

TARIFF FILING FORMS (THERMAL)

FOR DETERMINATION OF TARIFF

FOR

Korba STPS Stage-III

(From 01.04.2019 to 31.03.2024)

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 ***Korba Super Thermal Power Station Stage-III(500MW)***for the period from **01.04.2019** to **31.03.2024**.

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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 **Korba Super Thermal Power Station Stage-III(500MW) for the period from 01.04.2019 to 31.03.2024.**

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. Madhya Pradesh Power Management Company Limited,
Shakti Bhawan, Vidyut Nagar,
Jabalpur 482 008
2. Maharashtra State Electricity Distribution Co Ltd.
Prakashgad, Bandra (East),
Mumbai 400 051
3. Gujarat UrjaVikas Nigam Ltd.(GUVNL)
VidyutBhavan, Race Course
Vadodara – 390 007
4. Chattisgarh State Power Distribution Co. Ltd.,
(Successor of Chattisgarh State Electricity Board)
P.O. Sundar Nagar,
Danganiya, Raipur – 492013
5. Government of Goa,
Through its Chief Engineer (Electricals)
Electricity Department, VidyutBhawan,
Panaji, Goa

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6 Electricity Department,
Administration of Daman & Diu
Daman-396 210

7 Electricity Department,
Administration of Dadra & Nagar Haveli,
Silvasa.

The Petitioner humbly states that:

- 1) The Petitioner herein NTPC Ltd. (hereinafter referred to as '**Petitioner**' or '**NTPC**'), is a company incorporated under provisions of the Company Act, 1956 and a Government Company as defined under Section 2(45) of the Companies Act, 2013. Further, NTPC is a 'Generating Company' as defined under Section 2(28) of the Electricity Act, 2003.
- 2) In terms of Section 79(1)(a) of Electricity Act, 2003, the Hon'ble Commission has been vested with the functions to regulate the tariff of NTPC, being a Generating Company owned and controlled by the Central Government. The regulation of the tariff of NTPC is as provided under Section 79(1)(a) read with Section 61, 62 and 64 of the Electricity Act, 2003 and the Regulations notified by the Hon'ble Commission in exercise of powers under Section 178 read with Section 61 of the Electricity Act, 2003.
- 3) The Petitioner is having power stations/ projects at different regions and places in the country. Korba Super Thermal Power Station Stage -III(1X 500 MW) (hereinafter referred to as KORBA-III) is one such station located in the State of Chhattisgarh. The power generated from KORBA-III is being supplied to the respondents herein above.
- 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 for the period 01.04.2019 to 31.03.2024.

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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."

The date of filing of Tariff Petition for the period 2019-24 has subsequently been extended by Hon'ble Commission vide order dated 28.10.2019 in Petition No. 331/MP/2019.

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

- 6) The tariff of the KORBA-III for the tariff period 1.4.2014 to 31.3.2019 was determined by the Hon'ble Commission vide its order dated 03.03.2017 in Petition No. 340/GT/2014 in accordance with the CERC (Terms & Conditions of Tariff) Regulations 2014. Further, the Petitioner thereafter had filed an Appeal (being No.180 of 2017) in Appellate Tribunal of Electricity on certain aspects of the order dated 03.03.2017. The appeal is under consideration of the Hon'ble Appellate Tribunal of Electricity. The petitioner vide affidavit dated 07.01.2020 had filed a separate true up petition for the period from 01.04.2014 to 31.03.2019 for revision of tariff in line with the applicable provisions of Tariff Regulations 2014.
- 7) It is submitted that Hon'ble Commission vide order dated 03.03.2017 in Petition no 340/GT/2014 has allowed a capital cost of Rs 2537.064 Cr.as on 31.03.2019 based on the admitted projected capital expenditure for the 2014-19 period. However, the actual

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closing capital cost as on 31.03.2019 has been worked out in the aforesaid true-up petition as Rs.2579.7711 Crs based on the actual expenditure after truing up exercise for the period 2014-19. Accordingly, the Petitioner has adjusted an amount of Rs. (+) 42.7071 Cr to the admitted capital cost as on 31.03.2019 and accordingly the opening capital cost as on 01.04.2019 has been considered as Rs.2579.7711 Crs in the instant petition. The Hon'ble Commission may be pleased to accordingly 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.

- 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 projected estimated capital expenditures for the period 2019-24 under Regulation 19 and 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. Accordingly, water charges may be allowed in tariff based on the same for the 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.

Description	Remarks
Type of Plant	Coal based Thermal Power Plant
Type of cooling water system	Closed Circuit Cooling System
Allocation of Water*	101 MCM
Consumption of Water*	64.97 MCM
Rate of Water charges*	Rs 12.25/Cubic Meter
Total Water Charges**	1950.57Lakh

*As per truing up petition filed for the instant station for Korba-I&II, Korba-III & BCPP, ** For Korba-III for 2018-19 Water Charges during the period 2019-24 has been claimed based on the amount claimed in FY 2018-19 in the truing-up petition filed with an escalation@3.5% on annual basis.

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- 10) Similarly, the Petitioner is claiming the security expenses based on the estimated expenses for the period 2019-24, the same shall be subject to retrospective adjustment based on actuals at the time of true 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 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 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 order of the Hon'ble Commission in the said ECS petition.
- 12) It is submitted that 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 bearing the transportation cost of Fly Ash generated at power stations with the users of Fly Ash. 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:*

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- 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 true-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 2017-18 and 2018-19 in the true-up petition filed vide affidavit dated 07.01.2020 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) It is submitted that Hon'ble Commission has prescribed boiler efficiency and turbine heat rate separately for deriving the unit heat rate where the Unit Heat Rate is not guaranteed by the suppliers. It is submitted that the instant station was envisaged during the tariff period 2004-09 and equipments including SG and TG specifications for tendering / award was stipulated considering the boiler efficiency and the turbine heat rate prescribed by the Hon'ble Commission in the Tariff Regulations at that time. Based on the same the equipments were ordered through international competitive bidding. It

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was not possible for the petitioner to specify the efficiency parameters at the time of finalizing the contracts on the instant station as per the efficiency parameters specified in Tariff Regulations 2019-24 which are more stringent. .

In a similar case, Hon'ble Commission in its order dated 20.02.2014 in Petition No. 160/GT/2012 has considered the design parameters for computing Gross Heat Rate of the station with appropriate operating margin and has stated as under:

"161. As per the guaranteed turbine cycle heat rate of 1945 kCal/kWh and boiler efficiency of 88.5% along with the deviation of 6.5 % as per the 2009 Tariff Regulations, the Gross Heat Rate works out to 2340.59 kcal/kWh. Without the margin of Auxiliary consumption of 6.5%, the Gross Heat Rate works out as 2197.74 kcal/kWh. In light of this, achieving a GSHR of 2220 kcal/kWh as per submission of the respondents 1 to 6 is not possible. Also, the EPC contract was finalized in 2006 and there was no possibility for the petitioner to specify the Station Heat Rate as per the 2009 Tariff Regulations. In view of above, we consider a GSHR of 2340.59 kCal/kWh based on guaranteed turbine cycle heat rate 1945 kCal/kWh and boiler efficiency of 88.5% with a deviation of 6.5 % from the guaranteed design value."

Further, if the Petitioner had stipulated more stringent unit heat rate this would have increased the capital cost commensurate to the efficiency parameters sought. The benefit of the lower capital cost due to lower efficiency parameters has already been passed onto the beneficiaries in terms of lower capital cost. If now the boiler efficiency for working out the normative heat rate is considered as 86% instead of the actual design efficiency of 84.91%, the unit heat rate would be worked out to be 2374 kcal/kwh and the operating margin available over the design heat rate would be 3.58% only which is much less than the operating margin of 5% allowed in the Tariff Regulations 2019. Moreover, it is submitted that boiler efficiency is largely a function of coal quality. In view of above submissions it is prayed that Gross Station Heat rate may be allowed as 2405 Kcal/kwh based on guaranteed turbine cycle heat rate of 1944.44 Kcal/kwh and boiler efficiency of 84.91% with a operating margin of 5 % from the guaranteed design value. The tariff computation attached at Appendix-I is based on considering Station Heat Rate as per design heat rate with applicable operating margin.

- 14) It is submitted that the Petitioner has already paid the requisite filing fee vide UTR No. CMS1106438370 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. 25.04.2019For the



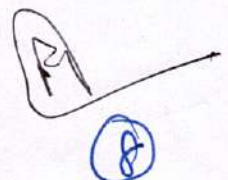
subsequent years, it shall be paid as per the provisions of the CERC (Payment of Fees) Regulations, 2012 as amended. Further Regulation 70 (1) of Tariff Regulations 2019 provides that the application fee and publication expenses may be allowed to be recovered directly from the beneficiaries at the discretion of the Hon'ble Commission. Accordingly, it is prayed that Hon'ble Commission may be pleased to allow recover filing fee and publication fee directly from the beneficiaries.

- 15) 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.
- 16) It is submitted the Petitioner has served the copy of the Petition on to the Respondents mentioned herein above and has posted the Petition on the company website i.e. www.ntpc.co.in
- 17) 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 31.3.2014 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, therefore, prays that the Hon'ble Commission may be pleased to:

- i) Approve tariff of KORBA-III 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) Consider station heat rate based on design heat rate with applicable operating margin.



v) Pass any other order as it may deem fit in the circumstances mentioned above.


Petitioner

Date: 28.01.2020
Place: New Delhi

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 **Korba Super Thermal Power Station Stage-III(500) for the period from 01.04.2019 to 31.03.2024.**

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. Madhya Pradesh Power Management
Company Limited,
Shakti Bhawan, Vidyut Nagar,
Jabalpur 482 008 and Others

AFFIDAVIT

I, Parimal Piyush, son of Late Shri Bharat Mishra aged about 44 years, resident of MP2/402, Magnolia Park, Eldeco Amantran , Sector-119, Noida-201301 do solemnly affirm and state as under:

1. That I am the Deputy General Manager (Commercial) in 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 filed by NTPC and have understood the contents of the same.



(10)

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, Parimal Piyush, 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 thisday of January 2020.



(Deponent)



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

Notary Public, DELHI

12 8 JAN 2020

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APPENDIX-I

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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-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	✓
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	✓
FORM- 12	Statement of Depreciation	✓
Form-12A	Statement of unrecovered depreciation	✓
FORM- 13	Calculation of Weighted Average Rate of Interest on Actual Loans	✓
FORM- 14	Draw Down Schedule for Calculation of IDC & Financing Charges	NA
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

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	NA
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	✓



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List of supporting documents for tariff filing for Thermal Stations

S. No.	Information / Document	Tick
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.	NA
	B. Station wise and Corporate audited Balance Sheet and Profit & Loss Accounts with all the Schedules & annexures for the existing station for relevant years.	***
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.	NA
9	Any other relevant information, (Please specify)	NA
10	Reconciliation with Balance sheet of any actual additional capitalization and amongst stages of a generating station	NA
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

*** Shall be submitted at the time of truing up

Summary of Tariff

Name of the Petitioner:		NTPC Limited								
Name of the Generating Station:		Korba STPS Stage-III								
Place (Region/District/State):		Western Region								
S. No.	Particulars	Unit	Existing 2018-19	Amount in Rs. Lakhs					2023-24	
				2019-20	2020-21	2021-22	2022-23	2023-24		
1	2	3	4	5	6	7	8	9		
1.1	Depreciation	Rs Lakh	13,113.26	13,192.64	13,271.74	13,344.86	13,366.96	6,014.66		
1.2	Interest on Loan	Rs Lakh	6,642.64	5,234.06	4,181.60	3,281.86	2,396.88	1,795.60		
1.3	Return on Equity	Rs Lakh	14,840.15	14,146.77	14,234.10	14,314.85	14,339.24	14,339.24		
1.4	Interest on Working Capital	Rs Lakh	2,797.86	2,545.00	2,557.88	2,571.80	2,585.24	2,490.41		
1.5	O&M Expenses	Rs Lakh	12,919.72	13,905.32	14,393.08	14,899.08	15,423.45	15,961.30		
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							
	Total	Rs Lakh	50313.63	49023.78	48638.39	48412.46	48111.77	40601.21		
2.1	Landed Fuel Cost (coal/gas/RLNG/ liquid) as per FSA approved by beneficiaries	Rs/Ton				1749.28				
	(%) of Fuel Quantity	(%)				199%				
2.2	Landed Fuel Cost Imported Coal as per FSA approved by beneficiaries					NA				
	(%) of Fuel Quantity					NA				
2.3	Landed Fuel Cost (coal/gas /RLNG/liquid) other than FSA	Rs/Ton				NA				
	(%) of Fuel Quantity	(%)				NA				
2.4	Landed Fuel Cost Imported Coal other than FSA.					NA				
	(%) of Fuel Quantity					NA				
2.5	Secondary fuel oil cost (Ex-bus)	Rs/Unit				0.020				
	Energy Charge Rate ex-bus (Paise/kWh) 2A, 2B, 2C, 2D	Rs/Unit				1.367				
									 	
									(Petitioner)	

Name of the Petitioner: NTPC Limited
Name of the Generating Station: Korba STPS Stage-III

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	2,57,977.11	2,59,077.11	2,61,077.11	2,61,943.11	2,61,943.11
2	Add: Addition during the year/period	1,100.00	2,000.00	866.00	-	-
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	2,59,077.11	2,61,077.11	2,61,943.11	2,61,943.11	2,61,943.11
7	Average Capital Cost	2,58,527.11	2,60,077.11	2,61,510.11	2,61,943.11	2,61,943.11

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	257977.11	259077.11	261077.11	261943.11	261943.11
2	Add: Addition during the year / period	1100.00	2000.00	866.00	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	259077.11	261077.11	261943.11	261943.11	261943.11
7	Average Capital Cost	258527.11	260077.11	261510.11	261943.11	261943.11

**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	Average Capital Cost	0.00	0.00	0.00	0.00	0.00



(Petitioner)

Name of the Petitioner:

NTPC Limited

Name of the Generating Station:

Korba STPS Stage-III

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		
	Return on Equity							
1	Gross Opening Equity (Normal)	75,155.87	75,485.87	76,085.87	76,345.67	76,345.67	76,345.67	76,345.67
2	Less: Adjustment in Opening Equity	-						
3	Adjustment during the year		0.00	0.00	0.00	0.00	0.00	0.00
4	Net Opening Equity (Normal)	75,155.87	75,485.87	76,085.87	76,345.67	76,345.67	76,345.67	76,345.67
5	Add: Increase in equity due to addition during the year / period	330.00	600.00	259.80	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	0.00	0.00
8	Less: Decrease due to reversal during the year / period	0.00	0.00	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	0.00	0.00
10	Net closing Equity (Normal)	75,485.87	76,085.87	76,345.67	76,345.67	76,345.67	76,345.67	76,345.67
11	Average Equity (Normal)	75,320.87	75,785.87	76,215.77	76,345.67	76,345.67	76,345.67	76,345.67
12	Rate of ROE (%)	18.782	18.782	18.782	18.782	18.782	18.782	18.782
13	Total ROE	14,146.77	14,234.10	14,314.85	14,339.24	14,339.24	14,339.24	14,339.24

17

Name of the Petitioner: **NTPC Limited**

Name of the Generating Station: **Korba STPS Stage-III**

Statement showing Return on *Weighted Average Interest on Loan*

S. No.	Particulars	Amount in Rs. Lakhs						
		2019-20	2020-21	2021-22	2022-23	2023-24		
1	2	3	4	5	6	7		
	Return on Equity (beyond the original scope of work excluding additional capitalization due to Change in Law)							
1	Gross Opening Equity (Normal)	0.00	0.00	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	0.00	0.00
3	Adjustment during the year	0.00	0.00	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	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	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	0.00	0.00
8	Less: Decrease due to reversal during the year / period	0.00	0.00	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	0.00	0.00
10	Net closing Equity (Normal)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	Average Equity (Normal)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	Rate of ROE (%)	8.454	8.058	7.863	7.741	7.818		
13	Total ROE	0.00	0.00	0.00	0.00	0.00	0.00	0.00

