

Petition No



A Maharatna Company

**FEROZE GANDHI UNCHAHAR THERMAL POWER
STATION, STAGE-IV**

(1X500 MW)

**PETITION FOR APPROVAL OF TARIFF 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 **Feroze Gandhi Unchahar Thermal Power Station Stage IV (500 MW)** for the period from 01.04.2019 to 31.03.2024.

INDEX

Sl. No.	Description	Page No.
1	Petition for Approval of Tariff of NCTPS II for the period from 01.04.2019 to 31.03.2024	1 - 11
2	Affidavit	12 - 13
3	Appendix-I	14 - 78
4	Annexure-A	79 - 82
	Annexure-B	83 - 91

X

S
Signature

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 Feroze Gandhi Unchahar Thermal Power Station Stage IV (500 MW) 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 Uttar Pradesh Power Corp. Ltd. (UPPCL)
Shakti Bhawan
14, Ashok Marg,
Lucknow – 226 001.

- 2 Rajasthan Urja Vika Nigam Limited (RUVNL)
(on behalf of DISCOMs of Rajasthan),
Vidyut Bhawan, Janpath,
Jaipur 302 005

- 3 Haryana Power Purchase Centre (HPPC)
Shakti Bhawan, Sector – VI,
Panchkula, Haryana – 134109

S. T. M.

4 Power Development Department (J&K)
Govt. of J&K, Secretariat
Jammu/Srinagar

5 Electricity Department (Chandigarh)
Union Territory of Chandigarh
Addl. Office Building
Sector-9 D, Chandigarh

6 Uttarakhand Power Corporation Ltd. (UPCL)
Urja Bhawan, Kanwali Road
Dehradun – 248 001
Uttarakhand.

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. Feroze Gandhi Unchahar Thermal Power Station, Stage IV (500 MW) (hereinafter referred to as FGUTPS-IV) is one such station located in the State of Uttar Pradesh (UP).The power generated from FGUTPS-IV is being supplied to the respondents herein above.

the admitted projected capital expenditure for the 2017-19 period. However, the actual closing capital cost as on 31.03.2019 has been worked out in the foresaid true-up petition as Rs. 2474.3688 Cr based on the actual expenditure after truing up exercise for the period 2017-19. Accordingly, the Petitioner has adjusted an amount of Rs (-) 240.0252 Cr FGUTPS-IV from 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. 2474.3688 Cr 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.

- 7) The capital expenditure 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, Regulation 24 & 25 of the Tariff Regulations, 2019.
- 8) It is humbly submitted that Hon'ble commission vide Tariff Regulation 2019 has provided cut-off date as last day of the calendar month after thirty six months from the date of commercial operation of the project. Regulation 3 (14) of CERC (Terms & Conditions of Tariff) Regulations, 2019 provides as under:

Quote

'Cut-off Date' means the last day of the calendar month after thirty six months from the date of commercial operation of the project:

Unquote

FGUTPS-IV achieved COD on 30.09.17 and in accordance with above provisions of Tariff Regulations, cut off date of the station is 30.09.2020.

It is submitted that the capitalization of certain works under original scope, are likely to get spilled over beyond cutoff date on account of some unforeseen circumstances beyond the reasonable control of the petitioner despite regular monitoring & follow-up by the petitioner. It is submitted that the unavoidable and uncontrollable reasons like i) Non

Availability of 'Sand and Moorum' due to ban in mining, ii) Excess rainfall during the period from June 2016 to October 2016, which delayed the completion of project beyond original schedule were submitted for consideration to the Hon'ble Commission. It is further submitted that Hon'ble Commission vide order dtd 06.12.2019 was pleased to consider the delay based on the same. As submitted earlier, the COD of the station was delayed even though maximum resources were diverted towards COD related activities. However, consequent and cascading effect of these reasons came heavily upon schedule of non COD related balance works. It is humbly submitted that the implementation of GST in July 2017 also delayed award of certain packages.

It is humbly submitted that the majority of above mentioned works are (Non-COD related) balance works pertaining to Main Plant/ BOP Civil/ SwitchYard Civil, BOP Package (CW System, Misc. pumps, Station Piping, WTP, Electrical System, HVAC, FDPS, AHP System, CHP system), Coal Transportation System, Township/colony civil works, sewerage treatment plant/associated works, site development works etc. These works are currently in progress and likely to be completed by FY 2020-21.

It is respectfully submitted that the prime concern of the petitioner was to commence the commercial operation of the unit to serve the beneficiaries at the earliest by supplying reliable power. It is further submitted that such non-COD related capitalization spilling over the cut-off date are not detrimental to beneficiaries. On the contrary, this protects the beneficiaries from front loading of the tariff such that no additional burden is imposed on them due to delays in such balance works.

It would be pertinent to mention that works that are envisaged to be completed after the scheduled cut off date are necessary for efficient functioning of the station. It would not be justified to deny the entire cost of these assets because in such case the beneficiaries would be taking the benefit of these assets without servicing the associated cost. Further, there is no cost overrun on account of delay in completion of these works.

That in view of the above, the Hon'ble Commission may be pleased to condone the expected delay in completion of above works and allow the capitalization of the same for the tariff purpose during the tariff period 2019-24 by relaxing the cut-off date beyond 30.09.2020 for 6 months i.e. up to 31.03.2021 exercising its powers under Power to Relax under Regulation-76 and Power to Remove Difficulty under Regulation-77 of Hon'ble Commission Tariff Regulations, 2019, which state as under:

Quote

76. Power to Relax: *The Commission, for reasons to be recorded in writing, may relax any of the provisions of these regulations on its own motion or on an application made before it by an interested person.*

77. Power to Remove Difficulty: *If any difficulty arises in giving effect to the provisions of these regulations, the Commission may, by order, make such provision not inconsistent with the provisions of the Act or provisions of other regulations specified by the Commission, as may appear to be necessary for removing the difficulty in giving effect to the objectives of these regulations.*

Unquote

In light of these provisions, and the circumstances mentioned above, the petitioner is praying for relaxation of Six (6) Months in cut-off date of FGUTPS-IV up to 31.03.2021.

- 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 2019-20 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
Type of cooling water system	Closed Cycle
Consumption of Water(Cusecs)	33.87/Year
Rate of Water charges (Including Royalty)	Rs 4.37lac/Cusec/year
Total Water Charges	148.03 Lacs

- 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 truing up. In respect of capital spares consumption, it is submitted that the same shall be claimed at the time of true-up in terms of the proviso to the Regulation 35 (1)(6) based on actual consumption of spares during the period 2019-24.
- 11) The present petition is filed on the basis of norms specified in the Tariff Regulations 2019. It is submitted that the petitioner is in the process of installing the Emission Control Systems (ECS) in 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 affect 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 for sharing of transportation cost of Fly Ash generated at power stations with

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 year 20013 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 competitive bidding. It 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 the subsequent Tariff Regulations and 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 85.1 % the unit heat rate would be worked out to be 2246.51 kcal/kwh and the operating margin available over the design heat rate would be around 4% only which is 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 based on guaranteed turbine cycle heat rate of 1932 and boiler efficiency of 85.1% with 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 of 5%.

- 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. 25.04.2019. For 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 31.3.2019 through true-up exercise are pending before the Hon'ble Commission and would take some time. The Petitioner, therefore, reserves its right to amend the tariff petition as per the outcome in such appeals/ petitions, if required.

Sthw..

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 FGUTPS-IV for the tariff period 01.04.2019 to 31.03.2024.
- ii) Allow Extension of cut-off date upto 31.03.2021 by invoking Hon'ble Commission's powers under Regulation 76 'Power to Relax' and Regulation 77 'Power to remove Difficulty'.
- iii) Consider station heat rate based on design heat rate with applicable operating margin.
- iv) Allow reimbursement of Ash Transportation Charges directly from the beneficiaries quarterly on net basis.
- v) Allow the recovery of filing fees as & when paid to the Hon'ble Commission and publication expenses from the beneficiaries.
- vi) Pass any other order as it may deem fit in the circumstances mentioned above.


Petitioner

BEFORE THE 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 **Feroze Gandhi Unchahar Thermal Power Station Stage IV (500 MW)** for the period from 01.04.2019 to 31.03.2024.

AND

IN THE MATTER OF

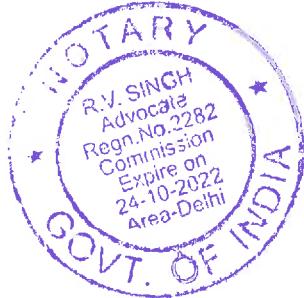
Petitioner

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

Respondent:

1. Uttar Pradesh Power Corp. Ltd. (UPPCL)
Shakti Bhawan,
14, Ashok Marg
Lucknow – 226 001.

.....
and Others



S
Tm..

AFFIDAVIT

I, E. Prabhakara Rao, son of Late Shri E. K. Rama Sharma aged about 52 years resident of D-311, Parsvnath Prestige, Sector-93A, Noida (UP) solemnly affirm and state as follows:

1. That I am the Additional General Manager (Commercial) in Petitioner Corporation NTPC Ltd. and am well conversant with the facts of the case and am competent to swear the present affidavit.
2. The statement made in the accompanying Petition for approval of tariff of Feroze Gandhi Unchahar Thermal Power Station (500 MW) for the period from 01.04.2019 to 31.03.2024, are based on the official records maintained during the ordinary course of business and believed by the deponent to be true.

S. Suresh
Deponent

Verification

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

Verified at New Delhi on 4th Mar, 2020



S. Suresh
Deponent

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

Notary Public DELHI

TARIFF FILING FORMS (THERMAL)

FOR DETERMINATION OF TARIFF

FOR

Unchahar Stage-IV

(From 01.04.2019 to 31.03.2024)

PART-I

ANNEXURE-I

A handwritten signature in blue ink, appearing to read "Shivam".

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- 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	
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 Works 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	✓

** Additional Forms

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

S
taras..

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.	***
	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	
8	d. Justification for cost and time Overrun	***
	Generating Company shall submit copy of Cost Audit Report along with cost accounting records, cost details, statements, schedules etc. for the Generating Unit wise /stage wise/Station wise/ and subsequently consolidated at Company level as submitted to the Govt. of India for first two years i.e. 2019-20 and 2020-21 at the time of mid-term true-up in 2021-22 and for balance period of tariff period 2019-24 at the time of final true-up in 2024-25. In case of initial tariff filing the latest available Cost Audit Report should be furnished.	
9	Any other relevant information, (Please specify)	NA
10	Reconciliation with Balance sheet of any actual additional capitalization and amongst stages of a generating station	***
11	BBMB is maintaining the records as per the relevant applicable Acts. Formats specified herein may not be suitable to the available information with BBMB. BBMB may modify the formats suitably as per available information to them for submission of required information for tariff purpose.	NA

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

SA

**PART-I
FORM- I**

Summary of Tariff

S. No.	Particulars	Unit	Existing 2018-19			2019-20			2020-21			2021-22			2022-23			2023-24		
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
1.1	Depreciation	Rs Lakh	12,847.15		13,860.57	14,791.62	15,097.19	15,148.03	15,158.69											
1.2	Interest on Loan	Rs Lakh	10,669.94		10,789.04	10,641.14	9,864.32	8,790.50	7,594.06											
1.3	Return on Equity	Rs Lakh	14,266.93		14,645.42	15,629.19	15,952.07	16,005.78	16,017.05											
1.4	Interest on Working Capital	Rs Lakh	5,765.88		4,344.39	4,398.98	4,423.77	4,437.58	4,447.18											
1.5	O&M Expenses	Rs Lakh	14,985.80		12,628.66	13,144.94	13,688.28	14,259.87	14,856.03											
1.6	Special Allowance (If applicable)	Rs Lakh																		
1.7	Compensation Allowance (If applicable – relevant for column 4 only)	Rs. Lakh																		
Total		Rs Lakh	58535.70		56268.08	58605.87	59025.62	58641.76	58073.01											
2.1	Landed Fuel Cost (coal/gas/RLNG/liquid) as per FSA	Rs/Ton								4296.44										
	(%) of Fuel Quantity	(%)																		
2.2	Landed Fuel Cost Imported Coal																			
	(%) of Fuel Quantity	(%)																		
2.3	Landed Fuel Cost (coal/gas /RLNG/liquid) other than FSA	Rs/Ton																		
	(%) of Fuel Quantity	(%)																		
2.4	Landed Fuel Cost Imported Coal other than FSA.																			
	(%) of Fuel Quantity	(%)																		
2.5	Secondary fuel oil cost	Rs/Unit																		
	Energy Charge Rate ex-bus (Paise/kWh) 2A, 2B, 2C, 2D	Rs/Unit																		
										2.810										

S. T. J.
(Petitioner)

PART-I
FORM- 1(IIA)

Name of the Petitioner:	NTPC Limited
Name of the Generating Station:	Unchahar Stage-IV

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)	74,231.06	81,720.58	84,706.73	85,158.74	85,278.73936
2	Less: Adjustment in Opening Equity	-				
3	Adjustment during the year		0.00	0.00	0.00	0.00
4	Net Opening Equity (Normal)	74,231.06	81,720.58	84,706.73	85,158.74	85,278.74
5	Add: Increase in equity due to addition during the year / period	7489.52	2986.15	452.01	120.00	0.00
7	Less: Decrease due to De-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
8	Less: Decrease due to reversal during the year / period	0.00	0.00	0.00	0.00	0.00
9	Add: Increase due to discharges during the year / period	0.00	0.00	0.00	0.00	0.00
10	Net closing Equity (Normal)	81,720.58	84,706.73	85,158.74	85,278.74	85,278.74
11	Average Equity (Normal)	77,975.82	83,213.66	84,932.74	85,218.74	85,278.74
12	Rate of ROE (%)	18.782	18.782	18.782	18.782	18.782
13	Total ROE	14,645.42	15,629.19	15,952.07	16,005.78	16,017.05

S
(Petitioner)

PART-I
FORM- 1(IIB)

Name of the Petitioner:		NTPC Limited				
Name of the Generating Station:		Unchahar Stage-IV				
Statement showing Return on Equity at Weighted Average Rate of Interest						
S. No.	Particulars	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
2	Less: Adjustment in Opening Equity	0.00	0.00	0.00	0.00	0.00
3	Adjustment during the year	0.00	0.00	0.00	0.00	0.00
4	Net Opening Equity (Normal)	0.00	0.00	0.00	0.00	0.00
5	Add: Increase in equity due to addition during the year / period	0.00	0.00	0.00	0.00	0.00
7	Less: Decrease due to De-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
8	Less: Decrease due to reversal during the year / period	0.00	0.00	0.00	0.00	0.00
9	Add: Increase due to discharges during the year / period	0.00	0.00	0.00	0.00	0.00
10	Net closing Equity (Normal)	0.00	0.00	0.00	0.00	0.00
11	Average Equity (Normal)	0.00	0.00	0.00	0.00	0.00
12	Rate of ROE (%)	8.384	8.382	8.364	8.293	8.112
13	Total ROE	0.00	0.00	0.00	0.00	0.00

S
(Petitioner)

Name of the Company
Name of the Power Station

NTPC
Unchahar Stage-IV

Plant Characteristics

Name of the Petitioner	NTPC Ltd
Name of the Generating Station	Unchahar Stage-IV
Unit(s)/Block(s)/Parameters	Unit-I
Installed Capacity (MW)	500
Schedule COD as per Investment Approval	31.12.2016
Actual COD	30.09.2017
Pit Head or Non Pit Head	Non Pit head
Name of the Boiler Manufacture	BHEL
Name of Turbine Generator Manufacture	BHEL
Main Steams Pressure at Turbine inlet (kg/Cm²) abs¹.	170 AT
Main Steam Temperature at Turbine inlet (°C)¹	537
Reheat Steam Pressure at Turbine inlet (kg/Cm²)¹	40.50 AT
Reheat Steam Temperature at Turbine inlet (°C)¹	565
Main Steam flow at Turbine inlet under MCR condition (tons /hr)²	1457.01
Main Steam flow at Turbine inlet under VWO condition (tons /hr)²	1544.92
Unit Gross electrical output under MCR /Rated condition (MW)²	500
Unit Gross electrical output under VWO condition (MW)²	525
Guaranteed Design Gross Turbine Cycle Heat Rate (kCal/kWh)³	1932
Conditions on which design turbine cycle heat rate guaranteed	
% MCR	At 100% Load under rated Steam Conditions at Condenser Pressure of 77 mm HG (abs) with 0% Make Up
% Makeup Water Consumption	
Design Capacity of Make up Water System	70 m3/Hr
Design Capacity of Inlet Cooling System	60000 m3/hr
Design Cooling Water Temperature (°C)	33
Back Pressure	
Steam flow at super heater outlet under BMCR condition (tons/hr)	1590
Steam Pressure at super heater outlet under BMCR condition (kg/Cm²)	178.0 (g)
Steam Temperature at super heater outlet under BMCR condition (0C)	540
Steam Temperature at Reheater outlet at BMCR condition (°C)	568
Design / Guaranteed Boiler Efficiency (%)	85.10
Design Fuel with and without Blending of domestic/imported coal	Design Coal GCV: 3400 kcal/kg
Type of Cooling Tower	IDCT
Type of cooling system⁵	Closed cycle
Type of Boiler Feed Pump⁶	2 TDBFP, 1 MDBFP
Fuel Details⁷	
-Primary Fuel	Coal
-Secondary Fuel	HFO
-Alternate Fuels	-
Special Features/Site Specific Features⁸	
Special Technological Features⁹	
Environmental Regulation related features¹⁰	Electro Static Precipitators (ESP), Emission Control System
Any other special features	FGD/ De Nox system is under Implementation.

