.

Encl: Tabular format-I & II

Yours faithfully,

  
Head, Directorate of Water Services



Memo No-10719WR

9544/WE

Date 29.03.19

Copy forwarded to the Special Secretary to Government, DoWR Rajiv Bhawan, Bhubaneswar for information and necessary action w.r.t . letter No.-Irr.II-WRC-48/19-8535/WR, Dt-26.03.2019 of DoWR.

Encl-As above

  
Head, Directorate of Water Services


Memo No-

9545/WE

Date 29.03.19

Copy forwarded to the Chief Engineer Flood Control & Basin Manager, Lower Mahanadi Basin, Bhubaneswar/Chief Engineer & Basin Manager, Upper Mahanadi Basin, Burla /Chief Engineer & Basin Manager, Brahmani Basin, Samal/Chief Construction Engineer, Rengali Right Irr. Project, Dhenkanal/Chief Engineer & Basin Manager, Subarnrekha & Budhabanga Basin, Laxmiposi/Chief Construction Engineer, Anandapur Barrage Project, Bhadrak /Chief Engineer & Basin Manager, RVN Basin, Berhapur/Chief Engineer & Basin Manager, Tel Basin, Bhawanipatna /Chief Engineer & R Basin Manager, Indravati-Kolab Basin, Khatiguda/Chief Construction Engineer, Pottru Irr. Project, Balimela/The Superintending Engineer, Irr. Circle, Angul/Addl. Project Director-cum-Chief Construction Engineer, Samal/ Superintending Engineer, Baripada Irr. Circle, Baripada/Superintending Engineer, Hirkud Dam Circle, Burla/Sundargarh Irr. Circle, Sundargarh/Superintending Engineer, Balangir Irr. Circle, Balangir/Superintending Engineer, Western Irr. Circle, Bhawanipatna/Superintending Engineer, Eastern Irr. Circle-1, Cuttack/Superintending Engineer, Central Irr. Circle, Unit-8, Bhubaneswar/Superintending Engineer, Eastern Irr. Circle-II, Chandikhol/Superintending Engineer, Baripada Irr. Circle, Baripada/Chief Construction Engineer, Anandapur Barrage Project, Salapada/Chief Construction Engineer, Brahmani Right Basin, Dhenkanal/Superintending Engineer, Southern Irr. Circle-II, Paralakhemundi/ Superintending Engineer, Southern Irr. Circle-I, Berhampur/Chief Construction Engineer, Upper Kolab Project, Bariniput/Chief Construction Engineer, Upper Indravati Irr. Project, Mukhiguda/ Chief Construction Engineer, Potteru Irr. Project, Balimela for information and necessary action.

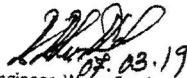
Encl: As above

  
Head, Directorate of Water Services.

SPECIAL WATER RATES UNDER SCHEDULE-II FOR THE PERIOD FROM 01.4.2019 TO 31.3.2020 AFTER THE ENHANCEMENT @ 10% PER ANNUM AS PER RULE-23A(2)(f) AND RULE 26 OF THE ODISHA IRRIGATION RULES, 1961 FOR THE PURPOSES OTHER THAN IRRIGATION( INDUSTRIAL/ COMMERCIAL USES OF WATER) FROM THE IRRIGATION WORKS