18




(Petitioner)

Plant Characteristics

Name of the Petitioner	NTPC Ltd.
Name of the Generating Station	Korba STPS Stage-III
Unit(s)/Block(s)/Parameters	Unit-1
Installed Capacity (MW)	500
Schedule COD as per Investment Approval	40188
Actual COD /Date of Taken Over (as applicable)	40623
Pit Head or Non Pit Head	Pit head
Name of the Boiler Manufacture	BHEL
Name of Turbine Generator Manufacture	KWU
Main Steams Pressure at Turbine inlet (kg/Cm ²) abs ¹ .	170
Main Steam Temperature at Turbine inlet (°C) ¹	537
Reheat Steam Pressure at Turbine inlet (kg/Cm ²) ¹	40.492
Reheat Steam Temperature at Turbine inlet (°C) ¹	537
Main Steam flow at Turbine inlet under MCR condition (tons /hr) ²	1498.53
Main Steam flow at Turbine inlet under VWO condition (tons /hr) ²	1587.7
Unit Gross electrical output under MCR /Rated condition (MW) ²	500
Unit Gross electrical output under VWO condition (MW) ²	529.53
Guaranteed Design Gross Turbine Cycle Heat Rate (kCal/kWh) ³	1944.44
Conditions on which design turbine cycle heat rate guaranteed	
% MCR	100
% Makeup Water Consumption	0
Design Capacity of Make up Water System	0.03
Design Capacity of Inlet Cooling System	54000
Design Cooling Water Temperature (°C)	33
Back Pressure	77
Steam flow at super heater outlet under BMCR condition (tons/hr)	1625
Steam Pressure at super heater outlet under under BMCR condition (Kg/cm ²)	178
Steam Temperature at super heater outlet under BMCR condition (°C)	540
Steam Temperature at Reheater outlet at BMCR condition (°C)	540
Design / Guaranteed Boiler Efficiency (%) ⁴	84.91%
Design Fuel with and without Blending of domestic/imported coal	Domestic Coal

Plant Characteristics

Name of the Petitioner	NTPC Ltd.
Name of the Generating Station	Korba STPS Stage-III
Unit(s)/Block(s)/Parameters	Unit-1
Type of Cooling Tower	Counter flow/Induced Draft
Type of cooling system⁵	Closed/Induced
Type of Boiler Feed Pump⁶	Steam Driven
Fuel Details⁷	
-Primary Fuel	Coal
-Secondary Fuel	HFO/LDO
-Alternate Fuels	
Types of SOX control system	FGD and De-Nox system installation under process.
Types of NOX control system	
Details of SPM control system	
Special Features/Site Specific Features⁸	
Special Technological Features⁹	
Environmental Regulation related features¹⁰	Electrostatic Precipitator
Any other special features	
1: At Turbine MCR condition.	
2: with 0% (Nil) make up and design Cooling water temperature	
3: at TMCR output based on gross generation, 0% (Nil) makeup and design Cooling water temperature.	
4: With Performance coal based on Higher Heating Value (HHV) of fuel and at BMCR) out put	
5: Closed circuit cooling, once through cooling, sea cooling, natural draft cooling, induced draft cooling	
6: Motor driven, Steam turbine driven etc.	
7: Coal or natural gas or Naptha or lignite etc.	
8: Any site specific feature such as Merry-Go-Round, Vicinity to sea, Intake /makeup water systems etc.	
9: Any Special Technological feature like Advanced class FA technology in Gas Turbines, etc.	
10: Environmental Regulation related features like FGD, ESP etc.,	
 Petitioner	

Normative parameters considered for tariff computations

Name of the Petitioner:		NTPC Limited					
Name of the Generating Station:		Korba STPS Stage-III					
		(Year Ending March)					
Particulars	Unit	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** \$\$	%	-	6.976	6.650	6.489	6.388	6.452
Effective Tax Rate	%	21.5490%	17.4720	17.4720	17.4720	17.4720	17.4720
Target Availability	%	85.00	85.00				
In High Demand Season	%	-	-	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
In Low Demand Season(Off-Peak)	%	-	-	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	%	5.75	6.25	6.25	6.25	6.25	6.25
Gross Station Heat Rate	kCal/kWh	2393.00	2404.50	2404.50	2404.50	2404.50	2404.50
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	0	22.51	23.3	24.12	24.97	25.84
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	MT				200000		
SBI 1 Year MCLR plus 350 basis point ³	%	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

Storage capacity pertains to entire VSTPS Station



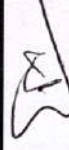
Petitioner

Part-I
FORM-3A
ADDITIONAL FORM

Calculation of O&M Expenses

Name of the Company :		NTPC Limited					
Name of the Power Station :		Korba STPS Stage-III					
		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	O&M expenses under Reg.35(1)						
1a	Normative	11255.00	11650.00	12060.00	12485.00	12920.00	
2	O&M expenses under Reg.35(6)						
2a	Water Charges	2018.84	2089.50	2162.63	2238.32	2316.67	
2b	Security expenses	631.47	653.58	676.45	700.13	724.63	
2c	Capital Spares**	0.00	0.00	0.00	0.00	0.00	
3	O&M expenses-Ash Transportation**						
	Total O&M Expenses	13905.32	14393.08	14899.08	15423.45	15961.30	

** Shall be provided at the time of truing up



Petitioner

**PART I
FORM- 5**

Abstract of Admitted Capital Cost for the existing Projects

Name of the Company :	NTPC Limited		
Name of the Power Station :	Korba STPS Stage-III		
Last date of order of Commission for the project	Date (DD-MM-YYYY)	In Rs Lakh	
Reference of petition no. in which the above order was passed	Petition no.	03.03.2017	
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: (as on 31.03.2019)			
Capital cost			253706.4
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)--as on 1.4.2014			744.30
Gross Normative Debt			1,79,831.73
Cumulative Repayment			1,02,209.46
Net Normative Debt			77622.27
Normative Equity			73,874.66
Cumulative Depreciation			1,02,380.16
Freehold land			2942

Note: gross Normative Debt has been derived from Capital Cost @ 70%


(Petitioner)

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

Particulars	XXII 8.1771%		XXIII 8.3796%		XXX 7.89%		XXXI 8.78%		XXXII 8.73%		XXXV 8.785%		XXXVIII 9.17%		54		57		66		67					
	BONDS INR	Interest Type	BONDS INR	Interest Type	BONDS INR	Interest Type	BONDS INR	Interest Type	BONDS INR	Interest Type	BONDS INR	Interest Type	BONDS INR	Interest Type	BONDS INR	Interest Type	BONDS INR	Interest Type	BONDS INR	Interest Type	BONDS INR	Interest Type				
Source of Loan1																										
Amount of Loan sanctioned	50000	Fixed	50000	Fixed	70000	Fixed	50000	Fixed	10600	Fixed	12000	Fixed	7500	Fixed	1030683	Fixed	50000	Fixed	392500	Fixed	400000	Fixed	400000	Fixed		
Interest Rate, if applicable	8.1771%		8.3796%		7.890%		8.78%		8.73%		8.785%		9.17%		8.49%		8.19%		7.37%		8.30%		N/A		8.30%	
Base Rate, if Floating Interest7	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A	
Margin, if Floating Interest8	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A	
Are there any Caps/Floors	No		No		No		No		No		No		No		No		No		No		No		No		No	
If above is yes specify caps/floor																										
Moratorium Period10	4.5 yrs *		4.5 yrs *		10 yrs		10 yrs *		10 yrs		6 yrs		6 yrs		8		8		10		15		10		10	
Moratorium effective from #	02.01.07		05.02.07		09.03.2010		09.03.2010		31.03.10		15.09.10		22.03.11		25.03.2015		25.03.2015		15.12.2015		14.12.2016		15-01-2019		15-01-2019	
Repayment Period11	9.5 yrs		9.5 yrs		Bullet Repayment		Bullet Repayment		Bullet Repayment		14 yrs		14 yrs		Installments Due on 25/03/2023, 25/03/2024 & 25/03/2025		Installments Due on 25-03-2023, 25/03/2023, 25/03/2024 & 25/03/2025		Bullet Repayment		Bullet Repayment		Bullet Repayment		Bullet Repayment	
Repayment effective from	02.07.11		05.08.11		09.03.2020		09.03.2020		31.03.20		15.09.16		22.03.2017		25-03-2023		25-03-2023		15-12-2025		14-12-2031		15-01-2029		15-01-2029	
Repayment Frequency12	Half Yearly		Half Yearly		Bullet Repayment		Bullet Repayment		Bullet Repayment		Yearly		Yearly		Yearly		Yearly		Bullet Repayment		Bullet Repayment		Bullet Repayment		Bullet Repayment	
Repayment Instalment13,14	2500		2500		70000		50000		10550		800		500		50000		50000		392500		400000		400000		400000	
Base Exchange Rate15																										
Door to Door Maturity	14 yrs		14 yrs		10 yrs		10 yrs		10 yrs		20 yrs		20 yrs		10		10		10		15		10		10	
Name of the Projects																										
KORGA III	1,000		1,200		5,000		2,500		7,500		1,000		1,500		9,200		500		900		2,135					

Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5070000011

T00001

D00001

Unsecured Loan From PFC-V		
Source of Loan :	PFC-V	
Currency :	INR	
Amount of Loan :	1,00,00,00,00,000	
Total Drawn amount :	2,00,00,00,00,000	
Date of Drawl	26.12.2008	
Interest Type :	Floating	
Fixed Interest Rate :	-----	
Base Rate, If Floating Interest	9.94%	
Margin, If Floating Interest :		
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 :	26.12.2008	
Repayment Period (Inc Moratorium) :	16 Years	
Repayment Frequency :	48 Quarterly Instalments	
Repayment Type :	FIFO	
First Repayment Date :	15.07.2013	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	KOLDAM	30,00,00,000.00
	SIMHADRI-II	75,00,00,000.00
	KAHALGAON-II	40,00,00,000.00
	KORBA-III	30,00,00,000.00
	FARAKKA-III	25,00,00,000.00
Total Allocated Amount		2,00,00,00,000.00



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Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5070000011

T00001

D00002

Unsecured Loan From PFC-V		
Source of Loan :	PFC-V	
Currency :	INR	
Amount of Loan :	1,00,00,00,00,000	
Total Drawn amount :	3,00,00,00,00,000	
Date of Drawl	28.01.2009	
Interest Type :	Floating	
Fixed Interest Rate :	-----	
Base Rate, If Floating Interest	D00002 - 9.97%	
Margin, If Floating Interest :		
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 :	26.12.2008	
Repayment Period (Inc Moratorium) :	16 Years	
Repayment Frequency :	48 Quarterly Instalments	
Repayment Type :	FIFO	
First Repayment Date :	15.07.2013	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	KOLDAM	50,00,00,000.00
	LOHARI NAG-PALA	10,00,00,000.00
	KORBA-III	30,00,00,000.00
	FARAKKA-III	50,00,00,000.00
	TAPOVAN VISHNUGAD	20,00,00,000.00
	SIMHADRI-II	20,00,00,000.00
	MAUDA	1,20,00,00,000.00
Total Allocated Amount		3,00,00,00,000.00



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Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5070000011

T00001

D00003

Unsecured Loan From PFC-V		
Source of Loan :	PFC-V	
Currency :	INR	
Amount of Loan :	1,00,00,00,00,000	
Total Drawn amount :	3,00,00,00,00,000	
Date of Drawl	28.08.2009	
Interest Type :	Floating	
Fixed Interest Rate :	-----	
Base Rate, If Floating Interest	9.70%	
Margin, If Floating Interest :		
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 :	26.12.2008	
Repayment Period (Inc Moratorium) :	16 Years	
Repayment Frequency :	48 Quarterly Instalments	
Repayment Type :	FIFO	
First Repayment Date :	15.07.2013	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	KOLDAM	70,00,00,000.00
	NCTPP-II	95,00,00,000.00
	KORBA-III	50,00,00,000.00
	VINDHYACHAL-IV	25,00,00,000.00
	SIMHADRI-II	60,00,00,000.00
Total Allocated Amount		3,00,00,00,000.00



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Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5070000011

T00001

D00007

Unsecured Loan From PFC-V		
Source of Loan :	PFC-V	
Currency :	INR	
Amount of Loan :	1,00,00,00,00,000	
Total Drawn amount :	1,00,00,00,00,000	
Date of Drawl	15.12.2009	
Interest Type :	Floating	
Fixed Interest Rate :	-----	
Base Rate, If Floating Interest	9.38%	
Margin, If Floating Interest :		
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 :	26.12.2008	
Repayment Period (Inc Moratorium) :	16 Years	
Repayment Frequency :	48 Quarterly Instalments	
Repayment Type :	FIFO	
First Repayment Date :	15.07.2013	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	KORBA-III	50,00,00,000.00
	VINDHYACHAL-IV	50,00,00,000.00
Total Allocated Amount		1,00,00,00,000.00



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Statement Giving Details of Project Financed through a Combination of loan

Form 8

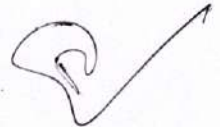
TRANCHE NO

BP NO 5070000011

T00001

D00011

Unsecured Loan From PFC-V		
Source of Loan :	PFC-V	
Currency :	INR	
Amount of Loan :	1,00,00,00,00,000	
Total Drawn amount :	2,00,00,00,00,000	
Date of Drawl	14.01.2010	
Interest Type :	Floating	
Fixed Interest Rate :	-----	
Base Rate, If Floating Interest	8.66%	
Margin, If Floating Interest :		
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 :	26.12.2008	
Repayment Period (Inc Moratorium) :	16 Years	
Repayment Frequency :	48 Quarterly Instalments	
Repayment Type :	FIFO	
First Repayment Date :	15.07.2013	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	KOLDAM	25,00,00,000.00
	KORBA-III	50,00,00,000.00
	NCTPP-II	25,00,00,000.00
	FARAKKA-III	50,00,00,000.00
	VINDHYACHAL-IV	50,00,00,000.00
Total Allocated Amount		2,00,00,00,000.00



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Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5070000011

T00001

D00012

Unsecured Loan From PFC-V		
Source of Loan :	PFC-V	
Currency :	INR	
Amount of Loan :	1,00,00,00,00,000	
Total Drawn amount :	2,00,00,00,00,000	
Date of Drawl	24.02.2010	
Interest Type :	Floating	
Fixed Interest Rate :	-----	
Base Rate, If Floating Interest	8.67%	
Margin, If Floating Interest :		
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 :	26.12.2008	
Repayment Period (Inc Moratorium) :	16 Years	
Repayment Frequency :	48 Quarterly Instalments	
Repayment Type :	FIFO	
First Repayment Date :	15.07.2013	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	VINDHYACHAL-IV	45,00,00,000.00
	KORBA-III	15,00,00,000.00
	SIMHADRI-II	10,00,00,000.00
	BONGAIGAON	25,00,00,000.00
	KOLDAM	20,00,00,000.00
	MAUDA	25,00,00,000.00
	RIHAND-III	35,00,00,000.00
	TAPOVAN VISHNUGAD	25,00,00,000.00
Total Allocated Amount		2,00,00,00,000.00



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Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5070000011

T00001

D00014

Unsecured Loan From PFC-V		
Source of Loan :	PFC-V	
Currency :	INR	
Amount of Loan :	1,00,00,00,00,000	
Total Drawn amount :	1,00,00,00,00,000	
Date of Drawl	22.03.2010	
Interest Type :	Floating	
Fixed Interest Rate :	-----	
Base Rate, If Floating Interest	8.74%	
Margin, If Floating Interest :		
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 :	26.12.2008	
Repayment Period (Inc Moratorium) :	16 Years	
Repayment Frequency :	48 Quarterly Instalments	
Repayment Type :	FIFO	
First Repayment Date :	15.07.2013	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	KORBA-III	1,00,00,00,000.00
Total Allocated Amount		1,00,00,00,000.00

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Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5070000011