- 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 etc.
 6: Motor driven, Steam turbine driven etc.
 7: Coal or natural gas or Naphtha or lignite etc.
 8: Any site specific feature such as Merry-Go-Round, Vicinity to sea, Intake /makeup water systems etc. scrubbers etc.
 9: Any Special Technological feature like Advanced class FA technology in Gas Turbines, etc.
 10: Environmental Regulation related features like FGD, ESP etc.,

Suresh
PETITIONER

Normative parameters considered for tariff computations

Name of the Petitioner:	NTPC Limited						
Name of the Generating Station:	Unchahar Stage-IV						
(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** \$\$	%	-	6.918	6.917	6.903	6.843	6.694
Effective Tax Rate	%	21.5488	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	2372.43	2383.78	2383.78	2383.78	2383.78	2383.78
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	60	50	50	50	50	50
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	6.5			6.5		
SBI 1 Year MCLR plus 350 basis point3	%	12.60	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

S. T.
Petitioner

Part-I
FORM-3A
ADDITIONAL FORM

Calculation of O&M Expenses

		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	148.03	148.03	148.03	148.03	148.03
2b	Security expenses	1225.63	1346.91	1480.25	1626.84	1788.00
2c	Capital Spares**	0.00	0.00	0.00	0.00	0.00
3	O&M expenses-Ash Transportation**	0.00	0.00	0.00	0.00	0.00
	Total O&M Expenses	12628.66	13144.94	13688.28	14259.87	14856.03

** Shall be provided at the time of truing up

Seva

Petitioner

PART 1
FORM- 5

Abstract of Admitted Capital Cost for the existing Projects

Name of the Company :	NTPC Limited	
Name of the Power Station :	Unchahar Stage-IV	
Last date of order of Commission for the project	Date (DD-MM-YYYY)	06-12-2019
Reference of petition no. in which the above order was passed	Petition no.	197/GT/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:		
Capital cost*		2,71,439.40
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)		35,025.88
Gross Normative Debt		1,70,177.68
Cumulative Repayment		19,829.90
Net Normative Debt		1,50,347.78
Normative Equity		81,431.82
Cumulative Depreciation		
Freehold land		19,829.90
*As on 31.03.2019		

(Rs. in lakh)

Sunil
(Petitioner)

Abstract of Claimed Capital Cost for the existing Projects

Name of the Company :	NTPC Limited
Name of the Power Station :	Unchahar Stage-IV

Reference of Final True-up Tariff Petition	Affidavit dated	
	Rs. Lakhs	
Capital Cost as on 31.03.2019 as per Hon'ble Commission's Order dated 06.12.2019 In Pet. No. 197/GT/2017		2,71,439.40
Adjustment as per Para (6) of this petition		-24002.52
Following details as considered by the Petitioner as on the last date of the period for which final true-up tariff is claimed:		2,47,436.88
Capital cost as on 01.04.2019		247436.88
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)	(Rs. in lakh)*	29924.07
Gross Normative Debt		1,73,205.82
Cumulative Repayment		19,065.41
Net Normative Debt		1,54,140.41
Normative Equity		74,231.06
Cumulative Depreciation		19,111.27
Freehold land		0.00

S
(Petitioner)

Statement Giving Details of Project Financed through a Combination of loan

**Form 8
TRANCHE NO**

BP NO 50500000451

T00001

D00002

Unsecured Loan From ICICI-IV		
Source of Loan :	ICICI-IV	
Currency :	INR	
Amount of Loan :	20,00,00,00,000	
Total Drawn amount :	2,00,00,00,000	
Date of Drawal	25.07.2016	
Interest Type :	Floating	
Fixed Interest Rate :		
Base Rate, If Floating Interest	D00002 - 8.6%	
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 :	25.07.2016	
Repayment Period (Inc Moratorium) :	15 years	
Repayment Frequency :	9 Yearly Instalment	
Repayment Type :	AVG	
First Repayment Date :	16.02.2023	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	GADARWARA	57,00,00,000.00
	UNCHAHAR STPP IV	30,00,00,000.00
	DARLIPALLI	1,13,00,00,000.00
Total Allocated Amount		2,00,00,00,000.00

Suresh ..

Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

T00001

D00003

BP NO 50500000451

Unsecured Loan From ICICI-IV		
Source of Loan :	ICICI-IV	
Currency :	INR	
Amount of Loan :	20,00,00,00,000	
Total Drawn amount :	2,50,00,00,000	
Date of Drawal	21.09.2016	
Interest Type :	Floating	
Fixed Interest Rate :		
Base Rate, If Floating Interest	D00003 - 8.6%	
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 :	21.09.2016	
Repayment Period (Inc Moratorium) :	15 years	
Repayment Frequency :	9 Yearly Instalment	
Repayment Type :	AVG	
First Repayment Date :	16.02.2023	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	LARA	30,00,00,000.00
	GADARWARA	55,00,00,000.00
	UNCHAHAR STPP IV	15,00,00,000.00
	NORTH KARANPURA	30,00,00,000.00
	DARLIPALLI	50,00,00,000.00
	TANDA-II	15,00,00,000.00
	KHARGONE	15,00,00,000.00
	PAKRI BARWADIH	30,00,00,000.00
	CHATTI BARIATU	10,00,00,000.00
Total Allocated Amount		2,50,00,00,000.00

S. T.

Statement Giving Details of Project Financed through a Combination of loan

**Form 8
TRANCHE NO**

BP NO 5050000451

T00001

D0000

Unsecured Loan From ICICI-IV		
Source of Loan :	ICICI-IV	
Currency :	INR	
Amount of Loan :	20,00,00,00,000	
Total Drawn amount :	2,25,00,00,000	
Date of Drawal	29.09.2016	
Interest Type :	Floating	
Fixed Interest Rate :		
Base Rate, If Floating Interest	D00004 - 8.6%	
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 :	29.09.2016	
Repayment Period (Inc Moratorium) :	15 years	
Repayment Frequency :	9 Yearly Instalment	
Repayment Type :	AVG	
First Repayment Date :	16.02.2023	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	LARA	30,00,00,000.00
	GADARWARA	30,00,00,000.00
	UNCHAHAR STPP IV	5,00,00,000.00
	NORTH KARANPURA	30,00,00,000.00
	DARLIPALLI	30,00,00,000.00
	TANDA-II	30,00,00,000.00
	KHARGONE	15,00,00,000.00
	KUDGI	30,00,00,000.00
	ANANTPUR SOLAR	17,00,00,000.00
	PAKRI BARWADIH	8,00,00,000.00
Total Allocated Amount		2,25,00,00,000.00

Suresh

Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

T00001

D0000

BP NO 50500000451

Unsecured Loan From ICICI-IV		
Source of Loan :	ICICI-IV	
Currency :	INR	
Amount of Loan :	20,00,00,00,000	
Total Drawn amount :	2,00,00,00,000	
Date of Drawal	10.10.2016	
Interest Type :	Floating	
Fixed Interest Rate :		
Base Rate, If Floating Interest	D00005- 8.6%	
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 :	10.10.2016	
Repayment Period (Inc Moratorium) :	15 years	
Repayment Frequency :	9 Yearly Instalment	
Repayment Type :	AVG	
First Repayment Date :	16.02.2023	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	LARA	50,00,00,000.00
	GADARWARA	50,00,00,000.00
	UNCHAHAR STPP IV	15,00,00,000.00
	NORTH KARANPURA	37,00,00,000.00
	BARH-II	8,00,00,000.00
	KHARGONE	20,00,00,000.00
	TAPOVAN VISHNUGAD	20,00,00,000.00
Total Allocated Amount		2,00,00,00,000.00

S. ...

Statement Giving Details of Project Financed through a Combination of loan

**Form 8
TRANCHE NO**

BP NO 5050000421

T00001

D0000

Unsecured Loan From HDFC Bank Ltd.-III		
Source of Loan :	HDFC Bank Ltd.-III	
Currency :	INR	
Amount of Loan :	20,00,00,00,000	
Total Drawn amount :	2,00,00,00,000	
Date of Drawal:	0	
Interest Type :	Floating	
Fixed Interest Rate :		
Base Rate, If Floating Interest	D00005- 8.45%	
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 :	11.07.2016	
Repayment Period (Inc Moratorium) :	15 Years	
Repayment Frequency :	9 Yearly Instalment	
Repayment Type :	AVG	
First Repayment Date :	04.12.2021	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	TAPOVAN VISHNUGAD	9,00,00,000
	SOLAPUR	9,00,00,000
	GADARWARA	36,00,00,000
	UNCHAHAR STPP IV	15,00,00,000
	NORTH KARANPURA	4,00,00,000
	DARLIPALLI	48,00,00,000
	TANDA-II	9,00,00,000
	ANANTPUR SOLAR	9,00,00,000
	MOUDA-II	20,00,00,000
	KUDGI	31,00,00,000
	PAKRI BARWADIH	10,00,00,000
	Total Allocated Amount	2,00,00,00,000

Suresh

Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5050000442

T00001

D0004

Unsecured Loan From SBI-VIII		
Source of Loan :	SBI-VIII	
Currency :	INR	
Amount of Loan :	1,00,00,00,00,000	
Total Drawn amount :	10,00,00,00,000	
Interest Type :	Floating	
Fixed Interest Rate :	-----	
Base Rate, If Floating Interest	D0004- 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 :	04.08.2015	
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-II	23,00,00,000
	BARH-I	45,00,00,000
	BONGAIGAON	61,00,00,000
	DARLIPALLI	68,00,00,000
	GADARWARA	1,25,00,00,000
	KOLDAM	29,00,00,000
	KUDGI-I	1,13,00,00,000
	LARA-I	1,65,00,00,000
	MOUDA-II	84,00,00,000
	NORTH KARANPURA	24,00,00,000
	RAMMAM	9,00,00,000
	SOLAPUR	1,11,00,00,000
	TANDA-II	7,00,00,000
	TAPOVAN VISHNUGARH	38,00,00,000
	UNCHAHAR-IV	41,00,00,000
	VINDHYACHAL-V	57,00,00,000
Total Allocated Amount		10,00,00,00,000.00

S. Srinivas

Statement Giving Details of Project Financed through a Combination of loan

**Form 8
TRANCHE NO**

BP NO 5050000442

T00001

D0005

Unsecured Loan From SBI-VIII		
Source of Loan :	SBI-VIII	
Currency :	INR	
Amount of Loan :	1,00,00,00,00,000	
Total Drawn amount :	5,00,00,00,000	
Interest Type :	Floating	
Fixed Interest Rate :	-----	
Base Rate, If Floating Interest	D0005- 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 :	23.09.2015	
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	20,00,00,000
	BONGAIGAON	10,00,00,000
	DARLIPALLI	55,00,00,000
	GADARWARA	1,55,00,00,000
	KUDGI	1,30,00,00,000
	LARA	45,00,00,000
	MOUDA-II	35,00,00,000
	SOLAPUR	30,00,00,000
	UNCHAHAR-IV	20,00,00,000
	Total Allocated Amount	5,00,00,00,000.00

S. T. ...

32

Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5050000442

T00001

D0006

Unsecured Loan From SBI-VIII		
Source of Loan :	SBI-VIII	
Currency :	INR	
Amount of Loan :	1,00,00,00,00,000	
Total Drawn amount :	1,50,00,00,000	
Interest Type :	Floating	
Fixed Interest Rate :	-----	
Base Rate, If Floating Interest	D0006- 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 :	14.10.2015	
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
	UNCHAHAR-IV	24,00,00,000
	TANDA-II	50,00,00,000
	MOUDA-II	76,00,00,000
Total Allocated Amount		1,50,00,00,000.00

S
.....

Statement Giving Details of Project Financed through a Combination of loan

**Form 8
TRANCHE NO**

BP NO 5050000442

T00001

D0008

Unsecured Loan From SBI-VIII		
Source of Loan :	SBI-VIII	
Currency :	INR	
Amount of Loan :	1,00,00,00,00,000	
Total Drawn amount :	5,00,00,00,000	
Interest Type :	Floating	
Fixed Interest Rate :	-----	
Base Rate, If Floating Interest	D0008- 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 :	21.10.2015	
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	54,00,00,000
	TAPOVAN VISHNUGAD	13,00,00,000
	BONGAIGAON	23,00,00,000
	BARH-II	22,00,00,000
	KUDGI-I	81,00,00,000
	MOUDA-II	25,00,00,000
	SOLAPUR	35,00,00,000
	VINDHYACHAL-V	13,00,00,000
	LARA-I	85,00,00,000
	GADARWARA	49,00,00,000
	UNCHAHAR-IV	10,00,00,000
	NORTH KARANPURA	8,00,00,000
	DARLIPALLI	34,00,00,000
	TANDA-II	26,00,00,000
	PAKRI BARWADIH	12,00,00,000
	RIHAND-III	10,00,00,000
Total Allocated Amount		5,00,00,00,000

S. M...

TRANCHE NO

T00001

D00011

BP NO 5050000442

Unsecured Loan From SBI-VIII		
Source of Loan :	SBI-VIII	
Currency :	INR	
Amount of Loan :	1,00,00,00,00,000	
Total Drawn amount :	3,00,00,00,000	
Interest Type :	Floating	
Fixed Interest Rate :	-----	
Base Rate, If Floating Interest	D00011- 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 :	30.10.2015	
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	31,00,00,000
	BONGAIGOAN	30,00,00,000
	DARLIPALLI	16,00,00,000
	GADARWARA	72,00,00,000
	KHARGONE	5,00,00,000
	LARA-I	33,00,00,000
	MOUDA-II	26,00,00,000
	NORTH KARANPURA	8,00,00,000
	TANDA-II	15,00,00,000
	TAPOVAN VISHNUGARH	21,00,00,000
	UNCHAHAR-IV	7,00,00,000
	PAKRI BARWADIH	4,00,00,000
	CHATTI BARIATU	9,00,00,000
	SIMHADRI-II	12,00,00,000
	RAMAGUNDAM R&M	11,00,00,000
Total Allocated Amount		3,00,00,00,000

35

S
hu

Statement Giving Details of Project Financed through a Combination of loan

**Form 8
TRANCHE NO**

BP NO 5050000442

T00001

D00012

Unsecured Loan From SBI-VIII		
Source of Loan :	SBI-VIII	
Currency :	INR	
Amount of Loan :	1,00,00,00,00,000	
Total Drawn amount :	4,00,00,00,000	
Interest Type :	Floating	
Fixed Interest Rate :	-----	
Base Rate, If Floating Interest	D00012- 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 :	12.11.2015	
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	25,00,00,000
	BONGAIGAON	32,00,00,000
	DARLIPALLI	22,00,00,000
	GADARWARA	56,00,00,000
	KUDGI	30,00,00,000
	LARA	23,00,00,000
	MOUDA-II	44,00,00,000
	NORTH KARANPURA	17,00,00,000
	PAKRI BARWADIH	11,00,00,000
	SOLAPUR	62,00,00,000
	TANDA-II	15,00,00,000
	TAPOVAN VISHNUGAD	18,00,00,000
	UNCHAHAR-IV	12,00,00,000
	VINDHYACHAL-V	13,00,00,000
	MOUDA-I	20,00,00,000
Total Allocated Amount		4,00,00,00,000

36

Suresh

Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5050000442

T00001

D00013

Unsecured Loan From SBI-VIII		
Source of Loan :	SBI-VIII	
Currency :	INR	
Amount of Loan :	1,00,00,00,00,000	
Total Drawn amount :	4,00,00,00,000	
Interest Type :	Floating	
Fixed Interest Rate :	-----	
Base Rate, If Floating Interest	D00013- 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 :	01.12.2015	
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	18,00,00,000
	BONGAIGOAN	14,00,00,000
	DARLIPALLI	45,00,00,000
	GADARWARA	50,00,00,000
	KUDGI	45,00,00,000
	LARA	72,00,00,000
	MOUDA-II	32,00,00,000
	SOLAPUR	45,00,00,000
	UNCHAHAR-IV	21,00,00,000
	RAMMAM	15,00,00,000
	BARH-II	18,00,00,000
	VINDHYACHAL-IV	13,00,00,000
	MOUDA-I	12,00,00,000
Total Allocated Amount		4,00,00,00,000

S P W.

39

TRANCHE NO

BP NO 5050000442

T00001

D00014

Unsecured Loan From SBI-VIII

Source of Loan :	SBI-VIII	
Currency :	INR	
Amount of Loan :	1,00,00,00,00,000	
Total Drawn amount :	3,00,00,00,000	
Date of Drawl	0	
Interest Type :	Floating	
Fixed Interest Rate :	-----	
Base Rate, If Floating Interest	D00014- 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 :	01.01.2016	
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	9,00,00,000
	BONGAIGOAN	22,00,00,000
	DARLIPALLI	35,00,00,000
	KUDGI-I	67,00,00,000
	LARA-I	77,00,00,000
	PAKRI BARWADIH	16,00,00,000
	TANDA-II	25,00,00,000
	TAPOVAN VISHNUGARH	12,00,00,000
	UNCHAHAR STPP IV	10,00,00,000
	KHARGONE	17,00,00,000
	VINDHYACHAL-V	10,00,00,000
	Total Allocated Amount	3,00,00,00,000.00

Suresh,

Statement Giving Details of Project Financed through a Combination of loan

**Form 8
TRANCHE NO**

BP NO 5050000442

T00001

D00015

Unsecured Loan From SBI-VIII		
Source of Loan :	SBI-VIII	
Currency :	INR	
Amount of Loan :	1,00,00,00,00,000	
Total Drawn amount :	1,50,00,00,000	
Interest Type :	Floating	
Fixed Interest Rate :	-----	
Base Rate, If Floating Interest	D00015- 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 :	29.01.2016	
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	35,00,00,000
	BONGAIGAON	20,00,00,000
	DARLIPALLI	20,00,00,000
	UNCHAHAR-IV	20,00,00,000
	GADARWARA	20,00,00,000
	MOUDA-II	20,00,00,000
	BARH-II	15,00,00,000
	Total Allocated Amount	1,50,00,00,000

Suresh ..