Item No	Purpose for which supply is given	Special water rates as per Schedule II from 01.10.2010 to 31.3.2017(in Rupees)	Enhanced special water rate (for the period from 01.4.2017 to 31.03.2018)(in Rupees)	Enhanced special water rate (for the period from 01.4.2018 to 31.03.2019)(in Rupees)	Enhanced special water rate (for the period from 01.4.2019 to 31.03.2020)(in Rupees)	Quantity	Remarks
1	2	3	4	5	6	7	8
1	Bricks or tile making	30.00	33.00	36.00	39.00	1000 Bricks or Tiles	
2	(i) For water actually drawn or allocated whichever is higher for industrial or commercial purpose						
	Slab-I-Consumption not exceeding 5 cusecs	4.20	4.62	5.04	5.46	1000 liter (1 m <sup>3</sup> )	
	Slab-II-Consumption of 5 cusecs or more	5.60	6.16	6.72	7.28	1000 liter (1 m <sup>3</sup> )	
	(ii) For water used for Hydro Power Generation	0.01	0.011	0.012	0.013	1 KWH	
3	(i) For bulk supply to Municipalities and Notified Area Councils and other local authorities for drinking, washing etc.	0.25	0.275	0.30	0.325	1000 liter (1 m <sup>3</sup> )	
	(ii) For bulk supply to Municipalities and Notified Area Councils and other local authorities and cluster of villages by industrial, commercial or other establishments actually drawn or allocated whichever is higher for drinking, washing etc.	0.50	0.55	0.60	0.65	1000 liter (1 m <sup>3</sup> )	
4	Construction of commercial buildings	7.10	7.81	8.52	9.23	1000 liter (1 m <sup>3</sup> )	
5	For filling tanks	0.10	0.11	0.12	0.13	1000 liter (1 m <sup>3</sup> )	
6	For filling tanks mainly for drinking purposes	0.05	0.055	0.06	0.065	1000 liter (1 m <sup>3</sup> )	

N.B:- The enhancement of licence fees and special water rates @ 10 per centum per annum with effect from the first day of April is as per the Odisha Irrigation (Amendment) Rules, 2016

  
03.19  
Chief Engineer, Water Service

RATE OF LICENCE FEE UNDER SCHEDULE-III FOR THE PERIOD FROM 01.4.2019 TO 31.3.2020 AFTER THE ENHANCEMENT @ 10% PER ANNUM AS PER RULE-23A(2)(f) OF THE ODISHA IRRIGATION RULES, 1961 FOR INDUSTRIAL/ COMMERCIAL USES OF WATER FROM THE GOVERNMENT WATER SOURCES

Item No	Purpose for which supply is given	Licence fees as per Schedule III from 01.10.2010 to 31.3.2017 (in Rupees)	Enhanced Licence Fee for the period from 01.4.2017 to 31.3.2018 (in Rupees)	Enhanced Licence Fee for the period from 01.4.2018 to 31.3.2019 (in Rupees)	Enhanced Licence Fee for the period from 01.4.2019 to 31.3.2020 (in Rupees)	Quantity	Remarks
1	2	3	4	5	6	7	8
1	Bricks or tile making	25.00	27.50	30.00	32.50	1000 Bricks or Tiles	
2	(i) For water actually drawn or allocated whichever is higher for industrial or commercial purpose						
	Slab-I-Consumption not exceeding 5 cusecs	3.40	3.74	4.08	4.42	1000 liter (1 m <sup>3</sup> )	
	Slab-II-Consumption of 5 cusecs or more	4.50	4.95	5.40	5.85	1000 liter (1 m <sup>3</sup> )	
	(ii) For water used for Hydro Power Generation	0.01	0.011	0.012	0.013	1 KWH	
3	(i) For bulk supply to Municipalities and Notified Area Councils and other local authorities for drinking, washing etc.	0.20	0.22	0.24	0.26	1000 liter (1 m <sup>3</sup> )	
	(ii) For bulk supply to Municipalities and Notified Area Councils and other local authorities and cluster of villages by industrial, commercial or other establishments actually drawn or allocated whichever is higher for drinking, washing etc.	0.40	0.44	0.48	0.52	1000 liter (1 m <sup>3</sup> )	
4	Construction of commercial buildings	5.30	5.83	6.36	6.89	1000 liter (1 m <sup>3</sup> )	
5	For sub soil water actually used and consumed for industrial /commercial						
	Slab-I-Consumption not exceeding 5 cusecs	6.80	7.48	8.16	8.84	1000 liter (1 m <sup>3</sup> )	
	Slab-II-Consumption of 5 cusecs or more	9.00	9.90	10.80	11.70	1000 liter (1 m <sup>3</sup> )	

N.B:- The enhancement of licence fees and special water rates @ 10 per centum per annum with effect from the first day of April is as per the Odisha Irrigation (Amendment) Rules, 2016

  
Chief Engineer, Water Service