T00001

D00019

Unsecured Loan From PFC-V		
Source of Loan :	PFC-V	
Currency :	INR	
Amount of Loan :	1,00,00,00,00,000	
Total Drawn amount :	3,50,00,00,000	
Date of Drawl	21.05.2010	
Interest Type :	Floating	
Fixed Interest Rate :	-----	
Base Rate, If Floating Interest	8.35%	
Margin, If Floating Interest :		
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 :	26.12.2008	
Repayment Period (Inc Moratorium) :	16 Years	
Repayment Frequency :	48 Quarterly Instalments	
Repayment Type :	FIFO	
First Repayment Date :	15.07.2013	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	KORBA-III	25,00,00,000.00
	KOLDAM	1,00,00,00,000.00
	NCTPP-DADRI-II	25,00,00,000.00
	SIMHADRI-II	50,00,00,000.00
	BONGAIGAON	50,00,00,000.00
	RIHAND-III	50,00,00,000.00
	SIPAT-I	50,00,00,000.00
Total Allocated Amount		3,50,00,00,000.00

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Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5070000011

T00001

D00023

Unsecured Loan From PFC-V		
Source of Loan :	PFC-V	
Currency :	INR	
Amount of Loan :	1,00,00,00,00,000	
Total Drawn amount :	3,50,00,00,000	
Date of Drawl	31.12.2010	
Interest Type :	Floating	
Fixed Interest Rate :	-----	
Base Rate, If Floating Interest	7.43%	
Margin, If Floating Interest :		
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 :	26.12.2008	
Repayment Period (Inc Moratorium) :	16 Years	
Repayment Frequency :	48 Quarterly Instalments	
Repayment Type :	FIFO	
First Repayment Date :	15.07.2013	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	BARH-II	25,00,00,000.00
	MAUDA-I	25,00,00,000.00
	SIMHADRI-II	10,00,00,000.00
	VINDHYACHAL IV	25,00,00,000.00
	RIHAND-III	50,00,00,000.00
	BARH-I	1,00,00,00,000.00
	KOLDAM	10,00,00,000.00
	KORBA-III	25,00,00,000.00
	FARAKKA III	15,00,00,000.00
	NCTPP-DADRI-II	10,00,00,000.00
	TAPOVAN VISHNUGARH	15,00,00,000.00
	BONGAIGAON	40,00,00,000.00
Total Allocated Amount		3,50,00,00,000.00

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Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5070000011

T00001

D00025

Unsecured Loan From PFC-V		
Source of Loan :	PFC-V	
Currency :	INR	
Amount of Loan :	1,00,00,00,00,000	
Total Drawn amount :	1,50,00,00,00,000	
Date of Drawl	17.03.2011	
Interest Type :	Floating	
Fixed Interest Rate :	-----	
Base Rate, If Floating Interest	7.67%	
Margin, If Floating Interest :		
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 :	26.12.2008	
Repayment Period (Inc Moratorium) :	16 Years	
Repayment Frequency :	48 Quarterly Instalments	
Repayment Type :	FIFO	
First Repayment Date :	15.07.2013	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	KOLDAM	25,00,00,000.00
	KORBA-III	25,00,00,000.00
	NCTPP-DADRI-II	40,00,00,000.00
	BONGAIGAON	60,00,00,000.00
Total Allocated Amount		1,50,00,00,000.00

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Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5070000011

T00001

D00031

Unsecured Loan From PFC-V		
Source of Loan :	PFC-V	
Currency :	INR	
Amount of Loan :	1,00,00,00,00,000	
Total Drawn amount :	4,00,00,00,00,000	
Date of Drawl	24.09.2011	
Interest Type :	Floating	
Fixed Interest Rate :	-----	
Base Rate, If Floating Interest	7.44%	
Margin, If Floating Interest :		
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 :	26.12.2008	
Repayment Period (Inc Moratorium) :	16 Years	
Repayment Frequency :	48 Quarterly Instalments	
Repayment Type :	FIFO	
First Repayment Date :	15.07.2013	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	KOLDAM	58,00,00,000.00
	TAPOVAN VISHNUGAD	15,00,00,000.00
	FARAKKA-III	48,00,00,000.00
	SIPAT-I	1,20,00,00,000.00
	NCTPP-II	37,00,00,000.00
	BARH-II	40,00,00,000.00
	KORBA-III	62,00,00,000.00
	KAHALGAON-II	15,00,00,000.00
	SIPAT-II	5,00,00,000.00
Total Allocated Amount		4,00,00,00,000.00

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Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5070000011

T00001

D00033

Unsecured Loan From PFC-V		
Source of Loan :	PFC-V	
Currency :	INR	
Amount of Loan :	1,00,00,00,00,000	
Total Drawn amount :	5,00,00,00,00,000	
Date of Drawl	31.12.2011	
Interest Type :	Fixed with Reset after every 3 Years	
Fixed Interest Rate :	-----	
Base Rate, If Floating Interest	7.83%	
Margin, If Floating Interest :		
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 :	26.12.2008	
Repayment Period (Inc Moratorium) :	16 Years	
Repayment Frequency :	48 Quarterly Instalments	
Repayment Type :	FIFO	
First Repayment Date :	15.07.2013	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	SIPAT-I	90,00,00,000.00
	BARH-I	65,00,00,000.00
	BARH-II	80,00,00,000.00
	MOUDA-I	47,00,00,000.00
	BONGAIGAON	25,00,00,000.00
	RIHAND-III	38,00,00,000.00
	FARAKKA-III	1,31,00,00,000.00
	KORBA-III	7,00,00,000.00
	SIPAT-II	4,00,00,000.00
	KAHALGAON-II	8,00,00,000.00
	UNCHAHAH R&M	5,00,00,000.00
Total Allocated Amount		5,00,00,00,000.00

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Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5070000011

T00001

D00037

Unsecured Loan From PFC-V		
Source of Loan :	PFC-V	
Currency :	INR	
Amount of Loan :	1,00,00,00,00,000	
Total Drawn amount :	5,00,00,00,00,000	
Date of Drawl	27.03.2012	
Interest Type :	Floating	
Fixed Interest Rate :	-----	
Base Rate, If Floating Interest	8.25%	
Margin, If Floating Interest :		
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 :	26.12.2008	
Repayment Period (Inc Moratorium) :	16 Years	
Repayment Frequency :	48 Quarterly Instalments	
Repayment Type :	FIFO	
First Repayment Date :	15.07.2013	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	NCTPP-II	1,10,00,00,000.00
	MOUDA-I	1,20,00,00,000.00
	VINDHYACHAL-IV	1,45,00,00,000.00
	BARH-II	80,00,00,000.00
	KORBA-III	30,00,00,000.00
	KAHALGAON-II	15,00,00,000.00
Total Allocated Amount		5,00,00,00,000.00



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Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5050000009 & 231

T00001

D00001

Unsecured Loan From HDFC Bank Ltd.-II		
Source of Loan :	HDFC Bank Ltd.-II	
Currency :	INR	
Amount of Loan :	10,00,00,00,000	
Total Drawn amount :	1,00,00,00,000	
Date of drawl	26.10.2010	
Interest Type :	Floating	
Fixed Interest Rate :		
Base Rate, If Floating Interest	8.45%	
Margin, If Floating Interest :		
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 :	26.10.2010	
Repayment Period (Inc Moratorium) :	10 Years	
Repayment Frequency :	14 Half Yearly Instalment	
Repayment Type :	AVG	
First Repayment Date :	26.04.2014	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	BARH-II	75,00,00,000
	KORBA-III	25,00,00,000
Total Allocated Amount		1,00,00,00,000



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Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5050000009 & 231

T00001

D00003

Unsecured Loan From HDFC Bank Ltd.-II		
Source of Loan :	HDFC Bank Ltd.-II	
Currency :	INR	
Amount of Loan :	10,00,00,00,000	
Total Drawn amount :	50,00,00,000	
Date of drawl	25.01.2011	
Interest Type :	Floating	
Fixed Interest Rate :		
Base Rate, If Floating Interest	8.45%	
Margin, If Floating Interest :		
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 :	26.10.2010	
Repayment Period (Inc Moratorium) :	10 Years	
Repayment Frequency :	14 Half Yearly Instalment	
Repayment Type :	AVG	
First Repayment Date :	26.04.2014	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	RIHAND-III	20,00,00,000
	KOLDAM	15,00,00,000
	KORBA-III	15,00,00,000
Total Allocated Amount		50,00,00,000

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Statement Giving Details of Project Financed through a Combination of loan

Form 8

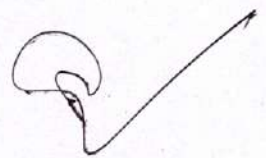
TRANCHE NO

BP NO 5050000211

T00001

D00002

Unsecured Loan From Vijaya Bank-IV		
Source of Loan :	Vijaya Bank - IV	
Currency :	INR	
Amount of Loan :	3,79,00,00,000	
Total Drawn amount :	1,00,00,00,000	
Date of drawl	17.09.2010	
Interest Type :	Floating	
Fixed Interest Rate :		
Base Rate, If Floating Interest	8.40%	
Margin, If Floating Interest :		
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 :	15.09.2010	
Repayment Period (Inc Moratorium) :	10 Years	
Repayment Frequency :	14 Half Yearly Instalment	
Repayment Type :	AVG	
First Repayment Date :	15.03.2014	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	KORBA-III	30,00,00,000.00
	TAPOVAN VISHNUGARD	35,00,00,000.00
	MAUDA	35,00,00,000.00
Total Allocated Amount		1,00,00,00,000.00



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Statement Giving Details of Project Financed through a Combination of loan

**Form 8
TRANCHE NO
T00001**

BP NO 5050000501

Unsecured Loan From Bank of Karnataka Bank		
Source of Loan :	Karnataka Bank-II	
Currency :	INR	
Amount of Loan :	5,00,00,00,000	
Total Drawn amount :	5,00,00,00,000	
Date of Drawal	28.03.2017	
Interest Type :	Floating	
Fixed Interest Rate :		
Base Rate, If Floating Interest	7.96%	
Margin, If Floating Interest :		
Are there any Caps/ Floor :	Y/N	
Frequency of Intt. Payment	MONTHLY	
If Above is yes, specify Caps/ Floor :		
Moratorium Period :	Nil	
Moratorium effective from :	28.03.2017	
Repayment Period (Inc Moratorium) :	15 Years	
Repayment Frequency :	9f Yearly Instalment	
Repayment Type :	AVG	
First Repayment Date :	28.03.2021	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	BARH-I	93,75,00,000.00
	BARH-II	1,31,25,00,000.00
	BONGAIGAON	17,85,71,427.00
	KORBA-III	36,78,57,143.00
	LARA-I	9,37,50,000.00
	PAKRI BARWADIH	53,75,00,000.00
	RIHAND-III	45,98,21,428.00
	SOLAPUR	46,87,50,000.00
	VINDHYACHAL-IV	35,71,42,855.00
	SIMHADRI-II	28,66,07,147.00
Total Allocated Amount		5,00,00,00,000.00

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Statement Giving Details of Project Financed through a Combination of loan

**Form 8
TRANCHE NO**

BP NO 5050000442

T00001

D00024

Unsecured Loan From SBI-VIII		
Source of Loan :	SBI-VIII	
Currency :	INR	
Amount of Loan :	1,00,00,00,00,000	
Total Drawn amount :	11,50,00,00,000	
Date of Drawl	14.02.2017	
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 :	6 Years	
Moratorium effective from :	14.02.2017	
Repayment Period (Inc Moratorium) :	15 Years	
Repayment Frequency :	9 Yearly Installments	
Repayment Type :	AVG	
First Repayment Date :	31.01.2022	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	BARH-I	3,00,00,00,000
	BONGAIGAON	34,28,57,142
	FARAKKA III	14,28,57,141
	GADARWARA	2,50,00,00,000
	KOLDAM	92,85,71,427
	KORBA-III	2,85,71,428
	KUDGI	1,00,00,00,000
	MOUDA-I	40,71,42,856
	NCTPP-II	15,71,42,855
	NORTH KARANPURA	1,00,00,00,000
	RIHAND-III	32,14,28,570
	SIMHADRI-II	53,28,57,141
	SIPAT-I	21,42,85,711
	SIPAT-II	5,71,42,856
	TAPOVAN VISHNUGAD	50,00,00,000
	VINDHYACHAL IV	32,42,85,714
	PAKRI BARWADIH	4,28,57,159
Total Allocated Amount		11,50,00,00,000

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Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5050000711

T00001

D00001

Unsecured Loan From Punjab National Bank-IV		
Source of Loan :	Punjab National Bank-IV	
Currency :	INR	
Amount of Loan :	20,00,00,00,000	
Total Drawn amount :	20,00,00,00,000	
Date of Drawl	01.01.2019	
Interest Type :	Floating	
Fixed Interest Rate :		
Base Rate, If Floating Interest	8.30%	
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 :	01.01.2019	
Repayment Period (Inc Moratorium) :	12 Years	
Repayment Frequency :	9 Yearly Instalment	
Repayment Type :	AVG	
First Repayment Date :	01.02.2022	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	UNCHA HAR STPP IV	65,00,00,000.00
	TANDA-II	85,00,00,000.00
	NCTPP-II	36,43,00,000.00
	DADRI GAS R&M	56,00,00,000.00
	KORBA-III	15,00,00,000.00
	SIPAT-II	17,14,00,000.00
	FARAKKA-III	8,57,00,000.00
	KAHALGAON-II	17,14,00,000.00
	BARH-I	1,08,57,00,000.00
	BARH-II	8,00,00,000.00
	NORTH KARANPURA	1,09,00,00,000.00
	KOLDAM	6,43,00,000.00
	TAPOVAN VISHNUGAD	28,57,00,000.00
	PAKRI BARWADIH	1,42,00,00,000.00
	CHATTI BARIATU	10,00,00,000.00
	BONGAIGAON	36,43,00,000.00
	KUDGI	60,00,00,000.00
	LARA	1,23,00,00,000.00
	GADARWARA	2,27,72,00,000.00
	DARLIPALLI	2,73,00,00,000.00
	KHARGONE	50,00,00,000.00
	ANANTPUR SOLAR	17,00,00,000.00
	TALAI PALI COAL MINE	5,00,00,00,000.00
	Total Allocated Amount	20,00,00,00,000.00

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Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5050000741

T00001

D00002

Unsecured Loan From SBI-XII		
Source of Loan :	SBI-XII	
Currency :	INR	
Amount of Loan :	50,00,00,00,000	
Total Drawn amount :	26,35,00,00,000	
Date of Drawal:	18.02.2019	
Interest Type :	Floating	
Fixed Interest Rate :	-----	
Base Rate, If Floating Interest	8.35%	
Margin, If Floating Interest :	NIL	
Are there any Caps/ Floor :	Y/N	
Frequency of Intt. Payment	Monthly	
If Above is yes, specify Caps/ Floor :		
Moratorium Period :	6 Years	
Moratorium effective from :	18.02.2019	
Repayment Period (Inc Moratorium) :	15 Years	
Repayment Frequency :	9 Yearly Installments	
Repayment Type :	AVG	
First Repayment Date :	31.03.2026	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	BARH-I	90,00,00,000.00
	FARAKKA-III	24,50,00,000.00
	GADARWARA	90,00,00,000.00
	KORBA-III	25,00,00,000.00
	LARA	1,00,00,00,000.00
	MOUDA-I	21,00,00,000.00
	MOUDA-II	2,25,00,00,000.00
	NCTPP-II	63,50,00,000.00
	NORTH KARANPURA	10,40,00,00,000.00
	PAKRI BARWADIH CMB	1,20,00,00,000.00
	SIMHADRI-II	21,00,00,000.00
	SOLAPUR	2,40,00,00,000.00
	TELANGANA	75,00,00,000.00
	KUDGI	2,00,00,00,000.00
	BARH-I	50,00,00,000.00
	NORTH KARANPURA	80,00,00,000
	TAPOVAN VISHNUGARH	20,00,00,000
	TELANGANA	1,50,00,00,000
Total Allocated Amount		26,35,00,00,000.00