Statement Giving Details of Project Financed through a Combination of loan

**Form 8
TRANCHE NO**

BP NO 5050000442

T00001

D00018

Unsecured Loan From SBI-VIII		
Source of Loan :	SBI-VIII	
Currency :	INR	
Amount of Loan :	1,00,00,00,00,000	
Total Drawn amount :	1,50,00,00,000	
Date of Drawl	21.04.2016	
Interest Type :	Floating	
Fixed Interest Rate :	-----	
Base Rate, If Floating Interest	D00018- 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 :	21.04.2016	
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
	BONGAIGAON	70,00,00,000
	UNCHAHAR-IV	5,00,00,000
	RAMAGUNDAM R&M	15,00,00,000
	TSTPS R&M	21,00,00,000
	GANDHAR R&M	8,00,00,000
	KORBA R&M	6,00,00,000
	DADRI GAS R&M	10,00,00,000
	UNCHAHAR R&M	5,00,00,000
	BADARPUR R&M	5,00,00,000
	KAHALGAON R&M	5,00,00,000
Total Allocated Amount		1,50,00,00,000

Spw

40

Statement Giving Details of Project Financed through a Combination of loan

**Form 8
TRANCHE NO**

BP NO 5050000531

T00001

D0004

Unsecured Loan From SBI-VIII		
Source of Loan :	SBI-IX	
Currency :	INR	
Amount of Loan :	30,00,00,00,000	
Total Drawn amount :	2,00,00,00,000	
Date of Drawal:	01.09.2017	
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 :	3 Years	
Moratorium effective from :	01.09.2017	
Repayment Period (Inc Moratorium) :	12 Years	
Repayment Frequency :	9 Yearly Installments	
Repayment Type :	AVG	
First Repayment Date :	31.03.2021	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	UNCHAHAR STPP IV	25,00,00,000
	ROJMAL WIND	55,00,00,000
	BARH - II	5,00,00,000
	KUDGI	1,15,00,00,000
Total Allocated Amount		2,00,00,00,000.00

S
.....

u

Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5050000531

T00001

D0004

Unsecured Loan From SBI-IX		
Source of Loan :	SBI-IX	
Currency :	INR	
Amount of Loan :	30,00,00,00,000	
Total Drawn amount :	2,00,00,00,000	
Date of Drawal:	01.09.2017	
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 :	3 Years	
Moratorium effective from :	01.09.2017	
Repayment Period (Inc Moratorium) :	12 Years	
Repayment Frequency :	9 Yearly Installments	
Repayment Type :	AVG	
First Repayment Date :	31.03.2021	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	UNCHAHAR STPP IV	25,00,00,000
	ROJMAL WIND	55,00,00,000
	BARH - II	5,00,00,000
	KUDGI	1,15,00,00,000
	Total Allocated Amount	2,00,00,00,000.00

*S
Thru.*

Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5050000551

T00001

D00001

Unsecured Loan From SBI-X		
Source of Loan :	SBI- X	
Currency :	INR	
Amount of Loan :	40,00,00,00,000	
Total Drawn amount :	10,00,00,00,000	
Date of Drawal:	25.09.2017	
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 :	25.09.2017	
Repayment Period (Inc Moratorium) :	15 Years	
Repayment Frequency :	9 Yearly Installments	
Repayment Type :	AVG	
First Repayment Date :	01.10.2024	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	BARH-I	2,40,97,00,000
	TAPOVAN VISHNUGARH	55,04,00,000
	BONGAIGAON	2,11,03,00,000
	SOLAPUR	1,49,66,00,000
	LARA	48,90,00,000
	GADARWARA	76,25,00,000
	UNCHAHAR STPP IV	30,00,00,000
	NORTH KARANPURA	1,02,00,00,000
	DARLIPALLI	60,00,00,000
	TANDA-II	26,15,00,000
	Total Allocated Amount	10,00,00,00,000.00

S. P. M.

Statement Giving Details of Project Financed through a Combination of loan

**Form 8
TRANCHE NO**

BP NO 5050000381

T00001

D00004

Unsecured Loan From Vijaya Bank		
Source of Loan :	Vijaya Bank-VI	
Currency :	INR	
Amount of Loan :	2,85,00,00,000	
Total Drawn amount :	85,00,00,000	
Date of Drawl	13.11.2017	
Interest Type :	Floating	
Fixed Interest Rate :		
Base Rate, If Floating Interest	D00004- 8.4%	
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 :	5 Years	
Moratorium effective from :	13.11.2017	
Repayment Period (inc Moratorium) :	15 Years	
Repayment Frequency :	10 Yearly	
Repayment Type :	Average	
First Repayment Date :	14.03.2020	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	GADARWARA	20,00,00,000
	UNCHAHAR STPP IV	20,00,00,000
	DARLIPALLI	20,00,00,000
	VINDHYACHAL-V	10,00,00,000
	TALAIPALI COAL MINE	15,00,00,000.00
Total Allocated Amount		85,00,00,000.00

Stus..

44

Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 50500000541

T00001

D00005

Unsecured Loan From ICICI-VI		
Source of Loan :	ICICI-VI	
Currency :	INR	
Amount of Loan :	30,00,00,00,000	
Total Drawn amount :	2,00,00,00,000	
Date of Drawal	11.12.2017	
Interest Type :	Floating	
Fixed Interest Rate :		
Base Rate, If Floating Interest	8.60%	
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 :	11.12.2017	
Repayment Period (Inc Moratorium) :	15 years	
Repayment Frequency :	9 Yearly Instalment	
Repayment Type :	AVG	
First Repayment Date :	11.09.2024	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	GADARWARA	40,00,00,000.00
	UNCHAHAR STPP IV	25,00,00,000.00
	NORTH KARANPURA	60,00,00,000.00
	TANDA-II	75,00,00,000.00
Total Allocated Amount		2,00,00,00,000.00

Sgms..

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-III		
Source of Loan :	Punjab National Bank-III	
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
	UNCHAHAR STPP IV	65,00,00,000
	TANDA-II	85,00,00,000
	NCTPP-II	36,43,00,000
	DADRI GAS R&M	56,00,00,000
	KORBA-III	15,00,00,000
	SIPAT-II	17,14,00,000
	FARAKKA-III	8,57,00,000
	KAHALGAON-II	17,14,00,000
	BARH-I	1,08,57,00,000
	BARH-II	8,00,00,000
	NORTH KARANPURA	1,09,00,00,000
	KOLDAM	6,43,00,000
	TAPOVAN VISHNUGAD	28,57,00,000
	PAKRI BARWADIH	1,42,00,00,000
	CHATTI BARIATU	10,00,00,000
	BONGAIGAON	36,43,00,000
	KUDGI	60,00,00,000
	LARA	1,23,00,00,000
	GADARWARA	2,27,72,00,000
	DARLIPALLI	2,73,00,00,000
	KHARGONE	50,00,00,000
	ANANTPUR SOLAR	17,00,00,000
	TALAIPALI COAL MINE	5,00,00,00,000
Total Allocated Amount		20,00,00,00,000

Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5050000741

T00001

D00003

Unsecured Loan From SBI-XII		
Source of Loan :	SBI-XII	
Currency :	INR	
Amount of Loan :	50,00,00,00,000	
Total Drawn amount :	5,00,00,00,000	
Date of Drawal:	26.03.2019	
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 :	26.03.2019	
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	40,00,00,000.00
	UNCHAHAR STPP IV	1,20,00,00,000.00
	LARA	30,00,00,000.00
	NORTH KARANPURA	30,00,00,000.00
	GADARWARA	60,00,00,000.00
	DARLIPALLI	41,00,00,000.00
	TANDA-II	30,00,00,000.00
	KHARGONE	60,00,00,000.00
	TELANGANA	60,00,00,000.00
	CHATTI BARIATU	5,00,00,000.00
	DULANGA	10,00,00,000.00
	TALAIPALI	10,00,00,000.00
	NCPS-FGD	4,00,00,000.00
Total Allocated Amount		5,00,00,00,000.00

Stu... .

PART-I
FORM-9A
Additional Form

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	NTPC Limited						Amount in Rs Lakh
Name of the Generating Station	Unchahar Stage-IV						
COD	30-09-2017						
For Financial Year	2019-24 (Summary)						
Sl. No.	Head of Work /Equipment	2019-20	2020-21	2021-22	2022-23	2023-24	Regulation/Justification
A. Works under Original scope, Change in Law etc. eligible for RoE at Normal Rate							
1	EPC Package for Unchahar Stage-IV	21,600.00	6,400.00				Please refer respective financial Year for Justification
2	Coal Transportation system	956.00	498.00				Please refer respective financial Year for Justification
3	Township and Colony	1,126.11	2,010.04	722.20	400.00		Please refer respective financial Year for Justification
4	Site Development						Please refer respective financial Year for Justification
5	Canal Lining	50.00	200.00				Please refer respective financial Year for Justification
6	Ash Dyke raising (Arkha)	1,000.00	392.00				Please refer respective financial Year for Justification
7	Design Supply and Installation of CCTV System	28.70					Please refer respective financial Year for Justification
8	HFO to LDO conversion in Stage-IV		250.00	69.00			Please refer respective financial Year for Justification
9	Replacement of Chlorine System by ClO ₂ .	44.25	88.50	715.49			Please refer respective financial Year for Justification
10	Roof top solar on stage-IV buildings.	160.00	115.30				Please refer respective financial Year for Justification
Total (A)	24,965.06	9,953.84	1,506.69	400.00	-	-	
B. Works beyond Original scope excluding add-cap due to Change in Law eligible for RoE at Wid. Average rate of Interest							
1		NA					
Total (B)	-	-	-	-	-	-	
Total Add. Cap. Claimed (A+B)	24,965.06	9,953.84	1,506.69	400.00	-	-	

S
(Petitioner) 10

26 48

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	NTPC Limited			Amount in Rs Lakhs			Admitted Cost by the Commission, if any
Name of the Generating Station	Unchahar Stage-IV						
COD	30-09-2017						
For Financial Year	2019-20						
Sl. No.	Head of Work /Equipment	Accrued basis as per IGAPP	Un-discharged Liability included in col. 3	ACE Claimed (Projected)	Regulations under which claimed	Justification	
1	2	3	4	5= (3-4)	6	7	8
A.	Works under Original scope, Change in Law etc. eligible for RoR at Normal Rate						9
1	EPC Package for Unchahar Stage-IV	21,600.00		21,600.00	24(1)(b)	These are actual capitalisation of the balance works pertaining to Main Plant/ BOP Civil/ Switch Yard Civil, BOP Package (CW System, Misc. pumps, Station Piping, WTP, Electrical System, HVAC, FDPS, AHP System, CHP system) within the original scope of work which have been deferred for execution but within the cut-off date. Hon'ble Commission may be pleased to allow the same under Regulation 24(1)(b) of 2019 Tariff Regulations	
2	Coal Transportation system	956.00		956.00	24(1)(b)	These are actual capitalisation of the balance works within the original scope of work which have been deferred for execution but within the cut-off date. Hon'ble Commission may be pleased to allow the same under Regulation 24(1)(b) of 2019 Tariff Regulations	
3	Township and Colony	1,126.11		1,126.11	24(1)(b)	These are actual capitalisation of the balance works of Township and Colony pertaining to Civil, Electrical and Associated Misc works within the original scope of work which have been deferred for execution but within the cut-off date. Hon'ble Commission may be pleased to allow the same under Regulation 24(1)(b) of 2019 Tariff Regulations	
4	Canal Lining	50.00		50.00	24(1)(b)	These are actual capitalisation of the balance work within the original scope of work which have been deferred for execution but within the cut-off date. Hon'ble Commission may be pleased to allow the same under Regulation 24(1)(b) of 2019 Tariff Regulations	
5	Ash Dye raising (Arkla)	1,000.00		1,000.00	24(1)(b)		
6	Design Supply and Installation of CCTV System	28.70		28.70	24(1)(b)		
7	Replacement of Chlorine System by ClO2:	44.25				In the instant station, at present Chlorine gas is being dosed 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. 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 highly hazardous gas chlorination system with ClO2 system. SPCB, Odisha while issuing consent to establish in case of Daripalli Station has asked NTPC to explore the possibility of installing ClO2 system instead of Chlorine gas system (Relevant documents is attached at Annexure-A). For 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) and 26(1)(d)	
8	Roof top solar on stage-IV buildings	160.00		160.00	24(1)(b), 24(1)(e)	These works are part of original scope of work & were awarded under policy framework of the Government of India to achieve its ambitious 2022 target for grid connected rooftop solar projects. This project supports the shift to renewable energy by installation of at least 500 KW of rooftop solar photovoltaic unit in Unchahar-IV. Beneficiaries can, over time, enjoy a financial gain on account of APC Reduction.	
	Total (A)	24,965.06	-	24,965.06	-	Carbon emission reduction and sustainability is also an important driver. This is particularly for NTPC which is committed to increase of renewable electricity in energy mix across India as well as energy sustainability for the future. Hon'ble Commission may be pleased to allow the same under Regulation 24(1)(b), 24(1)(e) of 2019 tariff regulations.	

27

29

Sub

PART-I
FORM-9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	NTPC Limited Uunchahar Stage-IV							
Name of the Generating Station	30-09-2017							
COD	2019-20							
For Financial Year								
Sl. No.	Head of Work/Equipment	Accrual basis as per I(GAAP)	Un-discharged Liability included in col. 3	ACE Claimed (Projected) Cash basis	Regulations under which claimed	Justification	Admitted Cost by the Commission, if any	Amount in Rs Lakh
1	2	3	4	5=(3-4)	6	7	8	9
B. Works beyond Original scope excluding add-cap due to Change in Law eligible for RoE at Wid. Average rate of Interest								
NA								
Total (B)		-	-	-	-	-	-	-
Total Add. Cap. Claimed (A+B)		24,965.06	-	24,965.06	-	-	-	-

S. H. (Petitioner)

28 50

PART-I
FORM-9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner NTPC Limited

Name of the Generating Station Unchahar Stage-IV

COD 30-09-2017

For Financial Year 2020-21

Sl. No.	Head of Work /Equipment	ACE Claimed (Projected)			Regulations under which claimed	Justification	Amount in Rs Lakh	
		Accrual basis as per IGAAAP	Un-discharged Liability included in col. 3	Cash basis				
1	2	3	4	5= (3-4)	6	7	8	9
A. Works under Original scope, Change in Law etc. slight for RoE at Normal Rate								
1	EPC Package for Unchahar Stage-IV	6,400.00		6,400.00		24(1)(b)	Same as Sl no A.1 of FY 2019-20	
2	Coal Transportation system	498.00		498.00		24(1)(b)	Same as Sl no A.2 of FY 2019-20	
3	Township and Colony	2,010.04		2,010.04		24(1)(b)	Same as Sl no A.3 of FY 2019-20	
4	Canal Lining	200.00		200.00		24(1)(b)	Same as Sl no A.4,A.5 of FY 2019-20	
5	Ash Dyke raising (Arkha)	392.00		392.00		24(1)(b)		
6	HFO to LDO conversion in Stage-IV	250.00		250.00		26(1)(b)	Hon'ble Supreme Court of India vide Order dtd 24.10.2017, in Writ Petition(s)(Civil) No(s).13029/1985 (Attached as Annexure B) banned use of Furnace Oil in states of J.P, Haryana & Rajasthan. And Ordered switching to Light Diesel Oil (LDO) in Thermal Power Plants. In view of this, NTPC has taken up the fuel system conversion of its various power stations including Rihand. Hon'ble Commission may be pleased to allow the capitalisation under under Regulation 24(1)(e) of 2019 Tariff Regulations	
7	Replacement of Chlorine System by CLO2:	88.50		88.50		26(1)(b), 26(1)(d)	Same as Sl no A.7 of FY 2019-20	
8	Roof top solar on stage-IV buildings.	115.30		115.30		24(1)(b), 24(1)(e)	Same as Sl no A.8 of FY 2019-20	
Total (A)		9,953.84		9,953.84				
B. Works beyond Original scope excluding add-on due to Change in Law except for RoE at Wid. Average rate of Interest								
3						NA		
	Total (B)	-		-				
	Total Add. Cap. Claimed (A+B)	9,953.84		9,953.84				

S
(Petitioner)

29

51

PART-I
FORM-9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	NTPC Limited
Name of the Generating Station	Unchahar Stage-IV
COD	30-09-2017
For Financial Year	2021-22

Sl. No.	Head of Work /Equipment	ACE Claimed (Projected)			Regulations under which claimed	Justification	Amount in Rs Lakh Admitted Cost by the Commission, if any
		Actual basis as per (GAAP	Un-discharged Liability included in col. 3	Cash basis			
1	2	3	4	5= (3-4)	6	7	8
A. Works under Original scope, Change in Law etc, eligible for RoE at Normal Rate							
1	Township and Colony	722.20	722.20	722.20	24(1)(b), Reg 76	These are actual capitalisation of the balance works of Township and Colony pertaining to Civil, Electrical and Associated Mise works within the original scope of work which have been deferred for execution. Hon'ble Commission may be pleased to allow the same under Regulation 24(1)(b) read with Regulation 76 of 2019 Tariff Regulations	9
2	HFO to LDO conversion in Stage-IV	69.00	69.00	69.00	26(1)(b)	Same as Sl no A.6 FY 2020-21	
4	Replacement of Chlorine System by CLO2:	715.49	715.49	715.49	26(1)(b), 26(1)(d)	Same as Sl no A.7 FY 2019-20	
5	Total (A)	1,506.69	-	1,506.69	-		
B. Works beyond Original scope existing add-cap due to Change in Law eligible for RoE at Wid. Average rate of Interest							
2					NA		
Total (B)		-	-	-			
Total Add. Cap. Claimed (A+B)		1,506.69	-	1,506.69	-	-	

S. T.
(Petitioner)

30 52

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	NTPC Limited					Amount in Rs Lakh	
Name of the Generating Station	Unchahar Stage-IV						
COD	30-09-2017						
For Financial Year	2022-23						
Sl. No.	Head of Work /Equipment	Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	ACE Claimed (Projected) Cash basis	IDC included in col. 3	Regulations under which claimed	
1	2	3	4	5 = (3-4)	6	7	
A. Works under Original scope, Change in Law etc. eligible for RoE at Normal Rate							
1	Township and Coloney	400.00		400.00	24(1)(b), Reg 76	same as Sl no A.1 FY 2021-22	
Total (A)		400.00	-	400.00			
B. Works beyond Original scope excluding add-cap due to Change in Law eligible for RoE at Wtd. Average rate of Interest							
2				NA			
Total (B)		-	-	-			
Total Add. Cap. Claimed (A+B)		400.00	-	400.00	-		