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Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	NTPC Limited			
Name of the Generating Station	Korba STPS Stage-III			
COD	21-03-2011			
For Financial Year	2019-24 (Summary)			

Sl. No.	Head of Work /Equipment	ACE Claimed (Actual / Projected)				Regulation under which claimed/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
A. Works under Original scope, Change in Law etc. eligible for RoE at Normal Rate								
1	Ash Dyke Raising	100.00	600.00					
2	Zero Liquid Discharge	1,000.00	200.00					
3	ClO2 dosing system		1,200.00	866.00				
	Total(A)	1,100.00	2,000.00	866.00	-	-		
B. Works beyond Original scope excluding add-cap due to Change in Law eligible for RoE at Wtd. Average rate of Interest								
7								
	Total (B)							
	Total Add. Cap. Claimed (A+B)	1,100.00	2,000.00	866.00	-	-		


(Petitioner)

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner		NTPC Limited	
Name of the Generating Station		Korba STPS Stage-III	
COD		21-03-2011	
For Financial Year		2019-20	

Sl. No.	Head of Work /Equipment	Accrual basis as per IGAAP	ACE Claimed (Projected)			Regulations under which claimed	Justification	Amount in Rs Lakh Admitted Cost by the Commission. if any
			Un-discharged Liability included in col.3 4	Cash basis 5= (3-4)	IDC included in col.3 6			
A. Works under Original scope, Change in Law etc. eligible for RoE at Normal Rate								
1	Ash Dyke Raising	100.00		100.00		25(1)(g)	Ash Dyke raising is the work under original scope and the activity is carried out periodically during the life of the plant to ensure continuous and sustainable operation of the station. Hon'ble Commission may be pleased to allow the same.	9
2	Zero Liquid Discharge	1,000.00		1,000.00		26 (1) (b)	As per the directions of Central Pollution Control Board (CPCB), ZLD is to be ensured in various Water polluting industries including the Thermal Generating Stations. Further, as per the 'Consent to Operate', granted by Chhattisgarh Environment Conservation Board, the Zero discharge is to be ensured by the instant station. Accordingly, the work has been taken up by the instant station to comply the same. Hon'ble Commission may be pleased to allow the same. (Consent to Operate is attached at Annexure-A)	
Total (A)		1,100.00	-	1,100.00	-			
B. Works beyond Original scope excluding add-cap due to Change in Law eligible for RoE at Wtd. Average rate of Interest								
Total (B)		-	-	-	-			
Total Add. Cap. Claimed (A+B)		1,100.00	-	1,100.00	-			


(Petitioner)

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner: NTPC Limited
 Name of the Generating Station: Korba STPS Stage-III
 COD: 21-03-2011
 For Financial Year: 2020-21

Sl. No.	Head of Work / Equipment	Accrual basis as per IGAAP	ACE Claimed (Actual / Projected)		Regulations under which claimed	Justification	Amount in Rs Lakh
			Un-discharged Liability included in col. 3	Cash basis 5= (3-4)			
1	2	3	4	6	7	8	9
A. Works under Original scope, Change in Law etc. eligible for RoE at Normal Rate							
1	Ash Dyke Raising	600.00		600.00	25(1)(g)	Justification as per Form-9 of FY 2019-20	
2	Zero Liquid Discharge	200.00		200.00	26 (1) (b)	Justification as per Form-9 of FY 2019-20	
3	ClO2 dosing system	1,200.00		1,200.00	26(1)(b) read with 26(1)(d)	In the instant station, at present Chlorine gas is being dozed directly at various stages of water treatment to maintain water quality and to inhibit organic growth in the water retaining structures/ equipment such as clarifiers, storage tanks, cooling towers, condenser tubes & piping etc. Chlorine dosing is done from chlorine stored in cylinders/ tonners. Chlorine gas is very hazardous and may prove fatal in case of leakage; handling and storage of same involves risk to the life of public at large. In the interest of public safety the chlorine dosing system is now being replaced by Chlorine Dioxide (ClO2) system, which is much safer and less hazardous than chlorine. In the proposed scheme ClO2 shall be produced on site by use of commercial grade HCl and sodium chlorite. As ClO2 is generated at site, avoids handling and storage risk. Further, at Kudgi NTPC project Department of Factories, Boiler, Industrial Safety and Health, Govt of Karnataka has directed NTPC to replace the highly hazardous gas chlorination system with ClO2 system. SPCB, Odisha while issuing consent to establish in case of Darlipalli Station has asked NTPC to explore the possibility of installing ClO2 system instead of Chlorine gas system (Relevant documents is attached at Annexure-B). In view of the directions of various statutory authorities in different states of the country and for enhancing the safety of public NTPC is replacing the chlorination system with ClO2 system. Accordingly, Hon'ble Commission may be pleased to allow the same under Reg. 26(1)(b) read with Reg. 26(1)(d).	
Total (A)		2,000.00	-	2,000.00	-		
B. Works beyond Original scope excluding add-cap due to Change in Law eligible for RoE at Wtd. Average rate of Interest							
10	Total (B)	-	-	-	-		
Total Add. Cap. Claimed		2,000.00	-	2,000.00	-		

(Petitioner)

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	NTPC Limited								
Name of the Generating Station	Korba STPS Stage-III								
COD	21-03-2011								
For Financial Year	2021-22								

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			
1	2	3	4	5= (3-4)	6	7	8	9
A. Works under Original scope, Change in Law etc. eligible for RoE at Normal Rate								
2	CIO2 dosing system	866		866		26(1)(b) read with 26(1)(d)	Justification as per Form-9 of FY 2020-21	
	Total (A)	866	-	866	-			
B. Works beyond Original scope excluding add-cap due to Change in Law eligible for RoE at Wtd. Average rate of Interest								
10	Total (B)	-	-	-	-			
	Total Add. Cap. Claimed (A+B)	866	-	866	-			



(Petitioner)

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	NTPC Limited					
Name of the Generating Station	Korba STPS Stage-III					
COD	21-03-2011					
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	Amount in Rs Lakh Admitted Cost by the Commission, if any
			Un-discharged Liability included in col. 3	Cash basis included in col. 3			
1	2	3	4	5=(3-4)	7	8	9
A. Works under Original scope. Change in Law etc. eligible for RoE at Normal Rate							
1							
No add-Cap proposed. However the same may be claimed, if any, at the time of truing-up.							
B. Works beyond Original scope excluding add-cap due to Change in Law eligible for RoE at Wid. Average rate of Interest							
10							
Total Add. Cap. Claimed (A+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		Korba STPS Stage-III	
COD		21-03-2011	
For Financial Year		2023-24	

Sl. No.	Head of Work /Equipment	Accrual basis as per IGAAP	ACE Claimed (Actual / Projected)		Regulations under which claimed	Justification	Amount in Rs Lakh Admitted Cost by the Commission. if any	
			Un-discharged Liability included in col. 3	4				Cash basis 5= (3-4)
1	2	3	4	5= (3-4)	6	7	8	9
A. Works under Original scope. Change in Law etc. eligible for RoE at Normal Rate								

No add-Cap proposed. However the same may be claimed, if any, at the time of truing-up.

1	Total (A)	-	-	-	-	-	-	-
B. Works beyond Original scope excluding add-cap due to Change in Law eligible for RoE at Wtd. Average rate of Interest								
10	Total (B)	-	-	-	-	-	-	-
Total Add. Cap. Claimed (A+B)								


(Petitioner)

**PART-I
FORM- 10**

Name of the Petitioner	NTPC Limited										
Name of the Generating Station	Korba STPS Stage-III										
Date of Commercial Operation	21-03-2011										

Financial Year (Starting from COD)1	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

Financing Details	
Loan-1	
Loan-2	
Loan-3 and so on	
Total Loan2	
Equity	
Internal Resources	
Others (Pl. specify)	
Total	

Add cap is proposed to be finance in Debt:Equity ratio of 70:30


(Petitioner)

Calculation of Depreciation

Name of the Company :		NTPC Limited		
Name of the Power Station :		Korba STPS Stage-III		
(Amount in Rs Lakh)				
Sl.No.	Name of the Assets I	Gross Block as on 01.04.2019 as on COD	Depreciation Rates as per CERC's Depreciation Rate Schedule	Depreciation Amount for each year up to 31.03.24
1	2		4	5= Col.3 X Col.4
1	Land- Free Hold*	3354.03	0.00%	0.00
2	Land- Lease Hold	942.68	3.34%	31.49
3	Plant & Machinery	246310.69	5.28%	13005.20
4	Water supply, drainage & sewerage	422.62	5.28%	22.31
5	Main Plant Building	10249.54	3.34%	342.33
6	Service Building	6271.62	3.34%	209.47
7	MGR	0.00	5.28%	0.00
8	Railway siding	634.40	5.28%	33.50
9	Road/Bridge	220.83	3.34%	7.38
10	Electrical installations	243.51	5.28%	12.86
11	Furniture & Fixtures, Office equipmnt.	563.28	6.33%	35.66
12	Other Office Equipments	351.51	6.33%	22.25
13	Communication Equip.	43.42	6.33%	2.75
14	EDP, WP&SATCOM.	271.43	15.00%	40.72
15	VEHICLES	35.52	9.50%	3.37
16	Construction equip.	159.36	5.28%	8.41
17	Hospital equipment	209.35	5.28%	11.05
18	Software	10.67	15.00%	1.60
19	Temp. Constructions.	0.00	100.00%	0.00
20	Spares (IndAs)	466.05	5.28%	24.61
	TOTAL	270760.53		13814.96
	Weighted Average Rate of Depreciation (%)			5.103

Statement of Depreciation

Name of the Company :		NTPC Limited							
Name of the Power Station :		Korba STPS Stage-III							
S. No.	Particulars	(Amount in Rs Lakh)							
		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	257653.02	2,57,977.11	2,59,077.11	2,61,077.11	2,61,943.11	2,61,943.11		
2	Closing Capital Cost	257977.11	2,59,077.11	2,61,077.11	2,61,943.11	2,61,943.11	2,61,943.11		
3	Average Capital Cost	257815.07	2,58,527.11	2,60,077.11	2,61,510.11	2,61,943.11	2,61,943.11		
1a	Cost of IT Equipments & Software included in (1) above*		-	-	-	-	-		
2a	Cost of IT Equipments & Software included in (2) above		-	-	-	-	-		
3a	Average Cost of IT Equipments & Software		-	-	-	-	-		
4	Freehold land	2,754.47	2,754.47	2,754.47	2,754.47	2,754.47	2,754.47		
5	Rate of depreciation	5.086	5.103	5.103	5.103	5.103	5.103		
6	Depreciable value	2,29,014.93	2,30,195.38	2,31,590.38	2,32,880.08	2,33,269.78	2,33,269.78		
7.	Balance useful life at the beginning of the period	17.97	16.97	15.97	14.97	13.97	12.97		
8	Remaining depreciable value	1,39,733.37	1,28,111.95	1,16,314.31	1,04,332.28	91,377.11	78,010.16		
9	Depreciation (for the period)	0.00	13,192.64	13,271.74	13,344.86	13,366.96	6,014.66		
10	Depreciation (annualised)	13,113.22	13,192.64	13,271.74	13,344.86	13,366.96	6,014.66		
11	Cumulative depreciation at the end of the period		1,15,276.07	1,28,547.80	1,41,892.66	1,55,259.62	1,61,274.28		
12	Less: Cumulative depreciation adjustment on account of un-discharged liabilities deducted as on 01.04.2009	0.00	-	-	-	-	-		
13	Add: Cumulative depreciation adjustment on account of liability Discharge	0.00	-	-	-	-	-		
14	Less: Cumulative depreciation adjustment on account of de-capitalisation	102.88	-	-	-	-	-		
15	Net Cumulative depreciation at the end of the period after adjustments	1,02,083.43	1,15,276.07	1,28,547.80	1,41,892.66	1,55,259.62	1,61,274.28		

* Shall be provided at the time of triung-up



(Petitioner)

Form-12A									
Statement of Underrecovery of Depreciation									
Station: Korba-III									
SN	FY	Target Availability (%)	Annual Availability (%)	AFC (Periodic) (Rs.Lakh)	Dep. included in AFC (Periodic) (Rs.Lakh)	Disincentive (Periodic) (Rs.Lakh)	Dep. unrecovered due to disincentive (Periodic) (Rs.Lakh)		
1	2010-11 (21.03.2011-31.03.2011)	85	81.38	1528.81	345.08	32.55	7.35		
2	2011-12	85	76.76	52353.55	11825.76	2538.47	573.40		

Calculation of Interest on Actual Loans ¹						
					Form-13	
Name of the Company			NTPC Limited			
Name of the Power Station			Korba Super Thermal Power Project-III			
(Amount in lacs)						
Sl. no.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
2						
1	PFC V					
	Gross loan - Opening	49900.00	49900.00	49900.00	49900.00	49900.00
	Cumulative repayments of Loans upto previous period	23910.42	28068.75	32227.08	36385.42	40543.75
	Net loan - Opening	25989.58	21831.25	17672.92	13514.58	9356.25
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period	0.00	0.00	0.00	0.00	0.00
	Total	25989.58	21831.25	17672.92	13514.58	9356.25
	Repayments of Loans during the period	4158.33	4158.33	4158.33	4158.33	4158.33
	Net loan - Closing	21831.25	17672.92	13514.58	9356.25	5197.92
	Average Net Loan	23910.42	19752.08	15593.75	11435.42	7277.08
	Rate of Interest on Loan	8.69%	8.69%	8.69%	8.69%	8.69%
	Interest on Loan Annualised	2078.72	1717.20	1355.68	994.17	632.65
2	HDFC II T-1 D1&D3					
	Gross loan - Opening	4000.00	4000.00	4000.00	4000.00	4000.00
	Cumulative repayments of Loans upto previous period	2857.14	3428.57	4000.00	4000.00	4000.00
	Net loan - Opening	1142.86	571.43	0.00	0.00	0.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period					
	Total	1142.86	571.43	0.00	0.00	0.00
	Repayments of Loans during the period	571.43	571.43	0.00	0.00	0.00
	Net loan - Closing	571.43	0.00	0.00	0.00	0.00
	Average Net Loan	857.14	285.71	0.00	0.00	0.00
	Rate of Interest on Loan	8.45%	8.45%	8.45%	8.45%	8.45%
	Interest on Loan Annualised	72.43	24.14	0.00	0.00	0.00
3	VIJYA Bank IV					
	Gross loan - Opening	3000.00	3000.00	3000.00	3000.00	3000.00
	Cumulative repayments of Loans upto previous period	2357.14	2785.71	3000.00	3000.00	3000.00
	Net loan - Opening	642.86	214.29	0.00	0.00	0.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period					
	Total	642.86	214.29	0.00	0.00	0.00
	Repayments of Loans during the period	428.57	214.29	0.00	0.00	0.00
	Net loan - Closing	214.29	0.00	0.00	0.00	0.00
	Average Net Loan	428.57	107.14	0.00	0.00	0.00
	Rate of Interest on Loan	8.40%	8.40%	0.00%	0.00%	0.00%
	Interest on Loan Annualised	36.00	9.00	0.00	0.00	0.00
4	Bonds XXII Series					
	Gross loan - Opening	1000.00	1000.00	1000.00	1000.00	1000.00
	Cumulative repayments of Loans upto previous period	800.00	900.00	1000.00	1000.00	1000.00
	Net loan - Opening	200.00	100.00	0.00	0.00	0.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period					
	Total	200.00	100.00	0.00	0.00	0.00
	Repayments of Loans during the period	100.00	100.00	0.00	0.00	0.00
	Net loan - Closing	100.00	0.00	0.00	0.00	0.00
	Average Net Loan	150.00	50.00	0.00	0.00	0.00
	Rate of Interest on Loan	8.21%	8.21%	0.00%	0.00%	0.00%
	Interest on Loan Annualised	12.31	4.10	0.00	0.00	0.00
5	Bonds XXIII Series					
	Gross loan - Opening	1200.00	1200.00	1200.00	1200.00	1200.00
	Cumulative repayments of Loans upto previous period	960.00	1080.00	1200.00	1200.00	1200.00
	Net loan - Opening	240.00	120.00	0.00	0.00	0.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period					
	Total	240.00	120.00	0.00	0.00	0.00
	Repayments of Loans during the period	120.00	120.00	0.00	0.00	0.00
	Net loan - Closing	120.00	0.00	0.00	0.00	0.00

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Calculation of Interest on Actual Loans ¹						
					Form-13	
Name of the Company			NTPC Limited			
Name of the Power Station			Korba Super Thermal Power Project-III			
(Amount in lacs)						
Sl. no.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	2					
	Average Net Loan	180.00	60.00	0.00	0.00	0.00
	Rate of Interest on Loan	8.41%	8.41%	8.41%	8.41%	8.41%
	Interest on Loan Annualised	15.14	5.05	0.00	0.00	0.00
6	Bonds XXX Series-bullet repayment on 05.05.2019					
	Gross loan - Opening	5000.00	5000.00	5000.00	5000.00	5000.00
	Cumulative repayments of Loans upto previous period	0.00	5000.00	5000.00	5000.00	5000.00
	Net loan - Opening	5000.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period	0.00	0.00	0.00	0.00	0.00
	Total	5000.00	0.00	0.00	0.00	0.00
	Repayments of Loans during the period	5000.00	0.00	0.00	0.00	0.00
	Net loan - Closing	0.00	0.00	0.00	0.00	0.00
	Average Net Loan	2500.00	0.00	0.00	0.00	0.00
	Rate of Interest on Loan	7.92%	7.92%	7.92%	7.92%	7.92%
	Interest on Loan Annualised	198.00	0.00	0.00	0.00	0.00
7	Bonds XXXI Series-bullet repayment on 09.03.2020					
	Gross loan - Opening	2500.00	2500.00	2500.00	2500.00	2500.00
	Cumulative repayments of Loans upto previous period	0.00	2500.00	2500.00	2500.00	2500.00
	Net loan - Opening	2500.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period	0.00	0.00	0.00	0.00	0.00
	Total	2500.00	0.00	0.00	0.00	0.00
	Repayments of Loans during the period	2500.00	0.00	0.00	0.00	0.00
	Net loan - Closing	0.00	0.00	0.00	0.00	0.00
	Average Net Loan	1250.00	0.00	0.00	0.00	0.00
	Rate of Interest on Loan	8.81%	8.81%	8.81%	8.81%	8.81%
	Interest on Loan Annualised	110.13	0.00	0.00	0.00	0.00
8	Bonds XXXIII Series-bullet repayment on 31.03.2020					
	Gross loan - Opening	7500.00	7500.00	7500.00	7500.00	7500.00
	Cumulative repayments of Loans upto previous period	0.00	7500.00	7500.00	7500.00	7500.00
	Net loan - Opening	7500.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period	0.00	0.00	0.00	0.00	0.00
	Total	7500.00	0.00	0.00	0.00	0.00
	Repayments of Loans during the period	7500.00	0.00	0.00	0.00	0.00
	Net loan - Closing	0.00	0.00	0.00	0.00	0.00
	Average Net Loan	3750.00	0.00	0.00	0.00	0.00
	Rate of Interest on Loan	8.76%	8.76%	8.76%	8.76%	8.76%
	Interest on Loan Annualised	328.50	0.00	0.00	0.00	0.00
9	Bonds XXXV Series					
	Gross loan - Opening	1000.00	1000.00	1000.00	1000.00	1000.00
	Cumulative repayments of Loans upto previous period	214.29	285.71	357.14	428.57	500.00
	Net loan - Opening	785.71	714.29	642.86	571.43	500.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period	0.00	0.00	0.00	0.00	0.00
	Total	785.71	714.29	642.86	571.43	500.00
	Repayments of Loans during the period	71.43	71.43	71.43	71.43	71.43
	Net loan - Closing	714.29	642.86	571.43	500.00	428.57
	Average Net Loan	750.00	678.57	607.14	535.71	464.29
	Rate of Interest on Loan	8.815%	8.815%	8.815%	8.815%	8.815%
	Interest on Loan Annualised	66.11	59.82	53.52	47.22	40.93
10	XXXVIII 9.17% BONDS					
	Gross loan - Opening	1500.00	1500.00	1500.00	1500.00	1500.00
	Cumulative repayments of Loans upto previous period	321.43	428.57	535.71	642.86	750.00
	Net loan - Opening	1178.57	1071.43	964.29	857.14	750.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period	0.00	0.00	0.00	0.00	0.00

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Calculation of Interest on Actual Loans ¹						
					Form-13	
Name of the Company			NTPC Limited			
Name of the Power Station			Korba Super Thermal Power Project-III			
(Amount in lacs)						
Sl. no.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	2					
	Total	1178.57	1071.43	964.29	857.14	750.00
	Repayments of Loans during the period	107.14	107.14	107.14	107.14	107.14
	Net loan - Closing	1071.43	964.29	857.14	750.00	642.86
	Average Net Loan	1125.00	1017.86	910.71	803.57	696.43
	Rate of Interest on Loan	9.20%	9.20%	9.20%	9.20%	9.20%
	Interest on Loan Annualised	103.50	93.64	83.79	73.93	64.07
11	54th Series 8.49% Bonds repayment from 25.03.2023					
	Gross loan - Opening	9200.00	9200.00	9200.00	9200.00	9200.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	1840.00
	Net loan - Opening	9200.00	9200.00	9200.00	9200.00	7360.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period	0.00	0.00	0.00	0.00	0.00
	Total	9200.00	9200.00	9200.00	9200.00	7360.00
	Repayments of Loans during the period	0.00	0.00	0.00	1840.00	3680.00
	Net loan - Closing	9200.00	9200.00	9200.00	7360.00	3680.00
	Average Net Loan	9200.00	9200.00	9200.00	8280.00	5520.00
	Rate of Interest on Loan	8.52%	8.52%	8.52%	8.52%	8.52%
	Interest on Loan Annualised	783.84	783.84	783.84	705.46	470.30
12	57th Series 8.19% Bonds repayment from 15.12.2025					
	Gross loan - Opening	500.00	500.00	500.00	500.00	500.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	500.00	500.00	500.00	500.00	500.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period	0.00	0.00	0.00	0.00	0.00
	Total	500.00	500.00	500.00	500.00	500.00
	Repayments of Loans during the period	0.00	0.00	0.00	0.00	0.00
	Net loan - Closing	500.00	500.00	500.00	500.00	500.00
	Average Net Loan	500.00	500.00	500.00	500.00	500.00
	Rate of Interest on Loan	8.22%	8.22%	8.22%	8.22%	8.22%
	Interest on Loan Annualised	41.10	41.10	41.10	41.10	41.10
13	66th Series 7.37% Bonds repayment from 14.12.2031					
	Gross loan - Opening	900.00	900.00	900.00	900.00	900.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	900.00	900.00	900.00	900.00	900.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period	0.00	0.00	0.00	0.00	0.00
	Total	900.00	900.00	900.00	900.00	900.00
	Repayments of Loans during the period	0.00	0.00	0.00	0.00	0.00
	Net loan - Closing	900.00	900.00	900.00	900.00	900.00
	Average Net Loan	900.00	900.00	900.00	900.00	900.00
	Rate of Interest on Loan	7.40%	7.40%	7.40%	7.40%	7.40%
	Interest on Loan Annualised	66.60	66.60	66.60	66.60	66.60
14	67th Series 8.30% Bonds repayment from 15.01.2029 (Refinancing ICI VI in 2018-19)					
	Gross loan - Opening	2135.00	2135.00	2135.00	2135.00	2135.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	2135.00	2135.00	2135.00	2135.00	2135.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period	0.00	0.00	0.00	0.00	0.00
	Total	2135.00	2135.00	2135.00	2135.00	2135.00
	Repayments of Loans during the period	0.00	0.00	0.00	0.00	0.00
	Net loan - Closing	2135.00	2135.00	2135.00	2135.00	2135.00
	Average Net Loan	2135.00	2135.00	2135.00	2135.00	2135.00
	Rate of Interest on Loan	8.4300%	8.4300%	8.4300%	8.4300%	8.4300%
	Interest on Loan Annualised	179.98	179.98	179.98	179.98	179.98
15	Karnataka Bank II (refinancing the BOM-III & IV loan in year 2016-17)					
	Gross loan - Opening	3678.57	3678.57	3678.57	3678.57	3678.57
	Cumulative repayments of Loans upto previous period	0.00	0.00	408.73	817.46	1226.19
	Net loan - Opening	3678.57	3678.57	3269.84	2861.11	2452.38
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00

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Calculation of Interest on Actual Loans ¹						
					Form-13	
Name of the Company			NTPC Limited			
Name of the Power Station			Korba Super Thermal Power Project-III			
(Amount in lacs)						
Sl. no.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	2					
	Increase/ Decrease due to ACE/Drawl during the period	0.00	0.00	0.00	0.00	0.00
	Total	3678.57	3678.57	3269.84	2861.11	2452.38
	Repayments of Loans during the period	0.00	408.73	408.73	408.73	408.73
	Net loan - Closing	3678.57	3269.84	2861.11	2452.38	2043.65
	Average Net Loan	3678.57	3474.21	3065.48	2656.75	2248.02
	Rate of Interest on Loan	8.29%	8.29%	8.29%	8.29%	8.29%
	Interest on Loan Annualised	305.08	288.13	254.23	220.33	186.44
16	SBI VIII (refinancing the OBC loan in year 2016-17)					
	Gross loan - Opening	285.71	285.71	285.71	285.71	285.71
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	31.75	63.49
	Net loan - Opening	285.71	285.71	285.71	253.97	222.22
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period	0.00	0.00	0.00	0.00	0.00
	Total	285.71	285.71	285.71	253.97	222.22
	Repayments of Loans during the period	0.00	0.00	31.75	31.75	31.75
	Net loan - Closing	285.71	285.71	253.97	222.22	190.48
	Average Net Loan	285.71	285.71	269.84	238.10	206.35
	Rate of Interest on Loan	8.45%	8.45%	8.45%	8.45%	8.45%
	Interest on Loan Annualised	24.14	24.14	22.80	20.12	17.44
17	PNB IV					
	Gross loan - Opening	1500.00	3000.00	4500.00	6000.00	7500.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	666.67	1333.33
	Net loan - Opening	1500.00	3000.00	4500.00	5333.33	6166.67
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period	1500.00	1500.00	1500.00	1500.00	1500.00
	Total	3000.00	4500.00	6000.00	6833.33	7666.67
	Repayments of Loans during the period	0.00	0.00	666.67	666.67	666.67
	Net loan - Closing	3000.00	4500.00	5333.33	6166.67	7000.00
	Average Net Loan	2250.00	3750.00	4916.67	5750.00	6583.33
	Rate of Interest on Loan	8.30%	8.30%	8.30%	8.30%	8.30%
	Interest on Loan Annualised	186.75	311.25	408.08	477.25	546.42
18	SBI XII (refinancing IDFC in year 2018-19)					
	Gross loan - Opening	2500.00	2500.00	2500.00	2500.00	2500.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	2500.00	2500.00	2500.00	2500.00	2500.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period	0.00	0.00	0.00	0.00	0.00
	Total	2500.00	2500.00	2500.00	2500.00	2500.00
	Repayments of Loans during the period	0.00	0.00	0.00	0.00	0.00
	Net loan - Closing	2500.00	2500.00	2500.00	2500.00	2500.00
	Average Net Loan	2500.00	2500.00	2500.00	2500.00	2500.00
	Rate of Interest on Loan	8.45%	8.45%	8.45%	8.45%	8.45%
	Interest on Loan Annualised	211.25	211.25	211.25	211.25	211.25
	TOTAL LOAN					
	Gross loan - Opening	110034.29	111534.29	113034.29	114534.29	116034.29
	Cumulative repayments of Loans upto previous period	31420.42	51977.32	57728.67	63172.72	70456.77
	Net loan - Opening	78613.87	59556.96	55305.61	51361.56	43737.52
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period	1500.00	1500.00	1500.00	1500.00	1500.00
	Total	67378.87	48321.96	44070.61	40126.56	34342.52
	Repayments of Loans during the period	20556.90	5751.35	5444.05	7284.05	9124.05
	Net loan - Closing	59556.96	55305.61	51361.56	43737.52	32433.47
	Average Net Loan	69085.42	57431.29	53333.59	47549.54	38085.49
	Rate of Interest on Loan	6.9762%	6.6501%	6.4891%	6.3879%	6.4517%
	Interest on Loan Annualised	4819.57	3819.24	3460.88	3037.41	2457.17
	Note: In case of foreign loans, opening loan balance considered at exchange rate of 20.03.2011					

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P

Calculation of Interest on Actual Loans ¹						
Name of the Company				NTPC Limited		Form-13
Name of the Power Station				Korba Super Thermal Power Project-III		
(Amount in lacs)						
Sl. no.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
2						
Exchange rate 21.03.2011 US \$= INR 45.59						
PFC V - T-1 D-1						
	Gross loan - Opening	3000.00	3000.00	3000.00	3000.00	3000.00
	Cumulative repayments of Loans upto previous year	1437.50	1687.50	1937.50	2187.50	2437.50
	Net loan - Opening	1562.50	1312.50	1062.50	812.50	562.50
	Increase/ Decrease due to FERV	0	0	0	0	0
	Increase/ Decrease due to ACE	0	0	0	0	0
	Total	1562.50	1312.50	1062.50	812.50	562.50
	Repayments of Loans during the year	250.00	250.00	250.00	250.00	250.00
	Net loan - Closing	1312.50	1062.50	812.50	562.50	312.50
	Average Net Loan	1437.50	1187.50	937.50	687.50	437.50
	Rate of Interest on Loan	9.94%	9.94%	9.94%	9.94%	9.94%
	Interest on Loan Annualised	142.89	118.04	93.19	68.34	43.49
PFC V - T-1 D-2						
	Gross loan - Opening	3000.00	3000.00	3000.00	3000.00	3000.00
	Cumulative repayments of Loans upto previous year	1437.50	1687.50	1937.50	2187.50	2437.50
	Net loan - Opening	1562.50	1312.50	1062.50	812.50	562.50
	Increase/ Decrease due to FERV	0	0	0	0	0
	Increase/ Decrease due to ACE	0	0	0	0	0
	Total	1562.50	1312.50	1062.50	812.50	562.50
	Repayments of Loans during the year	250.00	250.00	250.00	250.00	250.00
	Net loan - Closing	1312.50	1062.50	812.50	562.50	312.50
	Average Net Loan	1437.50	1187.50	937.50	687.50	437.50
	Rate of Interest on Loan	9.97%	9.97%	9.97%	9.97%	9.97%
	Interest on Loan Annualised	143.32	118.39	93.47	68.54	43.62
PFC V - T-1 D-3						
	Gross loan - Opening	5000.00	5000.00	5000.00	5000.00	5000.00
	Cumulative repayments of Loans upto previous year	2395.83	2812.50	3229.17	3645.83	4062.50
	Net loan - Opening	2604.17	2187.50	1770.83	1354.17	937.50
	Increase/ Decrease due to FERV	0	0	0	0	0
	Increase/ Decrease due to ACE	0	0	0	0	0
	Total	2604.17	2187.50	1770.83	1354.17	937.50
	Repayments of Loans during the year	416.67	416.67	416.67	416.67	416.67
	Net loan - Closing	2187.50	1770.83	1354.17	937.50	520.83
	Average Net Loan	2395.83	1979.17	1562.50	1145.83	729.17
	Rate of Interest on Loan	9.70%	9.70%	9.70%	9.70%	9.70%
	Interest on Loan Annualised	232.40	191.98	151.56	111.15	70.73
PFC V - T-1 D-7						
	Gross loan - Opening	5000.00	5000.00	5000.00	5000.00	5000.00
	Cumulative repayments of Loans upto previous year	2395.83	2812.50	3229.17	3645.83	4062.50
	Net loan - Opening	2604.17	2187.50	1770.83	1354.17	937.50
	Increase/ Decrease due to FERV	0	0	0	0	0
	Increase/ Decrease due to ACE	0	0	0	0	0
	Total	2604.17	2187.50	1770.83	1354.17	937.50
	Repayments of Loans during the year	416.67	416.67	416.67	416.67	416.67
	Net loan - Closing	2187.50	1770.83	1354.17	937.50	520.83
	Average Net Loan	2395.83	1979.17	1562.50	1145.83	729.17
	Rate of Interest on Loan	9.38%	9.38%	9.38%	9.38%	9.38%
	Interest on Loan Annualised	224.73	185.65	146.56	107.48	68.40
PFC V - T-1 D-11						
	Gross loan - Opening	5000.00	5000.00	5000.00	5000.00	5000.00
	Cumulative repayments of Loans upto previous year	2395.83	2812.50	3229.17	3645.83	4062.50
	Net loan - Opening	2604.17	2187.50	1770.83	1354.17	937.50
	Increase/ Decrease due to FERV	0	0	0	0	0
	Increase/ Decrease due to ACE	0	0	0	0	0
	Total	2604.17	2187.50	1770.83	1354.17	937.50
	Repayments of Loans during the year	416.67	416.67	416.67	416.67	416.67
	Net loan - Closing	2187.50	1770.83	1354.17	937.50	520.83
	Average Net Loan	2395.83	1979.17	1562.50	1145.83	729.17
	Rate of Interest on Loan	8.66%	8.66%	8.66%	8.66%	8.66%
	Interest on Loan Annualised	207.48	171.40	135.31	99.23	63.15
PFC V - T-1 D-12						
	Gross loan - Opening	1500.00	1500.00	1500.00	1500.00	1500.00
	Cumulative repayments of Loans upto previous year	718.75	843.75	968.75	1093.75	1218.75
	Net loan - Opening	781.25	656.25	531.25	406.25	281.25
	Increase/ Decrease due to FERV	0	0	0	0	0