S. J. Shrivastava
(Petitioner)

53

31

PART-I
FORM- 9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	NTPC Limited	Amount in Rs Lakh				Admitted Cost by the Commission, if any
Name of the Generating Station	Unchahar Stage-IV					
COD	30-09-2017					
For Financial Year	2023-24					
Sl. No.	Head of Work /Equipment	ACE Claimed (Projected)	Regulations under which claimed	Justification		
		Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	IDC included in col. 3		
1	2	3	4	5= (3-4)	6	7
A.	Works under Original scope, Change in Law etc, eligible for ReCL at Normal Rate				8	9

Total (A)

32

32 54

Total Add. Cap. Claimed (A+B)

(Penitentiary)

**PART-I
FORM- 10**

Name of the Petitioner	NTPC Limited									
Name of the Generating Station	Unchahar Stage-IV									
Date of Commercial Operation	30-09-2017									
		Amount in Rs Lakh								
		Actual			Admitted					
Financial Year (Starting from COD)1	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

S. S. T. R.
(Petitioner)

3

55

Name of the Company Name of the Power Station		Calculation of Depreciation Rate			Part-11 Form-11			
		NTPC Ltd. Unchahar Stage-IV		Rs. In lakhs				
Sl No	Description	Rate of Dep (%)	GB as on 31.03.2019	Depreciation				
1	Roads, bridges, culverts & helipad	3.34	104.23			3.48		
2	Main Plant Buildings	3.34	14733.16			492.09		
3	Other Buildings	3.34	872.39			29.14		
4	Temporary erection	100.00	377.93			377.93		
5	Plant and machinery	5.28	267361.29			14116.68		
6	Furniture and fixtures	6.33	555.57			35.17		
7	Other Office Equipments	6.33	276.37			17.49		
8	EDP, W/P machines & SATCOM equipment	15.00	784.51			117.68		
9	Vehicles including speedboats	9.50	1.63			0.16		
10	Construction equipment	9.50	78.88			7.49		
11	Electrical installations	5.28	36.37			1.92		
12	Communication equipment	6.33	195.02			12.34		
13	Hospital equipment	5.28	36.10			1.91		
14	Software	15.00	68.29			10.24		
	Total		285481.75			15223.71		
	Weighted Average Depreciation Rate (%)					5.333%		

S
Petitioner

39
56

PART-I

FORM- 12

Statement of Depreciation

Name of the Company :

Name of the Power Station :

<u>NTPC Limited</u>	<u>Unchahar Stage-IV</u>
---------------------	--------------------------

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	233952.39	2,47,436.88	2,72,401.94	2,82,355.78	2,83,862.46	2,84,262.46
2	Closing Capital Cost	247436.88	2,72,401.94	2,82,355.78	2,83,862.46	2,84,262.46	2,84,262.46
3	Average Capital Cost	240694.63	2,59,919.41	2,77,378.86	2,83,109.12	2,84,062.46	2,84,262.46
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	-	-	-	-	-	-
8	Rate of depreciation	5.338	5.333	5.333	5.333	5.333	5.333
6	Depreciable value	2,10,366.73	2,14,821.88	2,16,674.82	2,07,040.44	1,92,801.26	1,77,833.23
9	Balance useful life at the beginning of the period	24.50	23.50	22.50	21.50	20.50	19.50
9	Depreciation (for the period)	12,847.15	13,860.57	14,791.62	15,097.19	15,148.03	15,158.69
10	Depreciation (annualised)	12,847.15	13,860.57	14,791.62	15,097.19	15,148.03	15,158.69
11	Cumulative depreciation at the end of the period	19108.55	32,966.15	47,757.77	62,854.96	78,002.99	93,161.68
12	Add: Cumulative depreciation adjustment on account of Liability Discharge	0.00	-	-	-	-	-
13	Less: Cumulative depreciation adjustment on account of de- capitalisation	2.97	-	-	-	-	-
14	Net Cumulative depreciation at the end of the period after adjustments	19,105.58	32,966.15	47,757.77	62,854.96	78,002.99	93,161.68

* Shall be submitted at the time of Truing up.



(Petitioner)

Calculation of Interest on Actual Loans						
Name of the Company Name of the Power Station	NTPC LTD. FGUTPS-IV	(Amount in lacs)				
Sl. no.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
1 4.375% Euro Bonds 2024						
Gross loan - Opening	13417.60	13417.60	13417.60	13417.60	13417.60	13417.60
Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00	0.00
Net loan - Opening	13417.60	13417.60	13417.60	13417.60	13417.60	13417.60
Increase/ Decrease due to FERV	0	0	0	0	0	0
Increase/ Decrease due to ACE/Drawl during the period						
Total	13417.60	13417.60	13417.60	13417.60	13417.60	13417.60
Repayments of Loans during the period						
Net loan - Closing	13417.60	13417.60	13417.60	13417.60	13417.60	13417.60
Average Net Loan	13417.60	13417.60	13417.60	13417.60	13417.60	13417.60
Rate of Interest on Loan	4.6277%	4.6277%	4.6277%	4.6277%	4.6277%	4.6277%
Interest on Loan Annualised	620.92	620.92	620.92	620.92	620.92	620.92
2 Mizuho II A						
Gross loan - Opening	103.65	103.65	103.65	103.65	103.65	103.65
Cumulative repayments of Loans upto previous period	0.00	25.91	77.74	103.65	103.65	103.65
Net loan - Opening	103.65	77.74	25.91	0.00	0.00	0.00
Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00	0.00
Increase/ Decrease due to ACE/Drawl during the period						
Total	103.65	77.74	25.91	0.00	0.00	0.00
Repayments of Loans during the period	25.91	51.82	25.91	0.00	0.00	0.00
Net loan - Closing	77.74	25.91	0.00	0.00	0.00	0.00
Average Net Loan	90.69	51.82	12.96	0.00	0.00	0.00
Rate of Interest on Loan	4.3522%	4.3522%	4.3522%	4.3522%	4.3522%	4.3522%
Interest on Loan Annualised	3.95	2.26	0.56	0.00	0.00	0.00
3 Mizuho II B						
Gross loan - Opening	4732.19	4732.19	4732.19	4732.19	4732.19	4732.19
Cumulative repayments of Loans upto previous period	0.00	1183.05	3549.14	4732.19	4732.19	4732.19
Net loan - Opening	4732.19	3549.14	1183.05	0.00	0.00	0.00
Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00	0.00
Increase/ Decrease due to ACE/Drawl during the period						
Total	4732.19	3549.14	1183.05	0.00	0.00	0.00
Repayments of Loans during the period	1183.05	2366.10	1183.05	0.00	0.00	0.00
Net loan - Closing	3549.14	1183.05	0.00	0.00	0.00	0.00
Average Net Loan	4140.67	2366.10	591.52	0.00	0.00	0.00
Rate of Interest on Loan	4.3522%	4.3522%	4.3522%	4.3522%	4.3522%	4.3522%
Interest on Loan Annualised	180.21	102.98	25.74	0.00	0.00	0.00
4 4.25% Euro Bonds 2026						
Gross loan - Opening	17455.56	17455.56	17455.56	17455.56	17455.56	17455.56
Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00	0.00
Net loan - Opening	17455.56	17455.56	17455.56	17455.56	17455.56	17455.56
Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00	0.00
Increase/ Decrease due to ACE/Drawl during the period						
Total	17455.56	17455.56	17455.56	17455.56	17455.56	17455.56
Repayments of Loans during the period	0.00	0.00	0.00	0.00	0.00	0.00
Net loan - Closing	17455.56	17455.56	17455.56	17455.56	17455.56	17455.56
Average Net Loan	17455.56	17455.56	17455.56	17455.56	17455.56	17455.56
Rate of Interest on Loan	4.4955%	4.4955%	4.4955%	4.4955%	4.4955%	4.4955%
Interest on Loan Annualised	784.71	784.71	784.71	784.71	784.71	784.71
5 2.75% Euro Bonds 2027						
Gross loan - Opening	17877.06	17877.06	17877.06	17877.06	17877.06	17877.06
Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00	0.00
Net loan - Opening	17877.06	17877.06	17877.06	17877.06	17877.06	17877.06
Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00	0.00
Increase/ Decrease due to ACE/Drawl during the period						
Total	17877.06	17877.06	17877.06	17877.06	17877.06	17877.06
Repayments of Loans during the period	0.00	0.00	0.00	0.00	0.00	0.00
Net loan - Closing	17877.06	17877.06	17877.06	17877.06	17877.06	17877.06
Average Net Loan	17877.06	17877.06	17877.06	17877.06	17877.06	17877.06
Rate of Interest on Loan	2.9088%	2.9088%	2.9088%	2.9088%	2.9088%	2.9088%
Interest on Loan Annualised	520.01	520.01	520.01	520.01	520.01	520.01
7 7.25 % Masala Bonds 2022						
Gross loan - Opening	7141.38	7141.38	7141.38	7141.38	7141.38	7141.38
Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00	0.00
Net loan - Opening	7141.38	7141.38	7141.38	7141.38	7141.38	7141.38

Calculation of Interest on Actual Loans

Name of the Company Name of the Power Station	NTPC LTD. FGUTPS-IV	(Amount in lacs)				
SI. no.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
2	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	7141.38	7141.38	7141.38	7141.38	0.00
	Repayments of Loans during the period	0.00	0.00	0.00	0.00	0.00
	Net loan - Closing	7141.38	7141.38	7141.38	7141.38	0.00
	Average Net Loan	7141.38	7141.38	7141.38	0.00	0.00
	Rate of Interest on Loan	7.6687%	7.6687%	7.6687%	3570.69	0.00
	Interest on Loan Annualised	547.65	547.65	547.65	7.6687%	7.6687%
8	JPY Equivalent USD 350 Million Loan - A					
	Gross loan - Opening	1315.86	1315.86	1315.86	1315.86	1315.86
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	1315.86	1315.86	1315.86	1315.86	1315.86
	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	1315.86	1315.86	1315.86	1315.86	1315.86
	Repayments of Loans during the period	0.00	0.00	0.00	0.00	0.00
	Net loan - Closing	1315.86	1315.86	1315.86	1315.86	0.00
	Average Net Loan	1315.86	1315.86	1315.86	1315.86	1315.86
	Rate of Interest on Loan	1.0288%	1.0288%	1.0288%	1.0288%	1.0288%
	Interest on Loan Annualised	13.54	13.54	13.54	13.54	13.54
9	JPY Equivalent USD 350 Million Loan - B					
	Gross loan - Opening	1224.92	1224.92	1224.92	1224.92	1224.92
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	1224.92	1224.92	1224.92	1224.92	1224.92
	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	1224.92	1224.92	1224.92	1224.92	1224.92
	Repayments of Loans during the period	0.00	0.00	0.00	0.00	0.00
	Net loan - Closing	1224.92	1224.92	1224.92	1224.92	0.00
	Average Net Loan	1224.92	1224.92	1224.92	1224.92	1224.92
	Rate of Interest on Loan	1.0288%	1.0288%	1.0288%	1.0288%	1.0288%
	Interest on Loan Annualised	12.60	12.60	12.60	12.60	12.60
10	ICICI IV repayment from 16.02.2023 9 Yearly Installment					
	Gross loan - Opening	6500.00	6500.00	6500.00	6500.00	6500.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	6500.00	6500.00	6500.00	6500.00	722.22
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	5777.78
	Increase/ Decrease due to ACE/Drawl during the period	0.00	0.00	0.00	0.00	0.00
	Total	6500.00	6500.00	6500.00	6500.00	5777.78
	Repayments of Loans during the period	0.00	0.00	0.00	0.00	722.22
	Net loan - Closing	6500.00	6500.00	6500.00	6500.00	0.00
	Average Net Loan	6500.00	6500.00	6500.00	6500.00	5055.56
	Rate of Interest on Loan	8.6000%	8.6000%	8.6000%	6138.89	5416.67
	Interest on Loan Annualised	559.00	559.00	559.00	527.94	465.83
11	HDFC BANK-III repayment from 04.12.2021-9Y					
	Gross loan - Opening	1500.00	1500.00	1500.00	1500.00	1500.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	1500.00	1500.00	1500.00	1333.33	333.33
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	1166.67
	Increase/ Decrease due to ACE/Drawl during the period	0.00	0.00	0.00	0.00	0.00
	Total	1500.00	1500.00	1500.00	1333.33	1166.67
	Repayments of Loans during the period	0.00	0.00	0.00	0.00	1166.67
	Net loan - Closing	1500.00	1500.00	1333.33	1166.67	1166.67
	Average Net Loan	1500.00	1500.00	1333.33	1166.67	1000.00
	Rate of Interest on Loan	8.45%	8.45%	8.45%	1250.00	1083.33
	Interest on Loan Annualised	126.75	126.75	119.71	105.63	91.54
12	SBI VIII Total repayment from 31.01.2022 -9Y					
	Gross loan - Opening	17000.00	17000.00	17000.00	17000.00	17000.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	17000.00	17000.00	17000.00	15111.11	3777.78
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	13222.22
	Increase/ Decrease due to ACE/Drawl during the period	0.00	0.00	0.00	0.00	0.00
	Total	17000.00	17000.00	17000.00	15111.11	13222.22

Calculation of Interest on Actual Loans						
Name of the Company Name of the Power Station	NTPC LTD. FGUTPS-IV	2019-20	2020-21	2021-22	2022-23	(Amount in lacs) 2023-24
Sl. no.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
12	Repayments of Loans during the period	0.00	0.00	1888.89	1888.89	1888.89
	Net loan - Closing	17000.00	17000.00	15111.11	13222.22	11333.33
	Average Net Loan	17000.00	17000.00	16055.56	14166.67	12277.78
	Rate of Interest on Loan	8.25%	8.25%	8.25%	8.25%	8.25%
	Interest on Loan Annualised	1402.50	1402.50	1324.58	1168.75	1012.92
13	State Bank of India-IX					
	Gross loan - Opening	2500.00	2500.00	2500.00	2500.00	2500.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	277.78	555.56	833.33
	Net loan - Opening	2500.00	2500.00	2222.22	1944.44	1666.67
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period	0.00	0.00	0.00	0.00	0.00
	Total	2500.00	2500.00	2222.22	1944.44	1666.67
	Repayments of Loans during the period	0.00	277.78	277.78	277.78	277.78
	Net loan - Closing	2500.00	2222.22	1944.44	1666.67	1388.89
	Average Net Loan	2500.00	2361.11	2083.33	1805.56	1527.78
	Rate of Interest on Loan	8.25%	8.01%	8.01%	8.01%	8.01%
	Interest on Loan Annualised	206.25	189.22	166.95	144.69	122.43
14	State Bank of India-X					
	Gross loan - Opening	3000.00	3000.00	3000.00	3000.00	3000.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	3000.00	3000.00	3000.00	3000.00	3000.00
	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	3000.00	3000.00	3000.00	3000.00	3000.00
	Repayments of Loans during the period	0.00	0.00	0.00	0.00	0.00
	Net loan - Closing	3000.00	3000.00	3000.00	3000.00	3000.00
	Average Net Loan	3000.00	3000.00	3000.00	3000.00	3000.00
	Rate of Interest on Loan	8.25%	8.25%	8.25%	8.25%	8.25%
	Interest on Loan Annualised	247.50	247.50	247.50	247.50	247.50
15	Vijaya Bank - VI D-4 10 yearly Repayment from 14.03.2020					
	Gross loan - Opening	2000.00	2000.00	2000.00	2000.00	2000.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	2000.00	200.00	400.00	600.00	800.00
	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	2000.00	1800.00	1600.00	1400.00	1200.00
	Repayments of Loans during the period	200.00	200.00	200.00	200.00	200.00
	Net loan - Closing	1800.00	1600.00	1400.00	1200.00	1000.00
	Average Net Loan	1900.00	1700.00	1500.00	1300.00	1100.00
	Rate of Interest on Loan	8.40%	8.40%	8.40%	8.40%	8.40%
	Interest on Loan Annualised	159.60	142.80	126.00	109.20	92.40
16	ICICI Bank - VI D5 9 yearly Repayment from 11.09.2024					
	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	8.60%	8.60%	8.60%	8.60%	8.60%
	Interest on Loan Annualised	215.00	215.00	215.00	215.00	215.00
17	Punjab National Bank D1 9 yearly Repayment from 01.02.2022					
	Gross loan - Opening	6500.00	6500.00	6500.00	6500.00	6500.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	722.22	1444.44
	Net loan - Opening	6500.00	6500.00	6500.00	5777.78	5055.56
	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	5777.78	5055.56
	Total	6500.00	6500.00	6500.00	5777.78	5055.56
	Repayments of Loans during the period	0.00	0.00	722.22	722.22	722.22
	Net loan - Closing	6500.00	6500.00	5777.78	5055.56	4333.33
	Average Net Loan	6500.00	6500.00	6138.89	5416.67	4694.44
	Rate of Interest on Loan	8.30%	8.30%	8.30%	8.30%	8.30%