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PA

Calculation of Interest on Actual Loans ¹						Form-13
Name of the Company			NTPC Limited			
Name of the Power Station			Korba Super Thermal Power Project-III			
						(Amount in lacs)
Sl. no.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
2						
	Increase/ Decrease due to ACE	0	0	0	0	0
	Total	781.25	656.25	531.25	406.25	281.25
	Repayments of Loans during the year	125.00	125.00	125.00	125.00	125.00
	Net loan - Closing	656.25	531.25	406.25	281.25	156.25
	Average Net Loan	718.75	593.75	468.75	343.75	218.75
	Rate of Interest on Loan	8.67%	8.67%	8.67%	8.67%	8.67%
	Interest on Loan Annualised	62.32	51.48	40.64	29.80	18.97
PFC V - T-1 D-14						
	Gross loan - Opening	10000.00	10000.00	10000.00	10000.00	10000.00
	Cumulative repayments of Loans upto previous year	4791.67	5625.00	6458.33	7291.67	8125.00
	Net loan - Opening	5208.33	4375.00	3541.67	2708.33	1875.00
	Increase/ Decrease due to FERV	0	0	0	0	0
	Increase/ Decrease due to ACE	0	0	0	0	0
	Total	5208.33	4375.00	3541.67	2708.33	1875.00
	Repayments of Loans during the year	833.33	833.33	833.33	833.33	833.33
	Net loan - Closing	4375.00	3541.67	2708.33	1875.00	1041.67
	Average Net Loan	4791.67	3958.33	3125.00	2291.67	1458.33
	Rate of Interest on Loan	8.74%	8.74%	8.74%	8.74%	8.74%
	Interest on Loan Annualised	418.79	345.96	273.13	200.29	127.46
PFC V - T-1 D-19						
	Gross loan - Opening	2500.00	2500.00	2500.00	2500.00	2500.00
	Cumulative repayments of Loans upto previous year	1197.92	1406.25	1614.58	1822.92	2031.25
	Net loan - Opening	1302.08	1093.75	885.42	677.08	468.75
	Increase/ Decrease due to FERV	0	0	0	0	0
	Increase/ Decrease due to ACE	0	0	0	0	0
	Total	1302.08	1093.75	885.42	677.08	468.75
	Repayments of Loans during the year	208.33	208.33	208.33	208.33	208.33
	Net loan - Closing	1093.75	885.42	677.08	468.75	260.42
	Average Net Loan	1197.92	989.58	781.25	572.92	364.58
	Rate of Interest on Loan	8.35%	8.35%	8.35%	8.35%	8.35%
	Interest on Loan Annualised	100.03	82.63	65.23	47.84	30.44
PFC V - T-1 D-23						
	Gross loan - Opening	2500.00	2500.00	2500.00	2500.00	2500.00
	Cumulative repayments of Loans upto previous year	1197.92	1406.25	1614.58	1822.92	2031.25
	Net loan - Opening	1302.08	1093.75	885.42	677.08	468.75
	Increase/ Decrease due to FERV	0	0	0	0	0
	Increase/ Decrease due to ACE	0	0	0	0	0
	Total	1302.08	1093.75	885.42	677.08	468.75
	Repayments of Loans during the year	208.33	208.33	208.33	208.33	208.33
	Net loan - Closing	1093.75	885.42	677.08	468.75	260.42
	Average Net Loan	1197.92	989.58	781.25	572.92	364.58
	Rate of Interest on Loan	7.43%	7.43%	7.43%	7.43%	7.43%
	Interest on Loan Annualised	89.01	73.53	58.05	42.57	27.09
PFC V - T-1 D-25						
	Gross loan - Opening	2500.00	2500.00	2500.00	2500.00	2500.00
	Cumulative repayments of Loans upto previous year	1197.92	1406.25	1614.58	1822.92	2031.25
	Net loan - Opening	1302.08	1093.75	885.42	677.08	468.75
	Increase/ Decrease due to FERV	0	0	0	0	0
	Increase/ Decrease due to ACE	0	0	0	0	0
	Total	1302.08	1093.75	885.42	677.08	468.75
	Repayments of Loans during the year	208.33	208.33	208.33	208.33	208.33
	Net loan - Closing	1093.75	885.42	677.08	468.75	260.42
	Average Net Loan	1197.92	989.58	781.25	572.92	364.58
	Rate of Interest on Loan	7.67%	7.67%	7.67%	7.67%	7.67%
	Interest on Loan Annualised	91.88	75.90	59.92	43.94	27.96
PFC V - T-1 D-31						
	Gross loan - Opening	6200.00	6200.00	6200.00	6200.00	6200.00
	Cumulative repayments of Loans upto previous year	2970.83	3487.50	4004.17	4520.83	5037.50
	Net loan - Opening	3229.17	2712.50	2195.83	1679.17	1162.50
	Increase/ Decrease due to FERV	0	0	0	0	0
	Increase/ Decrease due to ACE	0	0	0	0	0
	Total	3229.17	2712.50	2195.83	1679.17	1162.50
	Repayments of Loans during the year	516.67	516.67	516.67	516.67	516.67
	Net loan - Closing	2712.50	2195.83	1679.17	1162.50	645.83
	Average Net Loan	2970.83	2454.17	1937.50	1420.83	904.17
	Rate of Interest on Loan	7.44%	7.44%	7.44%	7.44%	7.44%
	Interest on Loan Annualised	221.03	182.59	144.15	105.71	67.27

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AT

Calculation of Interest on Actual Loans ¹						
						Form-13
Name of the Company			NTPC Limited			
Name of the Power Station			Korba Super Thermal Power Project-III			
(Amount in lacs)						
Sl. no.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	2					
	PFC V - T-1 D-33					
	Gross loan - Opening	700.00	700.00	700.00	700.00	700.00
	Cumulative repayments of Loans upto previous year	335.42	393.75	452.08	510.42	568.75
	Net loan - Opening	364.58	306.25	247.92	189.58	131.25
	Increase/ Decrease due to FERV	0	0	0	0	0
	Increase/ Decrease due to ACE	0	0	0	0	0
	Total	364.58	306.25	247.92	189.58	131.25
	Repayments of Loans during the year	58.33	58.33	58.33	58.33	58.33
	Net loan - Closing	306.25	247.92	189.58	131.25	72.92
	Average Net Loan	335.42	277.08	218.75	160.42	102.08
	Rate of Interest on Loan	7.83%	7.83%	7.83%	7.83%	7.83%
	Interest on Loan Annualised	26.26	21.70	17.13	12.56	7.99
	PFC V - T-1 D-37					
	Gross loan - Opening	3000.00	3000.00	3000.00	3000.00	3000.00
	Cumulative repayments of Loans upto previous year	1437.50	1687.50	1937.50	2187.50	2437.50
	Net loan - Opening	1562.50	1312.50	1062.50	812.50	562.50
	Increase/ Decrease due to FERV	0	0	0	0	0
	Increase/ Decrease due to ACE	0	0	0	0	0
	Total	1562.50	1312.50	1062.50	812.50	562.50
	Repayments of Loans during the year	250.00	250.00	250.00	250.00	250.00
	Net loan - Closing	1312.50	1062.50	812.50	562.50	312.50
	Average Net Loan	1437.50	1187.50	937.50	687.50	437.50
	Rate of Interest on Loan	8.25%	8.25%	8.25%	8.25%	8.25%
	Interest on Loan Annualised	118.59	97.97	77.34	56.72	36.09
	PFC V - Consolidated:					
	Gross loan - Opening	49900.00	49900.00	49900.00	49900.00	49900.00
	Cumulative repayments of Loans upto previous year	23910.42	28068.75	32227.08	36385.42	40543.75
	Net loan - Opening	25989.58	21831.25	17672.92	13514.58	9356.25
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE	0.00	0.00	0.00	0.00	0.00
	Total	25989.58	21831.25	17672.92	13514.58	9356.25
	Repayments of Loans during the year	4158.33	4158.33	4158.33	4158.33	4158.33
	Net loan - Closing	21831.25	17672.92	13514.58	9356.25	5197.92
	Average Net Loan	23910.42	19752.08	15593.75	11435.42	7277.08
	Rate of Interest on Loan	8.6938%	8.6938%	8.6938%	8.6938%	8.6938%
	Interest on Loan Annualised	2078.72	1717.20	1355.68	994.17	632.65

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Details/Information to be submitted in respect of Fuel for Computation of Energy Charges

Name of the Petitioner: - **NTPC Ltd.**

Name of the Generating Station: - **Korba Stage III**

S.No.	Particulars	Unit	Oct-18		Nov-18		Dec-18	
			Domestic Coal (i)	Imported Coal (ii)	Domestic Coal (i)	Imported Coal (ii)	Domestic Coal (i)	Imported Coal (ii)
1	Quantity of coal supplied by the coal Company (includes Opening Stock)	(MT)	1170086.05	0.00	1248200.99	0.00	1205255.87	0.00
2	Adjustment (+/-) in quantity supplied by the coal Company	(MT)	0.00	0.00	0.00	0.00	0.00	0.00
3	Coal supplied by the Coal Company (1+2)	(MT)	1170086.05	0.00	1248200.99	0.00	1205255.87	0.00
4	Normative transit & handling losses	(MT)	2565.19	0.00	2623.67	0.00	2763.93	0.00
5	Net coal supplied (3-4)	(MT)	1167520.86	0.00	1245577.33	0.00	1202491.94	0.00
6	Amount charged by the coal company	(Rs.)	2032092923	0	2100915760	0	2012867323	0
7	Adjustment (+/-) in amount charged by the coal Company	(Rs.)	-18285853	0	0	0	18077091	0
8	Total amount charged (6+7)	(Rs.)	2013807070	0	2100915760	0	2030944414	0
9	Transportation charges by Rail / Ship / Road Transport	(Rs.)	10738438	0	6362950	0	24693554	0
10	Adjustment (+/-) in amount charged by Railways / Transport Company	(Rs.)		0		0		
11	Demurrage charges, if any	(Rs.)		0		0		
12	Cost of diesel in transporting coal through MGR system	(Rs.)	11793379	0	12419844	0	10780178	0
13	Total Transportation Charges (9+/-10-11+12)	(Rs.)	22531817	0	18782794	0	35473732	0
13A	Other Charges	(Rs.)	22734347	0	25528368	0	52283346	0
14	Total amount charged for coal supplied including transportation (8+13)	(Rs.)	2059073234	0	2145226921	0	2118701491	0
15	Landed cost of coal	(Rs./MT)	1763.629	0.00	1722.275	0.00	1761.926	0.00
16	Blending Ratio	%	100.00%	0.00%	100.00%	0.00%	100.00%	0.00%
17	Weighted Avg Cost of Coal	(Rs./MT)	1763.629		1722.275		1761.926	
18	GCV of Domestic Coal as per bill of coal company, EQ Basis	(kcal/kg)	4035.00		3897.00		3506	
19	GCV of Imported Coal as per bill of coal company	(kcal/kg)		0.000		0		0
20	Weighted average GCV of Coal as Billed	(kcal/kg)	4035.00		3897		3506	
21	GCV of Domestic Coal as received at Station, TM Basis	(kcal/kg)	3452.00		3523.00		3252	
22	GCV of Imported Coal as received at Station	(kcal/kg)		0.00		0		0
23	Weighted average GCV of Coal as received at station	(kcal/kg)	3452.00		3523		3252	

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Form-15

Details/Information to be submitted in respect of Fuel for Computation of Energy Charges.
 Name of the Petitioner: - NTPC Ltd.
 Name of the Generating Station: - Korba Stage III

S.No.	Particulars	Unit	Oct-18		Nov-18		Dec-18	
			Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal
			(i)	(ii)	(i)	(ii)	(i)	(ii)
1	Quantity of coal supplied by the coal Company (includes Opening Stock)	(MT)	1170086.05	0.00	1248200.99	0.00	1205255.87	0.00
2	Adjustment (+/-) in quantity supplied by the coal Company	(MT)	0.00	0.00	0.00	0.00	0.00	0.00
3	Coal supplied by the Coal Company (1+2)	(MT)	1170086.05	0.00	1248200.99	0.00	1205255.87	0.00
4	Normative transit & handling losses	(MT)	2565.19	0.00	2623.67	0.00	2763.93	0.00
5	Net coal supplied (3-4)	(MT)	1167520.86	0.00	1245577.33	0.00	1202491.94	0.00
6	Amount charged by the coal company	(Rs.)	2032092923	0	2100915760	0	2012867323	0
7	Adjustment (+/-) in amount charged by the coal Company	(Rs.)	-18285853	0	0	0	18077091	0
8	Total amount charged (6+7)	(Rs.)	2013807070	0	2100915760	0	2030944414	0
9	Transportation charges by Rail / Ship / Road Transport	(Rs.)	10738438	0	6362950	0	24893554	
10	Adjustment (+/-) in amount charged by Railways / Transport Company	(Rs.)		0		0		
11	Demurrage charges, if any	(Rs.)		0		0		
12	Cost of diesel in transporting coal through MGR system	(Rs.)	11793379	0	12419644	0	10780178	
13	Total Transportation Charges (9+10-11+12)	(Rs.)	22531817	0	18782794	0	35473732	0
13A	Other Charges	(Rs.)	22734347	0	25528368	0	52283346	0
14	Total amount charged for coal supplied including transportation (8+13)	(Rs.)	2059073234	0	2145226921	0	2118701491	0
15	Landed cost of coal	(Rs./MT)	1763.629	0.00	1722.275	0.00	1761.926	0.00
16	Blending Ratio	%	100.00%	0.00%	100.00%	0.00%	100.00%	0.00%
17	Weighted Avg Cost of Coal	(Rs./MT)	1763.629		1722.275		1761.926	
18	GCV of Domestic Coal as per bill of coal company, EQ Basis	(kcal/kg)	4035.00		3897.00		3506	
19	GCV of Imported Coal as per bill of coal comp.	(kcal/kg)		0.000		0		0
20	Weighted average GCV of Coal as Billed	(kcal/kg)	4035.00		3897		3506	
21	GCV of Domestic Coal as received at Station, TM Basis	(kcal/kg)	3452.00		3523.00		3252	
22	GCV of Imported Coal as received at Station	(kcal/kg)		0.00		0		0
23	Weighted average GCV of Coal as received at station	(kcal/kg)	3452.00		3523		3252	

Anuj Kush

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 ANUJ KUSH
 (F&A)
 SSC, WR-II, SIPAT



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 UDIN 13416156AAAA094684

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Details of Secondary Fuel for Computation of Energy Charges

Name of the Company :		NTPC Limited			
Name of the Power Station :		Korba STPS Stage-III			
Sl.No.	Month	Unit	Oct'18 HFO	Nov'18 HFO	Dec'18 HFO
1	Quantity of oil supplied by Oil Company*	KL	4169.52	4071.52	3610.52
2	Value of Oil *	(Rs)	158307159.1	154586322.7	137083204.8
3	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0	0	0
4	Oil supplied by Oil Company	KL	0	0	0
5	Normative transit & Handling losses	KL	0	0	0
6	Net Oil supplied (4-5)	KL	0	0	0
7	Amount charged by the Oil Company	(Rs)	0	0	0
8	Adjustment (+/-) in amount charged by Oil Company	(Rs)	0	0	0
9	Total Amount charged (7+8)	(Rs)	0	0	0
10	Transportation charges by Rail / Ship / Road Transport	(Rs)	0	0	0
11	Adjustment (+/-) in amount charged by railways / transport company	(Rs)	0	0	0
12	Demurrage charges, if any	(Rs)	0	0	0
13	Cost of diesel in transporting Oil through MGR system, if applicable	(Rs)	0	0	0
14	Total transportation charges (10+/- 11 - 12 + 13)	(Rs)	0	0	0
15	Others- Entry Tax on oil	(Rs)	0	0	0
16	Total amount charged for Oil supplied including transportation (14 + 15)	(Rs)	0	0	0
17	Landed Cost of Oil (HFO/LDO) (2+16) / (1+6)	Rs/KL	37967.72	37967.72	37967.72
18	Weighted average GCV of Secondary Fuel	Rs/KL	10117.50	10168.70	10117.50
19	Weighted average rate of Secondary Fuel	Rs/KL	37967.72	37967.72	37967.72


PETITIONER

Computation of Energy Charges

Form-15B
ADDITIONAL FORM

Name of the Company	NTPC Limited
Name of the Power Station	Korba STPS Stage-III

Computation of Energy Charges

- 1 Rate of Energy Charge from Sec. Fuel Oil/ Alternate Fuel (p/kwh) = $(Q_o)_n \times P_s$ (REC)_s 1.898
- 2 Heat Contribution from SFO / Alternate Fuel (H_s) = $(Qs)_n \times (GCV)_s$ 5.067
- 3 Heat Contribution from coal (H_p)_s = GHR - H_s 2399.43
- 4 Specific Primary Fuel Consumption (Qp)_n = H_p / (GCV)_p 0.722
- 5 Rate of Energy charge from Primary Fuel (p/kwh) (REC)_p 126.272
- 6 Rate of Energy charge ex-bus (p/kWh) = $\frac{((REC)_s + (REC)_p)}{(REC)_s} \times \frac{1}{(1-(AUX))}$ 136.715

	2019-20	2020-21	2021-22	2022-23	2023-24
No of Days in the year	366	365	365	365	366
Sp. Oil consumption ml/kwh	0.5	0.5	0.5	0.5	0.5
Auxiliary consumption %	6.25	6.25	6.25	6.25	6.25
Heat Rate Kcal/Kwh	2,404.50	2,404.50	2,404.50	2,404.50	2,404.50
Sp. Lime Stone Consumption Kg/Kwh	0.0162	0.0162	0.0162	0.0162	0.0162

Computation of Variable Charges

Variable Charge (Coal) p/kwh	134.690	134.690	134.690	134.690	134.690
Variable Charge (Oil) p/kwh	2.025	2.025	2.025	2.025	2.025
Variable Charge (Lime Stone) p/kwh	0.000	0.000	0.000	0.000	0.000
Total p/kwh	136.715	136.715	136.715	136.715	136.715

Price of fuel from Form-15/15A

Coal Cost (Rs./MT)	1749.28	1749.28	1749.28	1749.28	1749.28
Oil Cost (Rs./K.L)	37967.72	37967.72	37967.72	37967.72	37967.72
Lime Stone Cost Rs./MT	1600.00	1600.00	1600.00	1600.00	1600.00

Computation of Fuel Expenses for Calculation of IWC:

ESO in a year (MUS)	3499.88	3490.31	3490.31	3490.31	3499.875
ESO for 40 days (MUS)	382.500	382.500	382.500	382.500	382.500
Cost of coal for 50 Days (Rs. Lakh)	5151.89	5151.89	5151.89	5151.89	5151.89
Cost of oil for 2 months (Rs. Lakh)	118.12	117.79	117.79	117.79	118.12
Cost of Lime Stone for 50 days (Rs. Lakh)	0.00	0.00	0.00	0.00	0.00
Energy Expenses for 45 days (Rs. Lakh)	5883.01	5883.01	5883.01	5883.01	5883.01

Coal	3rd month	2nd month	1st month	Wtd. Avg.
Wtd. Avg. Price of Coal Rs./MT	1763.63	1722.28	1761.93	1749.28
Wtd. Avg. GCV of Coal as received kCal/kg	3452	3523	3252	3409.00
Wtd. Avg. GCV of Coal as received after adjustment of 85 kcal/kg				
Sec. Oil				3324.00
Wtd. Avg. Price of Secondary Fuel Rs./K.L	37967.72	37967.72	37967.72	37967.72
Wtd. Avg. GCV of Secondary Fuel kCal/L	10117.50	10168.70	10117.50	10134.57

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PETITIONER

Name of the Petitioner
Name of the Generating StationNTPC Ltd
Korba STPS Stage-III**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	270761.2	4436.71	266324.49
	b) Amount of IDC in A(a) above	34146.65	0	34146.65
	c) Amount of FC in A(a) above	0	0	0
	d) Amount of FERV in A(a) above	4817.97	0	4817.97
	e) Amount of Hedging Cost in A(a) above	0	0	0
	f) Amount of IEDC in A(a) above	7782.54	0	7782.54
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			

To be Provided at the time of Truing-up


(Petitioner)

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Name of the Petitioner
Name of the Generating StationNTPC Ltd
Korba STPS Stage-III**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	5739.26	610.39	5128.87
	b) Amount of IDC in A(a) above	188.46	0	188.46
	c) Amount of FC in A(a) above	0	0	0
	d) Amount of FERV in A(a) above	21.77	0	21.77
	e) Amount of Hedging Cost in A(a) above	0	0	0
	f) Amount of IEDC in A(a) above	-0.82	0	-0.82
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			

To be provideds at the time of truing-up

Note:

1. Relevant date/s means date of COD of unit/s/station and financial year start date and end date



(Petitioner)

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PART-I
FORM-N

Calculation of Interest on Normative Loan

Name of the Company : NTPC Limited
Name of the Power Station : Korba STPS Stage-III

S. No.	Particulars	(Amount in Rs Lakh)							
		Existing 2018-19	2019-20	2020-21	2021-22	2022-23	2023-24		
1	2	3	4	5	6	7	8		
1	Gross Normative loan – Opening	1,82,594.38	1,82,821.24	1,83,591.24	1,84,991.24	1,85,597.44	1,85,597.44		
2	Cumulative repayment of Normative loan up to previous year	88,653.60	1,01,582.54	1,14,775.18	1,28,046.91	1,41,391.78	1,54,758.73		
3	Net Normative loan – Opening	93,940.78	81,238.69	68,816.05	56,944.33	44,205.66	30,838.71		
4	Add: Increase due to addition during the year / period	260.41	770.00	1,400.00	606.20	-	-		
5	Less: Decrease due to de-capitalisation during the year / period	-195.69	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	162.14	0.00	0.00	0.00	0.00	0.00		
8	Less: Repayment of Loan	13113.22	13,192.64	13,271.74	13,344.86	13,366.96	6,014.66		
9	Net Normative loan - Closing	81,238.69	68,816.05	56,944.32	44,205.66	30,838.71	24,824.05		
10	Average Normative loan	87,589.73	75,027.37	62,880.18	50,574.99	37,522.19	27,831.38		
11	Weighted average rate of interest	7.6195	6.9762	6.6501	6.4891	6.3879	6.4517		
12	Interest on Loan	6674.33	5234.06	4181.60	3281.86	2396.88	1795.60		

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(Petitioner)

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Calculation of Interest on Working Capital

Name of the Company :		NTPC Limited							
Name of the Power Station :		Korba STPS Stage-III							
		(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	3,471.34	5151.89	5151.89	5151.89	5151.89	5151.89		
2	Cost of Main Secondary Fuel Oil	135.13	118.12	117.79	117.79	117.79	118.12		
3	Fuel Cost								
4	Liquid Fuel Stock								
5	O & M Expenses	1,076.64	1158.78	1199.42	1241.59	1285.29	1330.11		
6	Maintenance Spares	2,583.94	2781.06	2878.62	2979.82	3084.69	3192.26		
7	Receivables	13,457.70	11910.52	11879.52	11851.67	11814.60	10874.96		
8	Total Working Capital	20724.76	21120.37	21227.25	21342.76	21454.26	20667.34		
9	Rate of Interest	13.5000	12.0500	12.0500	12.0500	12.0500	12.0500		
10	Interest on Working Capital	2797.84	2545.00	2557.88	2571.80	2585.24	2490.41		



Petitioner

Name of the Petitioner: NTPC Limited		Form-S	
Name of the Generating Station: Korba-III			
COD: 21.03.2011			
Flow of Capital liabilities from 01.04.2019 onwards			
S.No.	Name of the work	Year of creation of liability capitalised in Gross Block	Undischarged liability as on 31.03.2019
	2	3	Amount in Rs
1	Chimney and Chimney Elevator Package for Stage III-STAGE-iii	2010-11	5,37,036
2	SUPPLY OF MAIN PLANT PACKAGE FOR KSTPS, STAGE-III(1x500MW)-STAGE-iii	2010-11	16,44,11,958
3	C.W.SYSTEM PACKAGE STAGE-III-STAGE-iii	2010-11	81,58,784
4	C.W.SYSTEM PACKAGE STAGE-III-STAGE-iii	2010-11	17,27,272
5	FIRE DETECTION & PROTECTION SYSTEM FOR STAGE III-KORBA-STAGE-iii	2010-11	1,13,87,727
6	Ash handling System-STAGE-iii	2010-11	8,95,06,448
7	Cooling Tower-STAGE-iii	2010-11	3,74,03,502
8	Station C & I Package-STAGE-iii	2010-11	70,95,081
12	Generator Transformer-STAGE-iii	2010-11	46,12,032
13	Land R&R cap liab	2011-12	5,99,58,665
14	ERV ON CW SYSTEM	2011-12	20,89,366
15	Miscellaneous Works	2011-12	1,08,280
16	Starter Dyke	2012-13	3,57,945
17	1st Raising of I.GN-3A at Dhanras Dyke	2013-14	68,19,141
18	CIVIL SI - 12 NOS C TYPE QTRS	2013-14	10,90,177
19	SI-Develop work at 12 nos new C type Qtr	2013-14	2,17,876
20	SI-DRINKING WATER LINE FOR NEW C & D	2013-14	3,95,582
21	SI - Slope protection of rly track in	2013-14	3,09,723
22	SI - RCC septic tank of toilet - Ash	2013-14	42,685
23	SI -P WRK DIFFERENT AREAS ST III	2013-14	90,232
24	MISCELLANEOUS STRUCTURAL STEEL WORKS OF	2013-14	1,88,726
25	Structural Steel works of pipe & cable g	2013-14	8,72,550

Flow of Capital liabilities from 01.04.2019 onwards			Amount in Rs
S.No.	Name of the work	Year of creation of liability capitalised in Gross Block	Undischarged liability as on 31.03.2019
	2	3	
26	SI-CAPACITY ENHANCEMENT OF OVERFLOW TANK	2013-14	46,691
(A)	Sub-Total (already allowed items)		39,64,25,478
	Claimed Items in 2014-15		-
27	Main Plant Civil Works- Balance	2014-15	16,12,887
28	electric System LT Package	2014-15	34,571
29	1ST RAISING OF LAGOON-3B AT DHANRAS DYKE	2014-15	1,04,69,913
30	78 No. D-Type quarters		37,00,839
(B)	Sub-Total (Claimed in 2014-15)		1,58,18,210
	Claim of New Item		-
31	CCTV	2014-15	-
	Sub-Total (New items)		-
	Items Not Claimed		-
32	MBOA	2014-15	2,10,700
33	Capital Spares	2014-15	85,588
	Total (items Not Claimed)		2,96,288
	Claimed Items in 2015-16		-
115	2ND RAISING OF LAGOON-3A AT DHANRAS DYKE	2015-16	-
(D)	Sub-Total (Claimed in 2015-16)		-

Flow of Capital liabilities from 01.04.2019 onwards			Amount in Rs
S.No.	Name of the work	Year of creation of liability capitalised in Gross Block	Undischarged liability as on 31.03.2019
	2	3	
	Items Not Claimed in 2015-16		
34	Simulator Package for Korba STPP	2015-16	77,59,616
	Sub-Total (Not-Claimed in 2015-16)		77,59,616
	Offsite Package(Civil)-balance work/payment	2016-17	43,11,758
36	2nd Raising of Ash Dyke Lagoon-3B	2016-17	58,23,430
37	3rd Raising of Ash Dyke Lagoon-3A	2016-17	26,96,835
(E)	Sub-Total (Claimed in 2016-17)		1,28,32,023
38	2rd raising of lagoon-3B	2017-18	22,69,893
39	4th raising of Lagoon-3A	2018-19	33,37,360
40	Spares	2018-19	49,32,186
	Total		44,36,71,054

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Summary of issue involved in the petition

Name of the Company :		NTPC Limited				
Name of the Power Station :		Korba STPS Stage-III				
1	Petitioner:	NTPC Limited				
2	Subject	Approval of Tariff for 2019-24				
3		<p>i) Approve tariff of KORBA-III 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) Consider station heat rate based on design heat rate with applicable operating margin. v) Pass any other order as it may deem fit in the circumstances mentioned above.</p>				
4	Respondents					
	Name of Respondents					
	a. Madhya Pradesh Power Management Company Limited	e. Electricity Department, Goa				
	b. Maharashtra State Electricity Distribution Co Ltd.	f. DNH Power Distribution Company Ltd				
	c. Gujarat Urja Vikas Nigam Ltd. (GUVNL)					
	d. Chattisgarh State Power Distribution Co. Ltd.,					
5	Project Scope					
	Cost					
	COD	30.10.2015				
	Claim					
	AFC	2019-20	2020-21	2021-22	2022-23	2023-24
		49023.78	48638.39	48412.46	48111.77	40601.21
	Capital cost (as on 1.4.2019)					2,57,977.11
	Initial spare					
	NAPAF (Gen)					85%
	Any Specific					

* Units of amounts shown in Rs Lakh

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CHHATTISGARH ENVIRONMENT CONSERVATION BOARD
Paryavas Bhawan, North Block, Sector - 19,
Atal Nagar, District - Raipur (C.G.)
e-mail - hocecb@gmail.com

To,

General Manager,
M/s Korba Super Thermal Power Project,
National Thermal Power Corporation Limited,
P.O.-Vikash Bhawan Jamnipali,
District - Korba (C.G.) 495 450

Sub: -

Renewal of the consent of the Board under section 25 of the Water (Prevention and Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention and Control of Pollution) Act, 1981.