Calculation of Interest on Actual Loans

Name of the Company Name of the Power Station	NTPC LTD. FGUTPS-IV	(Amount in lacs)				
Sl. no.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Interest on Loan Annualised	539.50	539.50	509.53	449.58	389.64
18 SBI XII Total repayment from 31.03.2026 -9Y						
Gross loan - Opening	12000.00	12000.00	12000.00	12000.00	12000.00	12000.00
Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00	0.00
Net loan - Opening	12000.00	12000.00	12000.00	12000.00	12000.00	12000.00
Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00	0.00
Increase/ Decrease due to ACF/Drawl during the period						
Total	12000.00	12000.00	12000.00	12000.00	12000.00	12000.00
Repayments of Loans during the period	0.00	0.00	0.00	0.00	0.00	0.00
Net loan - Closing	12000.00	12000.00	12000.00	12000.00	12000.00	12000.00
Average Net Loan	12000.00	12000.00	12000.00	12000.00	12000.00	12000.00
Rate of Interest on Loan	8.35%	8.35%	8.35%	8.35%	8.35%	8.35%
Interest on Loan Annualised	1002.00	1002.00	1002.00	1002.00	1002.00	1002.00
19 Bonds- 50 1A-repayment on 16.12.2023						
Gross loan - Opening	4183.08	4183.08	4183.08	4183.08	4183.08	4183.08
Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00	0.00
Net loan - Opening	4183.08	4183.08	4183.08	4183.08	4183.08	4183.08
Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00	0.00
Increase/ Decrease due to ACE/Drawl during the period						
Total	0.00	0.00	0.00	0.00	0.00	0.00
Repayments of Loans during the period	4183.08	4183.08	4183.08	4183.08	4183.08	4183.08
Net loan - Closing	0.00	0.00	0.00	0.00	0.00	0.00
Average Net Loan	4183.08	4183.08	4183.08	4183.08	4183.08	4183.08
Rate of Interest on Loan	8.440%	8.440%	8.440%	8.440%	8.440%	2091.54
Interest on Loan Annualised	353.05	353.05	353.05	353.05	353.05	176.53
20 Bonds- 50 2A -repayment on 16.12.2028						
Gross loan - Opening	2142.39	2142.39	2142.39	2142.39	2142.39	2142.39
Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00	0.00
Net loan - Opening	2142.39	2142.39	2142.39	2142.39	2142.39	2142.39
Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00	0.00
Increase/ Decrease due to ACE/Drawl during the period						
Total	0.00	0.00	0.00	0.00	0.00	0.00
Repayments of Loans during the period	2142.39	2142.39	2142.39	2142.39	2142.39	2142.39
Net loan - Closing	0.00	0.00	0.00	0.00	0.00	0.00
Average Net Loan	2142.39	2142.39	2142.39	2142.39	2142.39	2142.39
Rate of Interest on Loan	8.510%	8.510%	8.510%	8.510%	8.510%	8.510%
Interest on Loan Annualised	182.32	182.32	182.32	182.32	182.32	182.32
21 Bonds- 50 3A -repayment on 16.12.2033						
Gross loan - Opening	2674.52	2674.52	2674.52	2674.52	2674.52	2674.52
Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00	0.00
Net loan - Opening	2674.52	2674.52	2674.52	2674.52	2674.52	2674.52
Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00	0.00
Increase/ Decrease due to ACE/Drawl during the period						
Total	0.00	0.00	0.00	0.00	0.00	0.00
Repayments of Loans during the period	2674.52	2674.52	2674.52	2674.52	2674.52	2674.52
Net loan - Closing	0.00	0.00	0.00	0.00	0.00	0.00
Average Net Loan	2674.52	2674.52	2674.52	2674.52	2674.52	2674.52
Rate of Interest on Loan	8.690%	8.690%	8.690%	8.690%	8.690%	2674.52
Interest on Loan Annualised	232.42	232.42	232.42	232.42	232.42	232.42
22 Bonds- 50 1B -repayment on 16.12.2023						
Gross loan - Opening	1788.34	1788.34	1788.34	1788.34	1788.34	1788.34
Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00	0.00
Net loan - Opening	1788.34	1788.34	1788.34	1788.34	1788.34	1788.34
Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00	0.00
Increase/ Decrease due to ACE/Drawl during the period						
Total	0.00	0.00	0.00	0.00	0.00	0.00
Repayments of Loans during the period	1788.34	1788.34	1788.34	1788.34	1788.34	1788.34
Net loan - Closing	0.00	0.00	0.00	0.00	0.00	0.00
Average Net Loan	1788.34	1788.34	1788.34	1788.34	1788.34	1788.34
Rate of Interest on Loan	8.690%	8.690%	8.690%	8.690%	8.690%	894.17
Interest on Loan Annualised	155.41	155.41	155.41	155.41	155.41	8.690%
23 Bonds- 50 2B-repayment on 16.12.2028						
Gross loan - Opening	783.37	783.37	783.37	783.37	783.37	783.37

Calculation of Interest on Actual Loans

Name of the Company Name of the Power Station	NTPC LTD. FGUTPS-IV	(Amount in lacs)				
Sl. no.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	783.37	783.37	783.37	783.37	783.37
	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	783.37	783.37	783.37	783.37	783.37
	Repayments of Loans during the period	0.00	0.00	0.00	0.00	0.00
	Net loan - Closing	783.37	783.37	783.37	783.37	783.37
	Average Net Loan	783.37	783.37	783.37	783.37	783.37
	Rate of Interest on Loan	8.760%	8.760%	8.760%	8.760%	8.760%
	Interest on Loan Annualised	68.62	68.62	68.62	68.62	68.62
24	Bonds- 50 3B- repayment on 16.12.2033					
	Gross loan - Opening	3428.30	3428.30	3428.30	3428.30	3428.30
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	3428.30	3428.30	3428.30	3428.30	3428.30
	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	3428.30	3428.30	3428.30	3428.30	3428.30
	Repayments of Loans during the period	0.00	0.00	0.00	0.00	0.00
	Net loan - Closing	3428.30	3428.30	3428.30	3428.30	3428.30
	Average Net Loan	3428.30	3428.30	3428.30	3428.30	3428.30
	Rate of Interest on Loan	8.940%	8.940%	8.940%	8.940%	8.940%
	Interest on Loan Annualised	306.49	306.49	306.49	306.49	306.49
25	Bonds 54 Repayment on 25.03.2023					
	Gross loan - Opening	17400.00	17400.00	17400.00	17400.00	17400.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	3480.00
	Net loan - Opening	17400.00	17400.00	17400.00	17400.00	13920.00
	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	
	Total	17400.00	17400.00	17400.00	17400.00	13920.00
	Repayments of Loans during the period	0.00	0.00	0.00	0.00	3480.00
	Net loan - Closing	17400.00	17400.00	17400.00	17400.00	6960.00
	Average Net Loan	17400.00	17400.00	17400.00	17400.00	6960.00
	Rate of Interest on Loan	8.520%	8.520%	8.520%	8.520%	10440.00
	Interest on Loan Annualised	1482.48	1482.48	1482.48	1482.48	889.49
26	Bonds 57 Repayment on 15.12.2025					
	Gross loan - Opening	4800.00	4800.00	4800.00	4800.00	4800.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	4800.00	4800.00	4800.00	4800.00	4800.00
	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	4800.00	4800.00	4800.00	4800.00	4800.00
	Repayments of Loans during the period	0.00	0.00	0.00	0.00	4800.00
	Net loan - Closing	4800.00	4800.00	4800.00	4800.00	0.00
	Average Net Loan	4800.00	4800.00	4800.00	4800.00	4800.00
	Rate of Interest on Loan	8.220%	8.220%	8.220%	8.220%	8.220%
	Interest on Loan Annualised	394.56	394.56	394.56	394.56	394.56
27	Bonds 59 Repayment on 24.02.2021					
	Gross loan - Opening	5400.00	5400.00	5400.00	5400.00	5400.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	5400.00	5400.00	5400.00
	Net loan - Opening	5400.00	5400.00	0.00	5400.00	5400.00
	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	5400.00	5400.00	0.00	0.00	0.00
	Repayments of Loans during the period	0.00	5400.00	0.00	0.00	0.00
	Net loan - Closing	0.00	5400.00	0.00	0.00	0.00
	Average Net Loan	5400.00	0.00	0.00	0.00	0.00
	Rate of Interest on Loan	8.360%	8.360%	8.360%	8.360%	8.360%
	Interest on Loan Annualised	451.44	225.72	0.00	0.00	0.00
28	Bonds 60 Repayment on 05.05.2026					
	Gross loan - Opening	1800.00	1800.00	1800.00	1800.00	1800.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	1800.00	1800.00	1800.00	1800.00	1800.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00

Calculation of Interest on Actual Loans

Name of the Company Name of the Power Station	NTPC LTD. FGUTPS-IV	(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	1800.00	1800.00	1800.00	1800.00	1800.00
	Repayments of Loans during the period	0.00	0.00	0.00	0.00	0.00
	Net loan - Closing	1800.00	1800.00	1800.00	1800.00	1800.00
	Average Net Loan	1800.00	1800.00	1800.00	1800.00	1800.00
	Rate of Interest on Loan	8.080%	8.080%	8.080%	8.080%	8.080%
	Interest on Loan Annualised	145.44	145.44	145.44	145.44	145.44
29	Bonds 61 Repayment on 27.05.2021					
	Gross loan - Opening	5000.00	5000.00	5000.00	5000.00	5000.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	1666.67	1666.67
	Net loan - Opening	5000.00	5000.00	5000.00	3333.33	3333.33
	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	5000.00	5000.00	3333.33	3333.33
	Repayments of Loans during the period	0.00	0.00	1666.67	0.00	0.00
	Net loan - Closing	5000.00	5000.00	3333.33	3333.33	3333.33
	Average Net Loan	5000.00	5000.00	4166.67	3333.33	3333.33
	Rate of Interest on Loan	8.130%	8.130%	8.130%	8.130%	8.130%
	Interest on Loan Annualised	406.50	406.50	338.75	271.00	271.00
30	Bonds 62 Repayment on 23.08.2026					
	Gross loan - Opening	2800.00	2800.00	2800.00	2800.00	2800.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	2800.00	2800.00	2800.00	2800.00	2800.00
	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	2800.00	2800.00	2800.00	2800.00	2800.00
	Repayments of Loans during the period	0.00	0.00	0.00	0.00	0.00
	Net loan - Closing	2800.00	2800.00	2800.00	2800.00	2800.00
	Average Net Loan	2800.00	2800.00	2800.00	2800.00	2800.00
	Rate of Interest on Loan	7.610%	7.610%	7.610%	7.610%	7.610%
	Interest on Loan Annualised	213.08	213.08	213.08	213.08	213.08
31	Bonds 63 Repayment on 16.09.2026					
	Gross loan - Opening	3300.00	3300.00	3300.00	3300.00	3300.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	3300.00	3300.00	3300.00	3300.00	3300.00
	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	3300.00	3300.00	3300.00	3300.00	3300.00
	Repayments of Loans during the period	0.00	0.00	3300.00	3300.00	3300.00
	Net loan - Closing	3300.00	3300.00	0.00	0.00	0.00
	Average Net Loan	3300.00	3300.00	3300.00	3300.00	3300.00
	Rate of Interest on Loan	7.500%	7.500%	7.500%	7.500%	7.500%
	Interest on Loan Annualised	247.50	247.50	247.50	247.50	247.50
32	Bonds 64 Repayment on 07.11.2031					
	Gross loan - Opening	3500.00	3500.00	3500.00	3500.00	3500.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	3500.00	3500.00	3500.00	3500.00	3500.00
	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	3500.00	3500.00	3500.00	3500.00	3500.00
	Repayments of Loans during the period	0.00	0.00	3500.00	3500.00	3500.00
	Net loan - Closing	3500.00	3500.00	0.00	0.00	0.00
	Average Net Loan	3500.00	3500.00	3500.00	3500.00	3500.00
	Rate of Interest on Loan	7.520%	7.520%	7.520%	7.520%	7.520%
	Interest on Loan Annualised	263.20	263.20	263.20	263.20	263.20
33	Bonds 65 Repayment on 24.11.2021					
	Gross loan - Opening	2000.00	2000.00	2000.00	2000.00	2000.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	2000.00	2000.00
	Net loan - Opening	2000.00	2000.00	2000.00	0.00	2000.00
	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	2000.00	2000.00	2000.00	0.00	2000.00
	Repayments of Loans during the period	0.00	0.00	2000.00	0.00	0.00
	Net loan - Closing	2000.00	2000.00	0.00	0.00	0.00

Calculation of Interest on Actual Loans

Name of the Company Name of the Power Station	NTPC LTD. FGUTPS-IV	(Amount in lacs)				
Sl. no.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	2					
Average Net Loan	2000.00	2000.00	1000.00	0.00	0.00	0.00
Rate of Interest on Loan	6.750%	6.750%	6.750%	6.750%	6.750%	6.750%
Interest on Loan Annualised	135.00	135.00	67.50	0.00	0.00	0.00
34 Bonds 66 Repayment on 14.12.2031						
Gross loan - Opening	14700.00	14700.00	14700.00	14700.00	14700.00	14700.00
Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00	0.00
Net loan - Opening	14700.00	14700.00	14700.00	14700.00	14700.00	14700.00
Increase/ Decrease due to FERV	0.00	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	0.00
Total	14700.00	14700.00	14700.00	14700.00	14700.00	14700.00
Repayments of Loans during the period	0.00	0.00	0.00	0.00	0.00	0.00
Net loan - Closing	14700.00	14700.00	14700.00	14700.00	14700.00	14700.00
Average Net Loan	14700.00	14700.00	14700.00	14700.00	14700.00	14700.00
Rate of Interest on Loan	7.400%	7.400%	7.400%	7.400%	7.400%	7.400%
Interest on Loan Annualised	1087.80	1087.80	1087.80	1087.80	1087.80	1087.80
35 Bonds 67 Repayment on 15.01.2029						
Gross loan - Opening	2500.00	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	0.00
Net loan - Opening	2500.00	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	0.00
Increase/ Decrease due to ACE/Drawl during the period	0.00	0.00	0.00	0.00	0.00	0.00
Total	2500.00	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	0.00
Net loan - Closing	2500.00	2500.00	2500.00	2500.00	2500.00	2500.00
Average Net Loan	2500.00	2500.00	2500.00	2500.00	2500.00	2500.00
Rate of Interest on Loan	8.330%	8.330%	8.330%	8.330%	8.330%	8.330%
Interest on Loan Annualised	208.25	208.25	208.25	208.25	208.25	208.25
TOTAL LOAN						
Gross loan - Opening	192468.21	192468.21	192468.21	192468.21	192468.21	192468.21
Cumulative repayments of Loans upto previous period	0.00	1408.96	9704.66	17835.84	32435.00	32435.00
Net loan - Opening	192468.21	191059.25	182763.55	174632.37	160033.21	0.00
Increase/ Decrease due to FERV	0.00	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	0.00
Total	192468.21	191059.25	182763.55	174632.37	160033.21	0.00
Repayments of Loans during the period	192468.21	191059.25	182763.55	174632.37	160033.21	0.00
Net loan - Closing	1408.96	8295.70	8131.18	14599.15	16909.20	16909.20
Average Net Loan	191059.25	182763.55	174632.37	160033.21	143124.02	143124.02
Rate of Interest on Loan	191763.73	186911.40	178697.96	167332.79	151578.62	151578.62
Interest on Loan Annualised	6.9184%	6.9169%	6.9025%	6.8433%	6.6943%	6.6943%
Note: In case of foreign loans, opening loan balance considered at following exchange rate Exchange rate 29.10.2015 US \$ = INR 65.73	13267.00	12928.52	12334.63	11451.02	10147.19	10147.19
ICICI IV D-2 repayment from 16.02.2023						
Gross loan - Opening	3000.00	3000.00	3000.00	3000.00	3000.00	3000.00
Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00	333.33
Net loan - Opening	3000.00	3000.00	3000.00	3000.00	3000.00	2666.67
Increase/ Decrease due to FERV	0.00	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	0.00
Total	3000.00	3000.00	3000.00	3000.00	3000.00	2666.67
Repayments of Loans during the period	3000.00	3000.00	3000.00	3000.00	3000.00	2666.67
Net loan - Closing	0.00	0.00	0.00	0.00	0.00	333.33
Average Net Loan	3000.00	3000.00	3000.00	3000.00	2666.67	2333.33
Rate of Interest on Loan	3000.00	3000.00	3000.00	3000.00	2833.33	2500.00
Interest on Loan Annualised	8.60%	8.60%	8.60%	8.60%	8.60%	8.60%
ICICI IV D-3 repayment from 16.02.2023						
Gross loan - Opening	1500.00	1500.00	1500.00	1500.00	1500.00	1500.00
Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00	166.67
Net loan - Opening	1500.00	1500.00	1500.00	1500.00	1500.00	1333.33
Increase/ Decrease due to FERV	0.00	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	0.00
Total	1500.00	1500.00	1500.00	1500.00	1500.00	1333.33
Repayments of Loans during the period	1500.00	1500.00	1500.00	1500.00	1500.00	166.67