Ref: -

1. Consent of the Board issued under section 25/26 of the Water (Prevention and Control of Pollution) Act, 1974 vide letter no. 7498, dated: 25/07/1989. and under section 21 of the Air (Prevention and Control of Pollution) Act, 1981 vide letter no. 7500, dated: 25/07/1989.
2. Consent of the Board issued under section 25/26 of the Water (Prevention and Control of Pollution) Act, 1974 vide letter no. 4796, dated: 25/11/2010. and under section 21 of the Air (Prevention and Control of Pollution) Act, 1981 vide letter no. 4798, dated: 25/11/2010.
3. Last renewal of the Board issued under section 25 of the Water (Prevention and Control of Pollution) Act, 1974 vide letter no. 1769/TS/CECB/2018, Naya Raipur, dated: 18/05/2018 and under section 21 of the Air (Prevention and Control of Pollution) Act, 1981 vide letter no. 1771/TS/CECB/2018, Naya Raipur, dated: 18/05/2018.
4. Last renewal of the Board issued under section 25 of the Water (Prevention and Control of Pollution) Act, 1974 vide letter no. 1773/TS/CECB/2018, Naya Raipur, dated: 18/05/2018, and under section 21 of the Air (Prevention and Control of Pollution) Act, 1981 vide letter no. 1775/TS/CECB/2018, Naya Raipur, dated: 18/05/2018.
5. Your online application no. 1457650, dated: 20/08/2018 and subsequent correspondence ending dated 22/09/2018.

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With reference to your above application, consents under section 25 of the Water (Prevention and Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention and Control of Pollution) Act, 1981 are hereby renewed for period of **01/11/2018 to 31/10/2019**, subject to the fulfillment of the terms and conditions incorporated in the water consent letter no. **7498, dated: 25/07/1989 and 4796, dated: 25/11/2010** and air consent letter no. **7500, dated: 25/07/1989 and 4798, dated: 25/11/2010** and subsequent renewal(s)/amendment(s) issued by the Board and additional conditions mentioned below.

This renewal of consent is valid for production capacity of: -

Product	Production Capacity
Electricity Generation By Thermal Power Plant (Stage-I, II & III)	2600 Megawatt [3x100 MW + 3x500 MW + 1x500 MW] {Two Thousand Six Hundred Megawatt}

Additional Conditions

A. Water (Prevention and Control of Pollution) Act, 1974

- 
1. Industry shall operate the effluent treatment arrangement regularly and maintain them properly. Industry shall ensure treated effluent quality meets the standard prescribed by the Board. Zero discharge condition shall be maintained all the time.
 2. Industry shall implement the work to achieve 100% utilization of fly ash as per action plan submitted along with bank guarantee.
 3. Industry shall install fly ash brick/block/products manufacturing unit of capacity at-least 2,35,000 Nos per day.
 4. Industry shall comply the provisions of notification dated 07/12/2015 (as amended up to date) issued by MoEF & CC.
 5. Industry shall transport the raw material in mechanically covered vehicles (if required) to avoid dust emission during transportation.
 6. This renewal of consent is being issued under the "Scheme of Auto-Renewal of Consent" of the Board issued vide office order no. 5937 dated 29/01/2018 as per self certificate submitted by authorized signatory Mr. Niraj Kumar Sinha, ED(Korba) of M/s Korba Super Thermal Power Project, National Thermal Power Corporation Limited, Village-Jamnipali, Tehsil-Katghora, District - Korba (C.G.).
 7. Chhattisgarh Environment Conservation Board reserves the rights to revoke the consent / renewal of consent at any time for any violation/non-compliance.
 8. Industry shall submit Environment Statement to this Board as per provision of Environment (Protection) Amendment Rule, 1993 for the previous year ending 31st March on or before 30th September every year.



9. Extensive tree plantation shall be carried out in the open areas available within and around the plant premises in the current monsoon season. Fruit bearing species like mango, tamarind, guava etc. shall be given preference in this regard.

B. Air (Prevention and Control of Pollution) Act, 1981

1. Industry shall operate and maintain the existing air pollution control equipments regularly and effectively so as to ensure the particulate matter emission level below 50 mg/Nm³. Emission of air pollutants and ambient air quality shall be ensured within the limits prescribed by Board all the time. Chhattisgarh Environment Conservation Board may further stipulate stringent particulate matter emission limit depending upon environmental conditions.
2. Industry shall implement the work to achieve 100% utilization of fly ash as per action plan submitted along with bank guarantee.
3. Industry shall install fly ash brick/block/products manufacturing unit of capacity at-least 2,35,000 Nos per day.
4. Industry shall comply the provisions of notification dated 07/12/2015 (as amended up to date) issued by MoEF & CC.
5. Industry shall transport the raw material in mechanically covered vehicles (if required) to avoid dust emission during transportation.
6. This renewal of consent is being issued under the "Scheme of Auto-Renewal of Consent" of the Board issued vide office order no. 5937 dated 29/01/2018 as per self certificate submitted by authorized signatory Mr. Niraj Kumar Sinha, ED(Korba) of M/s Korba Super Thermal Power Project, National Thermal Power Corporation Limited, Village-Jamnipali, Tehsil-Katghora, District - Korba (C.G.).
7. Chhattisgarh Environment Conservation Board reserves the rights to revoke the consent / renewal of consent at any time for any violation/non-compliance.
8. Industry shall submit Environment Statement to this Board as per provision of Environment (Protection) Amendment Rule, 1993 for the previous year ending 31st March on or before 30th September every year.
9. Extensive tree plantation shall be carried out in the open areas available within and around the plant premises in the current monsoon season. Fruit bearing species like mango, tamarind, guava etc. shall be given preference in this regard.

Signature valid

Digitally Signed by M. Sunil
Mishra MS

Member Secretary

Date: 2018-09-11:21:58 IST
Chhattisgarh Environment Conservation Board
Atal Nagar, Raipur (C.G.)

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Govt Of Karnataka
Department Of Factories, Boilers, Industrial Security And Health

Office of the Director
Karmika Bhawana, II floor, Bannerghatta Road,
Bengaluru-29, Date: 13.04.2016

Proceedings of the Department of Factories, Boilers, Industrial Security and Health

Read with: Sec 6(1) of Factories Act 1948 and Rule 3 of Karnataka Factories Rules, 1969

Sub: Approval of factory drawings in respect of M/s. Kudgi Super Thermal Power Project (NTPC Limited) as per Factories Act 1948 -Reg.

- Ref: 1) Application Form 1 dated 27.01.2016
2) Site Inspection dated 05.02.2016
3) Final Scrutiny dated 07.04.2016

The maps of M/s NTPC Limited, Kudgi Super Thermal Power Project, Vijayapura have been scrutinized as per the Factories Act 1948 and the Rules framed and conceived there under and the blue prints of the factory's buildings and machinery layouts have been approved subject to the conformity of all provisions conceived as per Factories Act 1948 concerned and clause 3(4) of Karnataka Factories Rules, 1969 and also conformity of following conditions:

1. To modify the use of hazardous chlorine chemical to minimum hazardous chlorine chemical and to strictly comply with all the conditions laid down in the letter as per the condition of this office letter no. CSMC/TFC/CR-13/2013-14 Date 23.09.2013.
2. To get those buildings and machinery layout maps approved which are not approved earlier or the maps involving modifications. Such maps should be submitted for approval.
3. Before starting use of all the buildings and structures of the factory, authentication certification should be separately obtained as per Form 1A from authorized Civil Engineers and submitted to the Field Officer. Then only these should be used.

Ninety nine maps as approved are sent enclosed herewith. Kindly acknowledge.

Director of Factories &
Boilers,
Bengaluru

To:
The Occupier,
M/s. Kudgi Super Thermal Power Project
NTPC Limited
Kudgi, Taluka: Basavana Bagewadi, Dist.: Vijayapura

for kind information please.

45/11/16
29/4/16

29/4/16

वेने द्वारा अनुमित

29/4/16

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GOVERNMENT OF KARNATAKA
DEPARTMENT OF FACTORIES, BOILERS, INDUSTRIAL SAFETY & HEALTH

CSMC/TFC/CR-13/2013-14

Directorate of Factories, Boilers, Industrial Safety & Health
"Karnika Bhavana" 2nd Floor, Near Bangalore Dairy, IT Compound, Bannerghatta Road, Bangalore-56 Dated 23.09.2013

Phone No. 080 26531200
Fax No. 080 26531202

General Manager,
M/S. NTPC Limited,
Kudde Super Thermal Power Project,
Plot No. 9, Mallikarjun Nagar,
M. G. Road, Bilalur 560005.

A.G.M (PES)
Date 17/10/2013

Subject: Site Clearance for setting up of super thermal power project.

- Reference:
1. Your letter dated 03.05.2013
 2. Proceedings of Task force committee meeting held on 12.09.2013
 3. Your reply mail dated 19.09.2013.

* * *

We are pleased to inform you that the Task Force Committee in its meeting held on 12.09.2013 has reviewed the presentation documents, details of the project, site conditions and has concurred in principle to issue the Site Clearance for the establishment of super thermal power project for generating electrical power of 800 MW at Near Kudde village, Basavana bagewadi Taluk, Bilur District.

The site clearance is issued subject to the following conditions:

1. The replacing of highly hazardous chlorine with available less hazardous alternative chemicals like chlorine dioxide, sodium hypochlorite shall be considered.
2. The mobile hydrogen cylinder bank with manifold system shall be adopted instead of fixed hydrogen cylinders.
3. The safety check shall be prepared in storing, handling and usage of Hydrogen and its holding capacity shall be limited to a minimum required quantity.
4. The exclusive safety, health and environment (SHE) department shall be formed under direct control & supervision of the occupier. This department shall also support a few senior level qualified and competent executives with adequate field staff.
5. The effective online monitoring system shall be set up to monitor the work environment with special trust to fugitive emission of radiation in case of leak.
6. No building of structure shall be constructed with obtaining a prior approval of plans by Director, Department of Factories, Boilers, Industrial Safety and Health.
7. The pre and periodical medical examination shall be carried out to all the category of employees including contract and casual. The medical surveillance shall be carried out by creating a base line health data and shall have the provision for up-dating the same and continuous basis.

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- The investigations/reports as submitted by the project team and as suggested by committee shall be incorporated in the on-site emergency plan. The same shall be submitted for scrutiny and approval.
- The provisions of rule 29(1) 29(1) of Building and other construction workers (Employment and condition of service) (Karnataka) Rules, 2006 shall be complied to ensure occupational safety and health of the construction workers involved in project. The compliance shall be witnessed by one of the project officers of the department and the project officer, Factory Inspectors, Industrial Safety and Health.

Suggestions

- 1. The site should adopt the rain harvesting of rain water for use in site.
- 2. The site should adopt solar energy system at least covering the street lighting and other sustainable and life water heating in the canteen, etc.

The above conditions and suggestions shall be complied and a copy of it shall be submitted to the department reserves all the rights to modify or withdraw clearance issued at any point of time.

Your's Faithfully,

Chairman
Task Force on
and Director of Factories, Inspectors,
Industrial Safety and Health, Bangalore





BY REGD. POST

STATE POLLUTION CONTROL BOARD, ODISHA

(Department of Forest & Environment, Govt. of Odisha)
Paribesh Bhawan, A/118, Nilakanthanagar, Unit-VIII
Bhubaneswar - 751012

No. 2755 /

Ind-II-NOC-5592

Date 28.02.14

OFFICE MEMORANDUM

In consideration of the application for obtaining Consent to Establish for **Derlipali Super Thermal Power Project of M/s. NTPC Ltd.**, the State Pollution Control Board has been pleased to convey its Consent to Establish under section 25 of Water (Prevention & Control of Pollution) Act, 1974 and section 21 of Air (Prevention & Control of Pollution) Act, 1981 to set up of Thermal Power Plant of capacity 1600 MW (2x800 MW, stage-I), At/Po-Derlipali (Plot No. & Khata No. as mentioned in application form) in the district of Sundargarh with the following conditions.

GENERAL CONDITIONS.

1. This Consent to establish is valid for the raw materials, product, manufacturing process and capacity mentioned in the application form. This order is valid for five years, which means the proponent shall commence construction of the project within a period of five years from the date of issue of this order. If the proponent fails to do substantial physical progress of the project within five years then a renewal of this consent to establish shall be sought by the proponent.
2. Adequate effluent treatment facilities are to be provided such that the quality of sewage and trade effluent satisfies the standards as prescribed under Environment Protection Rule, 1986 or as prescribed by the Central Pollution Control Board and/or State Pollution Control Board or otherwise stipulated in the special conditions.
3. All emission from the industry as well as the ambient air quality and noise shall conform to the standards as laid down under Environment (Protection) Act, 1986 or as prescribed by Central Pollution Control Board/State Pollution Control Board or otherwise stipulated in the special conditions.
4. Appropriate method of disposal of solid waste is to be adopted to avoid environmental pollution.
5. The industry shall comply to the provisions of Environment Protection Act, 1986 and the rules made there under with their amendments from time to time such as the Hazardous Waste Management, Handling and Transboundary Movement Rules 2008 and amendment thereof, Hazardous Chemical Rules, /Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 etc. and amendments there under. The industry shall also comply to the provisions of Public Liability Insurance Act, 1991, if applicable.
6. The industry shall apply for grant of Consent to operate under section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 & Air (Prevention & Control of Pollution) Act, 1981 at least 3 (three) months before the commercial production and obtain Consent to Operate from this Board. ✓
7. This consent to establish is subject to statutory and other clearances from Govt. of Odisha and/or Govt. of India, as and when applicable. ✓

[1]

37. A toe drain shall be provided around the ash mound. The seepage water collected in the toe drain shall be monitored every month with respect to pH, SS, O&G and fluoride and shall meet the following standards

pH-6.5 to 8.5
SS-100mg/l
O&G-20mg/l and
Flouride-2.0mg/l

and the monitoring report shall be submitted to the Board quarterly.

38. Regular monitoring of runoff water from the disposal area and excess ash water shall be carried out with respect to pH, SS, O&G and fluoride content and monitoring report shall be submitted to the Board every quarter.
39. Ash pond shall be lined with HDPE or any other suitable impermeable lining such that no leachate takes place at any point of time. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.
40. The Project Proponent shall carry out detail hydrogeological study of the ash pond site incorporating soil analysis, ground water quality (fluoride & heavy metals), surface water quality (fluoride & heavy metals) and drainage network of the area and the change in hydrological status shall be monitored annually.
41. Regular monitoring of ground water level shall be carried out by establishing a network of existing wells and constructing new piezometers. Monitoring around the ash pond area shall be carried out particularly for heavy metals (F, Cd, Hg, Cr, As, Pb) and records shall be maintained and submitted to the Board. The data so obtained should be compared with the baseline data so as to ensure that the ground water quality is not adversely affected due to the project.
42. The entire upstream face of the dyke shall be provided with stone pitching or brick lining or precast tile lining to prevent erosion of the slope by wave action during heavy wind.
43. The entire area of the ash dyke shall be provided with fencing and unauthorized entry within this ash pond area shall be strictly prohibited. Security guards shall be posted for vigilance of the ash dyke area round the clock. This is very important as there are chances of sabotage. The entire dyke perimeter shall have accessible roads. The entire dyke area shall be provided with street lights or flood lights for inspection during night time. A site office shall be constructed with a full time engineer responsible for inspection and monitoring of the ash dyke.
44. The industry shall construct a Sewage Treatment Plant (STP) for treatment of wastewater to be generated from domestic source and the treated sewage shall be discharged to the common monitoring basin.
45. The unit shall explore the possibility to use chlorine di-oxide for treatment of water instead of chlorine gas.
46. Plantation activity shall be planned in such a way so that trees will have better growth by the time the unit starts operation.
47. The proponent shall deploy vehicles which conform to the latest BIS emission specification. The proponent shall also give a detail proposal to control noise pollution during construction phase. The proponent shall prepare pollution prevention and environment management plan for construction phase and operation phase separately and should submit to the Board three months prior to commencement of construction and operation respectively.
48. The rising temperature during summer in the area is a major concern. The unit shall conduct a detailed study on contribution of thermal heat to atmosphere due to the proposed project and its impact on ambient temperature during different season. The study should also investigate the heat island effect due to the project.

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