Calculation of Interest on Actual Loans

Name of the Company Name of the Power Station	NTPC LTD. FGUTPS-IV	(Amount in lacs)				
Sl. no.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
2						
Net loan - Closing	1500.00	1500.00	1500.00	1333.33	1166.67	1166.67
Average Net Loan	1500.00	1500.00	1500.00	1416.67	1250.00	1250.00
Rate of Interest on Loan	8.60%	8.60%	8.60%	8.60%	8.60%	8.60%
Interest on Loan Annualised	129.00	129.00	129.00	121.83	107.50	107.50
ICICI IV D-4 repayment from 16.02.2023						
Gross loan - Opening	500.00	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	55.56	55.56
Net loan - Opening	500.00	500.00	500.00	500.00	444.44	444.44
Increase/ Decrease due to FERV	0.00	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	0.00
Total	500.00	500.00	500.00	500.00	444.44	444.44
Repayments of Loans during the period	0.00	0.00	0.00	0.00	55.56	55.56
Net loan - Closing	500.00	500.00	500.00	444.44	388.89	388.89
Average Net Loan	500.00	500.00	500.00	472.22	416.67	416.67
Rate of Interest on Loan	8.60%	8.60%	8.60%	8.60%	8.60%	8.60%
Interest on Loan Annualised	43.00	43.00	43.00	40.61	35.83	35.83
ICICI IV D-5 repayment from 16.02.2023						
Gross loan - Opening	1500.00	1500.00	1500.00	1500.00	1500.00	1500.00
Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	166.67	166.67
Net loan - Opening	1500.00	1500.00	1500.00	1500.00	1333.33	1333.33
Increase/ Decrease due to FERV	0.00	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	0.00
Total	1500.00	1500.00	1500.00	1500.00	1333.33	1333.33
Repayments of Loans during the period	0.00	0.00	0.00	0.00	166.67	166.67
Net loan - Closing	1500.00	1500.00	1500.00	1333.33	1166.67	1166.67
Average Net Loan	1500.00	1500.00	1500.00	1416.67	1250.00	1250.00
Rate of Interest on Loan	8.60%	8.60%	8.60%	8.60%	8.60%	8.60%
Interest on Loan Annualised	129.00	129.00	129.00	121.83	107.50	107.50
ICICI IV Total						
Gross loan - Opening	6500.00	6500.00	6500.00	6500.00	6500.00	6500.00
Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	722.22	722.22
Net loan - Opening	6500.00	6500.00	6500.00	6500.00	5777.78	5777.78
Increase/ Decrease due to FERV	0.00	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	0.00
Total	6500.00	6500.00	6500.00	6500.00	5777.78	5777.78
Repayments of Loans during the period	0.00	0.00	0.00	0.00	722.22	722.22
Net loan - Closing	6500.00	6500.00	6500.00	5777.78	5055.56	5055.56
Average Net Loan	6500.00	6500.00	6500.00	6138.89	5416.67	5416.67
Rate of Interest on Loan	8.60%	8.60%	8.60%	8.60%	8.60%	8.60%
Interest on Loan Annualised	559.00	559.00	559.00	527.94	465.83	465.83
SBI VIII D-4 repayment from 31.01.2022 -9Y						
Gross loan - Opening	4100.00	4100.00	4100.00	4100.00	4100.00	4100.00
Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	455.56	911.11
Net loan - Opening	4100.00	4100.00	4100.00	4100.00	3644.44	3188.89
Increase/ Decrease due to FERV	0.00	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	0.00
Total	4100.00	4100.00	4100.00	3644.44	3188.89	3188.89
Repayments of Loans during the period	0.00	0.00	0.00	0.00	455.56	455.56
Net loan - Closing	4100.00	4100.00	4100.00	3644.44	3188.89	2733.33
Average Net Loan	4100.00	4100.00	4100.00	3872.22	3416.67	2961.11
Rate of Interest on Loan	8.25%	8.25%	8.25%	8.25%	8.25%	8.25%
Interest on Loan Annualised	338.25	338.25	319.46	281.88	244.29	244.29
SBI VIII D-5 repayment from 31.01.2022 -9Y						
Gross loan - Opening	2000.00	2000.00	2000.00	2000.00	2000.00	2000.00
Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	222.22	444.44
Net loan - Opening	2000.00	2000.00	2000.00	2000.00	1777.78	1555.56
Increase/ Decrease due to FERV	0.00	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	0.00
Total	2000.00	2000.00	2000.00	1777.78	1555.56	1555.56
Repayments of Loans during the period	0.00	0.00	0.00	0.00	222.22	222.22
Net loan - Closing	2000.00	2000.00	2000.00	1777.78	1555.56	1333.33
Average Net Loan	2000.00	2000.00	2000.00	1888.89	1666.67	1444.44
Rate of Interest on Loan	8.250%	8.250%	8.250%	8.250%	8.250%	8.250%
Interest on Loan Annualised	165.00	165.00	155.83	137.50	119.17	119.17
SBI VIII D-6 repayment from 31.01.2022 -9Y						
Gross loan - Opening	2400.00	2400.00	2400.00	2400.00	2400.00	2400.00

Calculation of Interest on Actual Loans

Name of the Company Name of the Power Station	NTPC LTD. FGUTPS-IV	(Amount in lacs)				
Sl. no.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	2					
Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	266.67	533.33	
Net loan - Opening	2400.00	2400.00	2400.00	2133.33	1866.67	
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	2400.00	2400.00	2400.00	2133.33	1866.67	
Repayments of Loans during the period	0.00	0.00	266.67	266.67	266.67	
Net loan - Closing	2400.00	2400.00	2133.33	1866.67	1600.00	
Average Net Loan	2400.00	2400.00	2266.67	2000.00	1733.33	
Rate of Interest on Loan	8.250%	8.250%	8.250%	8.250%	8.250%	
Interest on Loan Annualised	198.00	198.00	187.00	165.00	143.00	
SBI VIII D-8 repayment from 31.01.2022 -9Y						
Gross loan - Opening	1000.00	1000.00	1000.00	1000.00	1000.00	
Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	111.11	222.22	
Net loan - Opening	1000.00	1000.00	1000.00	888.89	777.78	
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	1000.00	1000.00	1000.00	888.89	777.78	
Repayments of Loans during the period	0.00	0.00	111.11	111.11	111.11	
Net loan - Closing	1000.00	1000.00	888.89	777.78	666.67	
Average Net Loan	1000.00	1000.00	944.44	833.33	722.22	
Rate of Interest on Loan	8.250%	8.250%	8.250%	8.250%	8.250%	
Interest on Loan Annualised	82.50	82.50	77.92	68.75	59.58	
SBI VIII D-11 repayment from 31.01.2022 -9Y						
Gross loan - Opening	700.00	700.00	700.00	700.00	700.00	
Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	77.78	155.56	
Net loan - Opening	700.00	700.00	700.00	622.22	544.44	
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	700.00	700.00	700.00	622.22	544.44	
Repayments of Loans during the period	0.00	0.00	77.78	77.78	77.78	
Net loan - Closing	700.00	700.00	622.22	544.44	466.67	
Average Net Loan	700.00	700.00	661.11	583.33	505.56	
Rate of Interest on Loan	8.250%	8.250%	8.250%	8.250%	8.250%	
Interest on Loan Annualised	57.75	57.75	54.54	48.13	41.71	
SBI VIII D-12 repayment from 31.01.2022 -9Y						
Gross loan - Opening	1200.00	1200.00	1200.00	1200.00	1200.00	
Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	133.33	266.67	
Net loan - Opening	1200.00	1200.00	1200.00	1066.67	933.33	
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	1200.00	1200.00	1200.00	1066.67	933.33	
Repayments of Loans during the period	0.00	0.00	133.33	133.33	133.33	
Net loan - Closing	1200.00	1200.00	1066.67	933.33	800.00	
Average Net Loan	1200.00	1200.00	1133.33	1000.00	866.67	
Rate of Interest on Loan	8.250%	8.250%	8.250%	8.250%	8.250%	
Interest on Loan Annualised	99.00	99.00	93.50	82.50	71.50	
SBI VIII D-13 repayment from 31.01.2022 -9Y						
Gross loan - Opening	2100.00	2100.00	2100.00	2100.00	2100.00	
Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	233.33	466.67	
Net loan - Opening	2100.00	2100.00	2100.00	1866.67	1633.33	
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	2100.00	2100.00	2100.00	1866.67	1633.33	
Repayments of Loans during the period	0.00	0.00	233.33	233.33	233.33	
Net loan - Closing	2100.00	2100.00	1866.67	1633.33	1400.00	
Average Net Loan	2100.00	2100.00	1983.33	1750.00	1516.67	
Rate of Interest on Loan	8.250%	8.250%	8.250%	8.250%	8.250%	
Interest on Loan Annualised	173.25	173.25	163.63	144.38	125.13	
SBI VIII D-14 repayment from 31.01.2022 -9Y						
Gross loan - Opening	1000.00	1000.00	1000.00	1000.00	1000.00	
Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	111.11	222.22	
Net loan - Opening	1000.00	1000.00	1000.00	888.89	777.78	
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	1000.00	1000.00	1000.00	888.89	777.78	
Repayments of Loans during the period	0.00	0.00	111.11	111.11	111.11	
Net loan - Closing	1000.00	1000.00	888.89	777.78	666.67	
Average Net Loan	1000.00	1000.00	944.44	833.33	722.22	
Rate of Interest on Loan	8.250%	8.250%	8.250%	8.250%	8.250%	

Calculation of Interest on Actual Loans

Name of the Company Name of the Power Station	NTPC LTD. FGUTPS-IV	(Amount in lacs)				
Sl. no.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
2						
Interest on Loan Annualised		82.50	82.50	77.92	68.75	59.58
SBI VIII D-15 repayment from 31.01.2022 -9Y						
Gross loan - Opening		2000.00	2000.00	2000.00	2000.00	2000.00
Cumulative repayments of Loans upto previous period		0.00	0.00	0.00	222.22	444.44
Net loan - Opening		2000.00	2000.00	2000.00	1777.78	1555.56
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		2000.00	2000.00	2000.00	1777.78	1555.56
Rewpayments of Loans during the period		0.00	0.00	222.22	222.22	222.22
Net loan - Closing		2000.00	2000.00	1777.78	1555.56	1333.33
Average Net Loan		2000.00	2000.00	1888.89	1666.67	1444.44
Rate of Interest on Loan		8.250%	8.250%	8.250%	8.250%	8.250%
Interest on Loan Annualised		165.00	165.00	155.83	137.50	119.17
SBI VIII D-18 repayment from 31.01.2022 -9Y						
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	55.56	111.11
Net loan - Opening		500.00	500.00	500.00	444.44	388.89
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		500.00	500.00	500.00	444.44	388.89
Rewpayments of Loans during the period		0.00	0.00	55.56	55.56	55.56
Net loan - Closing		500.00	500.00	444.44	388.89	333.33
Average Net Loan		500.00	500.00	472.22	416.67	361.11
Rate of Interest on Loan		8.250%	8.250%	8.250%	8.250%	8.250%
Interest on Loan Annualised		41.25	41.25	38.96	34.38	29.79
SBI VIII Total						
Gross loan - Opening		17000.00	17000.00	17000.00	17000.00	17000.00
Cumulative repayments of Loans upto previous period		0.00	0.00	0.00	1888.89	3777.78
Net loan - Opening		17000.00	17000.00	17000.00	15111.11	13222.22
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		17000.00	17000.00	17000.00	15111.11	13222.22
Rewpayments of Loans during the period		0.00	0.00	1888.89	1888.89	1888.89
Net loan - Closing		17000.00	17000.00	15111.11	13222.22	11333.33
Average Net Loan		17000.00	17000.00	16055.56	14166.67	12277.78
Rate of Interest on Loan		8.25%	8.25%	8.25%	8.25%	8.25%
Interest on Loan Annualised		1402.50	1402.50	1324.58	1168.75	1012.92

67

S
Signature

FORM-15

Details/Information to be provided to beneficiaries under Clause (2) of Regulation 40 of CERC [Terms & Conditions of Tariff] Regulations, 2019

Annexure-B									
Details of Source wise Fuel for Computation of Energy Charges (in case of coal)									
Name of the Petitioner:	NTPC Limited		UNCHAHAR-1		UNCHAHAR-2		UNCHAHAR-3		UNCHAHAR-4
Name of the Generating Station:	Unchahar		Dec-18		Dec-18		Dec-18		Dec-18
Month:									Dec-18
S.No.	Particulars	Unit	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Imported Coal
A) OPENING QUANTITY									
1 Opening Quantity of Coal/Lignite	MT	1084137.93		108437.93		108437.93		108437.93	
2 Value of Stock	Rs.	479014933.12		479014933.12		479014933.12		479014933.12	
B) QUANTITY									
3 Quantity of coal supplied by the coal Company	MT	608954.52		0.00		0.00		0.00	
4 Adjustment (+/-) in quantity supplied by the coal Company	MT	-465.00		608964.52		608964.52		608964.52	
5 Coal supplied by the Coal Company (1+2)	MT	608499.52		608499.52		608499.52		608499.52	
6 Normative transit & handling losses	MT	4871.72		4871.72		4871.72		4871.72	
7 Net Coal / Lignite supplied (5 - 6)	MT	603627.80		603627.80		603627.80		603627.80	
C) PRICE									
8 Amount charged by the Coal / Lignite Company	Rs.	1619028137		1619028137		1619028137		1619028137	
9 Adjustment (+/-) in amount charged by coal / Lignite Company	Rs.	-1265625		0	-1265625	0	0	-1265625	0
10 Handling, Sampling such Other Similar Charges	Rs.	0		0	0	0	0	0	0
11 Total Amount charged (8+9+10)	Rs.	1617763512		0	1617763512	0	0	1617763512	0
D) TRANSPORTATION									
12 Transportation charges by Rail / Ship / Road Transport	Rs.	861748793		0	861748793	0	0	861748793	0
13 Adjustment (+/-) in amount charged by Railways / transport Company	Rs.	0		0	0	0	0	0	0
14 Demurrage charges, if any	Rs.	0		0	0	0	0	0	0
15 Cost of diesel in transporting coal through MGR system	Rs.	0		0	0	0	0	0	0
16 Total transportation charges (12+13 + 14 + 15)	Rs.	861748793		0	861748793	0	0	861748793	0
17 Total amount charged for coal supplied including transportation (11+16)	Rs.	2479312304		0	2479312304	0	0	2479312304	0
E) TOTAL COST									
18 Landed cost of coal / lignite(2+17)/(1+2)	Rs./MT	4154.851		4154.851		4154.851		4154.851	
19 Blending Ratio(Domestic/Imported)		100.00%		100.00%		100.00%		100.00%	
20 Weighted average cost of coal	Rs./MT	4,154.851		4,154.851		4,154.851		4,154.851	
F) QUALITY									
21 GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	(Kcal/Kg)	4467		4467		4467		4467	
22 GCV of Domestic Coal supplied as per bill of Coal Company	(Kcal/Kg)								
23 GCV of Imported Coal of the opening stock as per bill Coal Company	(Kcal/Kg)								
24 GCV of Imported Coal supplied as per bill Coal Company	(Kcal/Kg)								
25 Weighted average GCV of coal / lignite as billed	(Kcal/Kg)								
26 GCV of Domestic Coal of the opening stock as received at Station	(Kcal/Kg)								
27 GCV of Domestic Coal supplied as received at Station	(Kcal/Kg)								
28 GCV of Imported Coal of opening stock as received at Station	(Kcal/Kg)	3794		3794		3794		3794	
29 GCV of Imported Coal supplied as received at Station	(Kcal/Kg)								
30 Weighted average GCV of coal / lignite as Received	(Kcal/Kg)	3794		3794		3794		3794	

68

*Shahid**Jammeri**Zafar**Hussain*

M/N/20 441015

FORM-15

Details/Information to be provided to beneficiaries under Clause (2) of Regulation 40 of CERC (Terms & Conditions of Tariff) Regulations, 2019							Annexure-B
Details of Source wise Fuel for Computation of Energy Charges (in case of coal)							
Name of the Petitioner:	NTPC Limited	Unchahar	UNCHAHAR-1 Nov-18	UNCHAHAR-2 Nov-18	UNCHAHAR-3 Nov-18	UNCHAHAR-4 Nov-18	
Name of the Generating Station:							
Month:							
S.No.	Particulars	Unit	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal
A)	OPENING QUANTITY						Imported Coal
1	Opening Quantity of Coal/Lignite	MT	36095.03	36095.03	36095.03	36095.03	
2	Value of Stock	Rs.	158903384.26	158903384.26	158903384.26	158903384.26	
B)	QUANTITY						0.00
3	Quantity of coal supplied by the coal Company	MT	430235.79	430235.79	430235.79	430235.79	
4	Adjustment (+/-) in Quantity supplied by the coal Company	MT	0.00	0.00	0.00	0.00	
5	Coal supplied by the Coal Company (1+2)	MT	430235.79	430235.79	430235.79	430235.79	
6	Normative transit & handling losses	MT	3441.89	3441.89	3441.89	3441.89	
7	Net Coal / Lignite supplied (5 - 6)	MT	426793.90	426793.90	426793.90	426793.90	
C)	PRICE						
8	Amount charged by the Coal / Lignite Company	Rs.	1275889212	1275889212	1275889212	1275889212	
9	Adjustment (+/-) in amount charged by coal / lignite Company	Rs.	0	0	0	0	
10	Handling, Sampling, such Other Similar Charges	Rs.	0	0	0	0	
11	Total Amount charged (8 +9+10)	Rs. .	1275889212	0	1275889212	0	
D)	TRANSPORTATION						
12	Transportation charges by Rail / Ship / Road Transport	Rs.	609978457	0	609978457	0	
13	Adjustment (+/-) in amount charged by Railways / transport Company	Rs.	0	0	0	0	
14	Demurrage charges, if any	Rs.	0	0	0	0	
15	Cost of diesel in transporting coal through MGR system	Rs.	0	0	0	0	
16	Total transportation charges: 12+ 13 + 14 + 15	Rs.	609978457	0	609978457	0	
17	Total amount charged for coal supplied including transportation (11+16)	Rs.	1885867670	0	1885867670	0	
E)	TOTAL COST						
18	Landed cost of coal/lignite(2+17)/(1+7)	Rs./MT	4417.412	4417.412	4417.412	4417.412	
19	Blending Ratio(Domestic/Imported)		100.00%		100.00%		100.00%
20	Weighted average cost of coal	Rs./MT	4,417.412	4,417.412	4,417.412	4,417.412	
F)	QUALITY						
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	{Kcal/Kg}	4652	4652	4692	4692	
22	GCV of Domestic Coal supplied as per bill of Coal Company	{Kcal/Kg}					
23	GCV of Imported Coal of the opening stock as per bill Coal Company	{Kcal/Kg}					
24	GCV of Imported Coal supplied as per bill Coal Company	{Kcal/Kg}					
25	Weighted average GCV of coal / lignite as Billed	{Kcal/Kg}					
26	GCV of Domestic Coal of the opening stock as received at Station	{Kcal/Kg}					
27	GCV of Domestic Coal supplied as received at Station	{Kcal/Kg}					
28	GCV of Imported Coal of opening stock as received at Station	{Kcal/Kg}					
29	GCV of Imported Coal supplied as received at Station	{Kcal/Kg}					
30	Weighted average GCV of coal / lignite as Received	{Kcal/Kg}					

G9

Signature : *[Signature]* Date : *[Date]*

FORM-15

Details/Information to be provided to Beneficiaries under Clause [2] of Regulation 40 of CERC [Terms & Conditions of Tariff] Regulations, 2019

Details of Source wise Fuel for Computation of Energy Charges [in case of coal]				Annexure-B	
Name of the Petitioner:	NTPC Limited				
Name of the Generating Station:	Unchahar	UNCHAHAR-1	UNCHAHAR-2	UNCHAHAR-3	UNCHAHAR-4
Month:	Oct-18	Oct-18	Oct-18	Oct-18	Oct-18
S.No.	Particulars	Unit	Domestic Coal	Imported Coal	Domestic Coal
A) OPENING QUANTITY					
1 Opening Quantity of Coal/Lignite	MT	40211.32		40211.32	
2 Value of Stock	Rs.	169806017.89	169806017.89	169806017.89	169806017.89
B) QUANTITY					
3 Quantity of coal supplied by the Coal Company	MT		0.00	0.00	40211.32
4 Adjustment (+/-) in quantity supplied by the coal Company	MT	-205.00	-205.00	-205.00	0.00
5 Coal supplied by the Coal Company {1+2}	MT				386279.95
6 Normative transit & handling losses	MT	386074.95	386074.95	386074.95	386279.95
7 Net Coal / Lignite supplied {5 - 6}	MT	3090.24	3090.24	3090.24	-205.00
C) PRICE					
8 Amount charged by the Coal / lignite Company	Rs.	382984.71	382984.71	382984.71	382984.71
9 Adjustment (+/-) in amount charged by coal / lignite Company	Rs.	-594500	0	-594500	0
10 Handling, Sampling such Other similar charges	Rs.	1148319583	1148319583	1148319583	1148319583
11 Total Amount charged (8+9+10)	Rs.	0	0	0	0
D) TRANSPORTATION					
12 Transportation charges by Rail / Ship / Road Transport	Rs.	545031691	0	545031691	0
13 Adjustment (+/-) in amount charged by Railways / transport Company	Rs.	0	0	0	0
14 Demurrage charges, if any	Rs.	0	0	0	0
15 Cost of diesel in transporting coal through MGR system	Rs.	0	0	0	0
16 Total transportation charges {12+13 + 14 + 15} L	Rs.	0	0	0	0
17 Total amount charged for coal supplied including transportation {11+16}	Rs.	545031691	0	545031691	0
E) TOTAL COST					
18 Landed cost of coal / lignite{2-17}/{1+7}	Rs./MT	4402.364	4402.364	4402.364	4402.364
19 Blending Ratio{Domestic//Imported}					
20 Weighted average cost of coal	Rs./MT	4,402.364	4,402.364	4,402.364	4,402.364
F) QUALITY					
21 GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	(Kcal/Kg)	4561	4561	4561	4561
22 GCV of Imported Coal Supplied as per bill of Coal Company	(Kcal/Kg)				
23 GCV of Imported Coal of the opening stock as per bill Coal Company	(Kcal/Kg)				
24 GCV of Imported Coal supplied as per bill Coal Company	(Kcal/Kg)				
25 Weighted average GCV of coal / lignite as Billed	(Kcal/Kg)				
26 GCV of Domestic Coal of the opening stock as received at Station	(Kcal/Kg)				
27 GCV of Domestic Coal supplied as received at Station	(Kcal/Kg)				
28 GCV of Imported Coal of opening stock as received at Station	(Kcal/Kg)	4120	4120	4120	4120
29 GCV of Imported Coal supplied as received at Station	(Kcal/Kg)				
30 Weighted average GCV of coal / lignite as received	(Kcal/Kg)	4120	4120	4120	4120

Details of information to be submitted in respect of fuel for computation of energy charges (In case of OIL)

Station		UNCHAHAR Stg-1,2,3&4								
Month	SL	Particulars	Unit	HFO	LDO	HFO	LDO	HFO	LDO	Dec-18
	1	Opening Stock of Oil	KL	M1149201055	M1149201055	M1149201055	M1149201055	M1149201055	M1149201055	
	2	Value of Opening Stock	Rs	343,186	1,48,08,025.59	60,16,427.61	41,65,315.40	130,126	96,534	798,632
	3	Quantity of Oil supplied by the Oil Company	KL					60,16,427.61	3,55,21,012.72	4,62,70,681.50
	4	Adjustment (+/-) in quantity supplied made by Oil Company	KL					702,000	200,000	755,000
	5	Oil supplied by the Oil Company (3+4)	KL							
	6	Normative transit & Handling losses	KL							
	7	Net Oil supplied (5 - 6)	KL							
	8	Amount charged by the Oil Company	Rs.							
	9	Adjustment (+/-) in amount charged by Oil Company	Rs.							
	10	Total Amount charged (8 + 9)	Rs.							
	11	Transportation charges by Rail / Ship / Road Transport Adjustment (+/-) in amount charged by railways / transport company	Rs.							
	12	Demurrage charges, if any	Rs.							
	13	Total transportation charges (11 +/- 12 - 13)	Rs.							
	14	Total amount charged for the Oil supplied including transportation (10 + 14)	Rs.							
	15	Weighted average GCV of Oil as fired	Kcal / KL							
	16	Quantity of Oil at the station for the month (1 + 7)	KL	343,186	130,126	896,534	832,126	907,098	1,553,632	
	17	Total amount charged for Oil (2 + 15)	Rs.	1,48,08,025.59	60,16,427.61	4,50,37,315.40	4,82,11,237.61	4,39,38,212.72	8,64,28,034.50	
	18	Landed Cost of Oil (18 / 17)	Rs / KL	43,148,688	46,235,400	50,234,922	57,93,425	48,438,220	55,629,5669	
	19	Quantity of Oil consumed	KL	246,652	-	189,436	33,494	254,580	1,411,790	
	20	Value of Oil consumed (19 * 20)	Rs.	1,06,42,710.19	-	95,16,302.68	19,40,556.11	1,23,31,402.05	7,85,37,410.40	
	21	Value of Oil transferred to CAPEX	KL							
	22	Value of Oil transferred to CAPEX (19 * 22)	Rs.	96,534	130,126	707,098	798,632	652,518	141,842	
	23	Closing Stock of Oil (17 - 20 - 22)	KL	41,65,315.40	60,16,427.61	3,55,21,012.72	4,62,70,681.50	3,16,06,810.67	78,90,624.10	
	24	Value of Closing Stock (18 - 21 - 23)	Rs							
	25									
Station		UNCHAHAR						UNCHAHAR		
Month	SL	Particulars	Unit	HFO	LDO	HFO	LDO	HFO	LDO	Dec-18
	1	Landed Cost of Oil as at SI No 19	Rs / KL	43,148,688	46,235,400	50,234,922	57,937,425	4,8438,220	55,629,669	
	2	Usage Quantity for the month	KL	246,652	-	189,436	33,494	254,580	1,411,790	
	3	Weighted average rate ((R1*Q1)+(R2*Q2)) / (Q1+Q2)	Rs / KL							
	4	Weighted average GCV of Oil on usage basis	Kcal / L	43,148,688	9,488			51,392,180	54,530,994	9,720

Details of information to be submitted in respect of fuel for computation of energy charges

S. Virendra Singh
Shalabh
J. J. M.
Vijay Kumar
B. S. R.

Name of the Company		Computation of Energy Charges						
Name of the Power Station	NTPC Limited							
Name of the Power Station		Unchahar Stage-IV						
Computation of Energy Charges								
1	Rate of Energy Charge from Sec. Fuel Oil/ Alternate Fuel (p/kwh) = $(Q_s)_n \times P_s$	2.364	No of Days in the year Sr. Oil consumption Auxiliary consumption Heat Rate	Days ml/kwh %	2019-20 366 0.5 6.25	2020-21 365 0.5 6.25	2021-22 365 0.5 6.25	
2	Heat Contribution from SFO / Alternate Fuel (H _s)	4.806	Computation of Variable Charges					
3	Heat Contribution from coal (H _p) = GHR - H _s	2378.98	Variable Charge (Coal) Variable Charge (Oil) Total	p/kwh p/kwh p/kwh	278.513 2.521 281.034	278.513 2.521 281.034	278.513 2.521 281.034	
4	Specific Primary Fuel Consumption (Qp) _n = H _p / (GCV) _p	0.608	Price of fuel from Form-15/15A					
5	Rate of Energy charge from Primary Fuel (p/kwh)	261.106	Coal Cost Oil Cost	(Rs./MT) (Rs./KL)	4296.44 47273.94	4296.44 47273.94	4296.44 47273.94	
6	Rate of Energy charge ex- bus (p/kWh) = $((REC)_s + (REC)_p) / (1-(AUX))$	281.034	Computation of Fuel Expenses for Calculation of IWC:					
ESO in a year								
ESO for 50 days								
Cost of coal for 45 Days								
Cost of oil for 2 months								
Energy Expenses for 45 days								
Coal								
Wtd. Avg. Price of Coal		Rs./MT	3rd month	2nd month	1st month	Wtd. Avg.		
Wtd. Avg. GCV of Coal as received		kCal/Kg	4402.36	4417.41	4467.00	4296.44		
Wtd. Avg. GCV of Coal as received after adjustment of 85 kcal/kg								
Sec. Oil						3914.56		
Wtd. Avg. Price of Secondary Fuel		Rs./KL	43148.69	50234.92	48438.22	47273.94		
Wtd. Avg. GCV of Secondary Fuel		kCal/L	9488.00	9626.00	9720.00	9611.33		

PETITIONER

Sunil..

Name of the Petitioner NTPC Ltd
 Name of the Generating Station Unchahar Stage-IV
Statement of Capital cost

SI. No.	Particulars	(Amount in Rs. Lakh)
		2019-20
A	a) Opening Gross Block Amount as per books	2,85,481.75
	b) Amount of capital liabilities in A(a) above	29,924.07
	c) Amount of IDC in A(a) above	20,181.84
	d) Amount of FC in A(a) above	-
	e) Amount of FERV in A(a) above	2,657.65
	f) Amount of Hedging Cost in A(a) above	-
	g) Amount of IEDC in A(a) above	11,649.96
B	a) Addition in Gross Block Amount during the period (Direct purchases)	
	b) Amount of capital liabilities in B(a) above	
	c) Amount of IDC in B(a) above	
	d) Amount of FC in B(a) above	
	e) Amount of FERV in B(a) above	
	f) Amount of Hedging Cost in B(a) above	
	g) Amount of IEDC in B(a) above	
C	a) Addition in Gross Block Amount during the period (Transferred from CWIP)	
	b) Amount of capital liabilities in C(a) above	
	c) Amount of IDC in C(a) above	
	d) Amount of FC in C(a) above	
	e) Amount of FERV in C(a) above	
	f) Amount of Hedging Cost in C(a) above	
	g) Amount of IEDC in C(a) above	
D	a) Deletion in Gross Block Amount during the period	
	b) Amount of capital liabilities in D(a) above	
	c) Amount of IDC in D(a) above	
	d) Amount of FC in D(a) above	
	e) Amount of FERV in D(a) above	
	f) Amount of Hedging Cost in D(a) above	
	g) Amount of IEDC in D(a) above	
E	a) Closing Gross Block Amount as per books	
	b) Amount of capital liabilities in E(a) above	
	c) Amount of IDC in E(a) above	
	d) Amount of FC in E(a) above	
	e) Amount of FERV in E(a) above	
	f) Amount of Hedging Cost in E(a) above	
	g) Amount of IEDC in E(a) above	

Shal be
submitted at
the time off
Truing Up

SPL
(Petitioner)

PART-I
FORM- M

Statement of Capital Work in progress

(To be given for relevant dates and year wise)

Name of the Petitioner

NTPC Ltd

Name of the Generating Station

Unchahar St-IV

(Amount in Rs. Lakh)

Sl. No.	Particulars	2019-20
A	a) Opening CWIP as per books	11,619.37
	b) Amount of capital liabilities in A(a) above	4,930.03
	c) Amount of IDC in A(a) above	0.00
	d) Amount of FC in A(a) above	-
	e) Amount of FERV in A(a) above	-
	f) Amount of Hedging Cost in A(a) above	-
	g) Amount of IEDC in A(a) above	-
B	a) Addition in CWIP during the period	-
	b) Amount of capital liabilities in B(a) above	-
	c) Amount of IDC in B(a) above	-
	d) Amount of FC in B(a) above	-
	e) Amount of FERV in B(a) above	-
	f) Amount of Hedging Cost in B(a) above	-
	g) Amount of IEDC in B(a) above	-
C	a) Transferred to Gross Block Amount during the period	-
	b) Amount of capital liabilities in C(a) above	-
	c) Amount of IDC in C(a) above	-
	d) Amount of FC in C(a) above	-
	e) Amount of FERV in C(a) above	-
	f) Amount of Hedging Cost in C(a) above	-
	g) Amount of IEDC in C(a) above	-
D	a) Deletion in CWIP during the period	-
	b) Amount of capital liabilities in D(a) above	-
	c) Amount of IDC in D(a) above	-
	d) Amount of FC in D(a) above	-
	e) Amount of FERV in D(a) above	-
	f) Amount of Hedging Cost in D(a) above	-
	g) Amount of IEDC in D(a) above	-
E	a) Closing CWIP as per books	-
	b) Amount of capital liabilities in E(a) above	-
	c) Amount of IDC in E(a) above	-
	d) Amount of FC in E(a) above	-
	e) Amount of FERV in E(a) above	-
	f) Amount of Hedging Cost in E(a) above	-
	g) Amount of IEDC in E(a) above	-

Shal be
submitted at
the time off
Truing Up

S...
(Petitioner)

38 74

**PART-I
FORM-N**

Calculation of Interest on Normative Loan

Name of the Company :

NTPC Limited

Name of the Power Station :

Unchahar Stage-IV

S. No.	Particulars	(Amount in Rs Lakh)			
		2018-19	2019-20	2020-21	2021-22
1	2	3	4	5	6
1	Gross Normative loan – Opening	1,63,766.67	1,73,205.82	1,90,681.36	1,97,649.04
2	Cumulative repayment of Normative loan up to previous year	6,261.40	19,066.24	32,926.81	47,718.42
3	Net Normative loan – Opening	1,57,505.27	1,54,139.58	1,57,754.55	1,49,930.62
4	Add: Increase due to addition during the year / period	4810.53	17,475.54	6,967.69	1,054.68
5	Less: Decrease due to de-capitalisation during the year / period	42.31	0.00	0.00	280.00
6	Less: Decrease due to reversal during the year / period				-
7	Add: Increase due to discharges during the year / period	4670.92	0.00	0.00	0.00
8	Less: Repayment of Loan	12847.15	13,860.57	14,791.62	15,097.19
9	Net Normative loan - Closing	1,49,468.65	1,57,754.55	1,49,930.62	1,35,888.11
10	Average Normative loan	1,53,486.96	1,55,947.06	1,53,842.59	1,42,909.37
11	Weighted average rate of interest	6.848	6.9184	6.917	6.903
12	Interest on Loan	10510.02	10789.04	10641.14	9864.32
					7594.06

S. Sharmin
(Petitioner).

PART 1
FORM-O

Calculation of Interest on Working Capital

Name of the Company :	NTPC Limited
Name of the Power Station :	Unchahar Stage-IV

S. No.	Particulars	(Amount in Rs Lakh)				
		2018-19	2019-20	2020-21	2021-22	2022-23
1	2	3	4	5	6	7
1	Cost of Coal/Lignite	15,656.15	13316.39	13316.39	13316.39	13316.39
2	Cost of Main Secondary Fuel Oil	114.64	147.07	146.67	146.67	147.07
3	Fuel Cost					
4	Liquid Fuel Stock					
5	O & M Expenses	1,248.82	1052.39	1095.41	1140.69	1188.32
6	Maintenance Spares	2,997.16	2525.73	2628.99	2737.66	2851.97
7	Receivables	25,744.19	19011.45	19318.62	19370.37	19323.05
8	Total Working Capital	45760.95	36053.03	36506.08	36711.77	36826.40
9	Rate of Interest	12.6000	12.0500	12.0500	12.0500	12.0500
10	Interest on Working Capital	5765.88	4344.39	4398.98	4423.77	4447.18

S. S. T.
Petitioner

Name of the Petitioner
 Name of the Generating Station
 Station COD
 For The Period

NTPC Ltd
 Unchahar, Stage-IV
 30.09.2017
 01-04-2019 - 31-03-2020

S. No.	Name of the Party	Name of the work	Year of creation of liability capitalised in Gross Block	Undischarged liabilities relating to GB as on 01.04.2019
Allowed/claimed Items				
1.	NEW JAI BHARAT CONSTRUCTION	Construction of shed for ash Brick plant Machine No-4 at Ash brick plant.(PKG 026/2445)	2016-17	1,88,114
2	A R SINGH CONST CO	Widening and strengthening of patrolling road from emergency gate to autobase turning.	2017-18	75,506
3	UPL Limited	STORE SHED	2014-15	13,90,639
4	BABA BUILDERS	Internal Electrification & Lighting of Stores sheds & Office building(stage-IV) (PKG NO.- 021/2022)	2017-18	90,929
5	NBPPL	Main plant Civil work-SG	2017-18	12,27,28,994
6	NBPPL	Main plant Civil work-TG	2017-18	12,23,33,188
7	NBPPL	OFFSITE CIVIL- UNIT 6	2017-18	12,31,93,851
8	Trivedi Enterprises	Boundary Wall	2017-18	26,67,849
9	NBPPL	AC & VENTILATION SYSTEM-UNIT 6	2017-18	98,74,072
10	NBPPL	ASH HANDLING PLANT- UNIT 6	2017-18	11,07,65,228
11	NBPPL	C&I SYSTEM - UNIT 6	2017-18	5,99,31,833
12	NBPPL	COOLING TOWER- UNIT 6	2017-18	5,73,17,651
13	NBPPL	CW SYSTEM AND MISC PUMPS- UNIT 6	2017-18	1,20,48,559
14	NBPPL	DM PLANT- UNIT 6	2017-18	40,19,765
15	NBPPL	ELECT EQUIPMENT & CABLING- UNIT 6	2017-18	16,39,37,020
16	NBPPL	FIRE DETECTON & PROTECTION SYSTEM- UNIT 6	2017-18	3,26,35,818
17	NBPPL	STEAM GENERATORS- UNIT 6	2017-18	1,05,77,40,263
18	NBPPL	STATION PIPING- UNIT 6	2017-18	1,23,07,367
19	NBPPL	SWITCHYARD- UNIT 6	2017-18	8,89,58,514
20	NBPPL	TURBINE GENERATOR-UNIT 6	2017-18	39,62,88,752
21	NBPPL	TRANSFORMER- UNIT 6	2017-18	6,15,56,660
22	NBPPL	Main plant Structural work	2017-18	19,16,66,725
23	NBPPL	STATION LIGHTING- UNIT 6	2017-18	1,07,31,700
24	NBPPL	Chimney	2017-18	2,75,43,074
25	NBPPL	Electro static precipitator	2017-18	10,87,00,161
26	NBPPL	CHP INTER CONNECTION	2017-18	18,06,11,594
27	Various Parties	MBOA & Capital Spares	2017-18	3,31,03,608
		Total		2,99,24,07,432

431

77

Stm.

Summary of issue involved in the petition

Name of the Company :	NTPC Limited	
Name of the Power Station :	Unchahar Stage-IV	
1 Petitioner:	1 NTPC Limited	
2 Subject	DETERMINATION OF TARIFF FOR THE PERIOD	
3	i) Approve tariff of FGUTPS-IV for the tariff period 01.04.2019 to 31.03.2024. ii) Allow Extension of cut-off date upto 31.03.2021 by invoking Hon'ble Commission's powers under Regulation 76 'Power to Relax' and Regulation 77 'Power to remove Difficulty'. iii) Consider station heat rate based on design heat rate with applicable operating margin. iv) Allow reimbursement of Ash Transportation Charges directly from the beneficiaries quarterly on net basis. v) Allow the recovery of filing fees as & when paid to the Hon'ble Commission and publication expenses from the beneficiaries. vi) Pass any other order as it may deem fit in the circumstances mentioned above.	
4 Respondents: 4		
Name of Respondents		
	1. Uttar Pradesh Power Corp. Ltd. (UPPCL) Shakti Bhawan 14, Ashok Marg, Lucknow – 226 001.	2. Rajasthan Urja Vika Nigam Limited (RUVNL) (on behalf of DISCOMs of Rajasthan), Vidyut Bhawan, Janpath, Jaipur 302 005
	3. Haryana Power Purchase Centre (HPPC) Shakti Bhawan, Sector – VI, Panchkula, Haryana – 134109	4. Power Development Department (J&K) Govt. of J&K, Secretariat Jammu/Srinagar
	5. Electricity Department (Chandigarh) Union Territory of Chandigarh Addl. Office Building Sector-9 D, Chandigarh	6. Uttarakhand Power Corporation Ltd. (UPCL) Urja Bhawan, Kanwali Road Dehradun – 248 001 Uttarakhand.
5 Project Scope	500 MW Super Thermal Power Station	
COD	30.09.2017	
Claim	(Rs Cr)	
AFC (2019-20)	36,825.59	
Capital cost as on 01.04.2019	56,268.08	
NAPAF (Gen)	2,47,436.88	
Any Specific	85%	

42 78

Stu.

GOVERNMENT OF KARNATAKA
DEPARTMENT OF FACTORIES, BOILERS, INDUSTRIAL SAFETY & HEALTH
CSMC/TFC/CR-13/2013-14

Phone No 080-26531200
Fax No 080-26531202

Directorate of Factories, Boilers, Industrial Safety &
Health, Kamika Bhavana, 2nd floor, Near Bengaluru
Dairy, I.T.I compound, Bangalore road,
Bangalore-29. Dated 23/09/2013

General Manager,
M/s NTPC Limited,
Kudlu Super Thermal Power Project,
Plot No. 9, Mallikarjun Nagar,
Mysore Road, Bangalore 560 049.

Sir,

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

- Your letter dated 03/05/2013
- Proceedings of Task force committee meeting held on 12/09/2013
- Your reply mail dated 19/09/2013

Aum (PKS)
Dated 17/10/2013

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 scheme, etc., adopted, etc. and has concurred in principle to issue the site clearance for the establishment of super thermal power project for generating electrical power of 1 X 800 MW at Near Kudlu village, Basavanguppewadi Taluk, Mysore District. The site clearance is issued subject to the following conditions:

The replacing of highly hazardous chlorine with available less hazardous alternatives like chlorine dioxide, sodium hypochlorite shall be considered.

- 1. The mobile hydrogen cylinder bank with manifold system shall be adapted or placed near hydrogen cylinders.
- 2. The safety check shall be prepared in storing, handling and usage of Hydrazine and its holding capacity shall be limited to a minimum required quantity.
- 3. The exclusive safety, health and environment (SHSE) department shall be formed under the direct control & supervision of the occupier. This department shall be supervised by the senior level qualified and competent executives with adequate field staff.
- 4. The effective online monitoring system shall be adopted to monitor the working and living work environment with special trust to fugitive emission, if radiation noise level etc.
- 5. No building or structure shall be constructed without obtaining a prior approval of plans by Director, Department of Factories, Boilers, Industrial Safety and Health.
- 6. 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.

473 79

Signature
1/2

- 8. The mitigation programme as submitted by the committee and as suggested by committee shall be incorporated in the disaster emergency plan. The same shall be submitted for scrutiny and approval.
- 9. The provisions of rule 23 of Building and Other Construction Workers (Regulation of Employment and condition of service) (Karnataka) Rules 2006 shall be complied to ensure occupational safety and health of the construction workers involved project. These complaints shall be furnished regularly to jurisdiction officers of the department and to the Director of Factories, Inspectors Industrial Safety and Health.

Suggestions:

- 1. The authority shall adopt the rain harvesting system to reuse the rain water.
- 2. The authority shall adopt solar energy system at least catering to street lighting or for other suitable areas like water heating in the campus, etc.

The authority officials and employees shall be compelled and are requested to observe the following guidelines all the rights to modify or withdraw clearance issued at any point of time.

Your's Faithfully

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

Stm

44 80

Copy to GM(P) / GMS
AM

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 I 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.

29/4/2016

88 81

मोर्ति शंकर

R. S. Bellur

S. T. M.

ಕರ್ನಾಟಕ ಸರ್ಕಾರ
ಕಾರ್ವಾಣನೆಗಳು, ಬಾಯಲ್ಲಿರುಗಳು, ಕೈಗಾರಿಕಾ ಮರ್ಕೆತ್‌ ಮತ್ತು ಸ್ವಾಸ್ಥ್ಯ ಇಲಾಖೆ

ಸಂಪುಟ: ಕಾರ್ಡಾನಿ/ಎಫ್‌ಫಿಲ್‌/ಎಫ್‌ಟೆಕ್ನೋ/ಸಿಆರ್-167/2015-16

ನಿರ್ದೇಶಕರ ಕಾರ್ಯಾಲಯ,
ಕಾಮ್‌ಕ ಭಾಗವ, 2ನೇ ಮಹಡಿ, ಬಂಗಾರಭಾಗ ರಸ್ತೆ,
ಬೆಂಗಳೂರು-29, ದಿನಾಂಕ: 13.04.2016

ನಿದರ್ಶಕರು, ಕಾರ್ಮಾಂನೆಗಳು, ಬಾಯಿರುಗಳು, ಕ್ರಿಗಾರಿಕಾ ಸುರಕ್ಷತೆ ಮತ್ತು ಸ್ವಾಸ್ಥ ಇಲಾಖೆ, ಬೆಂಗಳೂರು ಇವರ ನಡವಳಿಗಳು

ಡಿದೆ: ಕಾರ್ಯಾನುಸಾರ ಕಾಯ್ದು 1948ರ ಸೆಪ್ಟೆಂಬರ್ 6(1) ಹಾಗೂ ಕೆನಾರ್ಟಕ ಕಾರ್ಯಾನುಸಾರ ನಿಯಮಾವಳಿಗಳು, 1969ರ 3ನೇ ನಿಯಮ.

విషయ: కాబ్యానేగళ కాయ్దా 1948ర మేరగే మీ॥ కొడగి సూపర్ భప్పుల్ పవర్ ప్రైజీస్ (విఎస్.పి.పి.ఎలిమిటెడ్), విజయపుర లో కాబ్యానేయ నక్కిగళన్న అనుమతిదినువ చురితు.

ഉള്ളേഖണി : 1) അജീഫ് നമ്മുനെ-1 റൂപ് ദിനാംകം	: 27.01.2016.
2) സ്കൗള് പരിവേളക്കേഡ്യു ദിനാംകം	: 05.02.2016.
3) അംഗിമു പരിശോധനേയു ദിനാംകം	: 07.04.2016.

ಮೀ ಕೂಡಗಿ ಸೂಪರ್ ಫ್ರೆಸ್‌ಲ್ಯಾ ಪವರ್ ಬ್ರೌಚ್‌ಕ್ಸ್ (ಎನ್.ಟಿ.ಪಿ.ಸಿ.ಲಿಮಿಟೆಡ್), ವಿಜಯಪುರ ಈ ಕಾರ್ಬಾನ್‌ನೆಯ ನ್ಯೂಗಳು ಕಾರ್ಬಾನ್‌ನೆಗಳ ಕಾಯ್ದೆ 1948ರ ಹಾಗೂ ಅದರಿಂದ ರೂಪಿತವಾದ ನಿಯಮಗಳಲ್ಲಿ ಕಲ್ಪಿಸಿರುವ ಅವಕಾಶಗಳಿಗನುಸಾರವಾಗಿ ಪರಿಶೋಧಿಸಿದ ಮೇಲೆ ಸದರಿ ಕಾರ್ಬಾನ್‌ನೆಗೆ ಸಂಬಂಧಪಟ್ಟ ಕಷ್ಟದ ಹಾಗೂ ಯಂತ್ರ ವಿನ್ಯಾಸ ಇವುಗಳ ನೀಲಿ ನ್ಯೂಗಳು ಅಗತ್ಯವಿರುವ ಕಾರ್ಬಾನ್‌ನೆಗಳು ಕಾಯ್ದೆ 1948ರ ಹಾಗೂ ಕನಾರ್ಟಕ ಕಾರ್ಬಾನ್‌ನೆಗಳ ನಿಯಮಾವಳಿಗಳು 1969ರ 3(4) ನೇ ನಿಯಮಕ್ಕೂನುಸಾರವಾಗಿ ಕಲ್ಪಿಸಿರುವ ಎಲ್ಲಾ ಅವಕಾಶಗಳು ಮತ್ತು ಈ ಕೆಳಕಂಡ ಘರತ್ವಗಳ ಅನುವತ್ತನೆಗೊಳಿಸಬಹುದು ಅನುಮೋದಿತವಾಗಿದೆ.

- ಇದೇ ಕ್ಷೇತ್ರದಲ್ಲಿ ಪತ್ರ ಸಂಪನ್ಮೂಲ ವಿಭಾಗ/ಟಿವಿಫೋನ್/ಸಿಆರ್-13/2013-14, ದಿ: 23.09.2013 ರಂತೆ ವಿಧಿಕ್ರಿಯಾಗಿ ಪರತ್ತಿನಂತೆ ಅಪಾಯಕಾರಿ ಕ್ಷೇತ್ರದಲ್ಲಿ ರಾಜಾಯನಿಕದ ಉಪಯೋಗವನ್ನು ಕನ್ನಡ ಅಪಾಯಕಾರಿ ರಾಜಾಯನಿಕಕ್ಕೆ ಬದಲಾಯಿಸುವುದು ಮತ್ತು ಇತರೆ ಸದರಿ ಪತ್ರದಲ್ಲಿ ಸೂಚಿಸಿರುವ ಎಲ್ಲಾ ಪರತ್ತಗಳನ್ನು ಕಟ್ಟಿನಿಟ್ಟಾಗಿ ಪಾಲಿಸುವುದು.
 - ಹಾಲಿ ಇಲಾಖೆಯಿಂದ ಅನುಮೋದನೆಗೊಂಡಿರುವ ಎಲ್ಲಾ ಕಟ್ಟಡ ಮತ್ತು ಯಂತ್ರ ವಿನ್ಯಾಸ ನಕ್ಷೆಗಳನ್ನು ಕ್ಷೇತ್ರದಲ್ಲಿ ಯಾವುದೇ ಕಟ್ಟಡ ಮತ್ತು ಯಂತ್ರ ವಿನ್ಯಾಸ ಅನುಮೋದನೆಗೊಳಿಸುವುದಲ್ಲಿ ಅಥವಾ ಬದಲಾವಣೆಗಳಿಂದಲ್ಲಿ ಅವುಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ನಕ್ಷೆಗಳನ್ನು ಸಲ್ಲಿಸಿ ಅನುಮೋದನೆ ಪಡೆಯುವುದು.
 - ಕಾರ್ಬಿಂಗ್ ನೆಯಲ್ಲಿನ ಎಲ್ಲಾ ಕಟ್ಟಡ ಮತ್ತು ಸ್ಟ್ರೀಕ್ರೋಗಳನ್ನು ಉಪಯೋಗಕ್ಕೆ ತೆಗೆದುಕೊಳ್ಳುವ ಮೂವರ್ಡಲ್ಲಿ ದೃಢಿಕ್ಕೆತ ಸೀಲ್ ಇಂಟಿನಿಯರ್‌ಗಳಿಂದ ದೃಢಿಕರಣ ಪ್ರಮಾಣ ಪತ್ರಗಳನ್ನು ನಮೂನೆ-1 ನಂತೆ ಪ್ರತ್ಯೇಕವಾಗಿ ಪಡೆದು ಕ್ಷೇತ್ರದಿಕಾರಿಗಳಿಗೆ ಸಲ್ಲಿಸಿ, ನಂತರವೇ ಉಪಯೋಗಕ್ಕೆ ತೆಗೆದುಕೊಳ್ಳುವುದು.

—इस पर्यं का अन्तिमी अनुवाद इसकी लाभ और साधा

—मात्राप्रवर्त्यक (तकनिकी देखा)

Annexure B

ITEM NO.2

COURT NO.4

SECTION PIL-W

S U P R E M E C O U R T O F I N D I A
RECORD OF PROCEEDINGS

Writ Petition(s) (Civil) No(s). 13029/1985

M.C. MEHTA

IN RE REPORT NO. 72 FILED BY EPCA AND
ALLOCATION OF NATURAL GAS TO IGL

Petitioner(s)

VERSUS

UNION OF INDIA & ORS.

Respondent(s)

(1) IN RE: REPORT NO. 72 SUBMITTED BY EPCA REGARDING BAN ON SALES
AND USE OF FURNACE OIL & PET-COKE IN NCR

2) IN RE: ALLOCATION OF NATURAL GAS TO M/S INDRAPRASTHA GAS LIMITED
IA NO. 104664/2017 (APPLICATION FOR DIRECTIONS ON BEHALF OF
INDRAPRASTHA GAS LIMITED)

Date : 24-10-2017 This petition was called on for hearing today.
CORAM :

HON'BLE MR. JUSTICE MADAN B. LOKUR
HON'BLE MR. JUSTICE DEEPAK GUPTA

For Petitioner(s) Mr. Harish N. Salve, Sr. Adv. (A.C.) (NP)

Ms. Aparajita Singh, Adv. (A.C.)

Mr. A.D.N. Rao, Adv. (A.C.) (NP)

Mr. Siddhartha Chowdhury, Adv. (A.C.) (NP)

Petitioner-In-Person

For Respondent(s) Mr. Maninder Singh, ASG
 Mr. A.K. Panda, Sr. Adv.
 Ms. V.A. Mohna, Sr. Adv.
 Mr. Rajesh K. Singh, Adv.
 Mr. Amit Sharma, Adv.
 Mr. Vibhu Shanker Mishra, Adv.
 Mr. Raj Bahadur, Adv.
 Mr. Sanjai Kumar Pathak, Adv.
 Mr. S.W.A. Qadri, Adv.
 Mr. Zaid Ali, Adv.
 Ms. Anil Katiyar, Adv.

Signature Not Verified
 Digitally signed by
 SANJAY KUMAR
 Date: 2012/10/26
 14:00:40 IST
 Reason:

S. T. Mehta

47 83

Mr. B.V. Balaram Das, Adv.
 Mr. Gurmeet Singh Makker, AOR

CPCB

Mr. Vijay Panjwani, AOR

Mr. Abhishek Choudhary, AOR (NP)

Mr. Anil Grover, AAG Haryana
 Dr. Monika Gusain, Adv.
 Mr. Satish Kumar, Adv.
 Mr. Sanjay Kr. Visen, AOR

Ms. Ruchi Kohli, AOR (NP)

Mr. Neeraj Kishan Kaul, Sr. Adv.
 Mr. Gourab Banerji, Sr. Adv.
 Mr. Saurav Agrawal, Adv.
 Mr. Bimal Roy Jad, AOR
 Mr. Satyawan Shekhawat, Adv.

Mr. Kapil Sibal, Sr. Adv.
 Mrs. Neelima Tripathi, Adv.
 Mr. K.V. Mohan, Adv.
 Mr. Shikhar Khare, Adv.

UPON hearing the counsel the Court made the following
 O R D E R

REPORT NO. 72 SUBMITTED BY EPCA REGARDING BAN ON SALES
 AND USE OF FURNACE OIL & PET-COKE IN NCR

We have considered the above Report filed by EPCA.

On 2nd May, 2017, learned *amicus curiae* had briefed us on the Report. It was pointed out on that day that use of Furnace Oil and Pet-Coke is prohibited in Delhi. It was further stated that the States of U.P., Haryana and Rajasthan had no objection if the ban is placed on the use of Furnace Oil and Pet-Coke. These State Governments were, therefore, permitted to place such a ban.

4/84

SP

Almost four months have gone by and we are told that none of these three State Governments have taken any action in this matter. To make the situation worse, there is no representation on behalf of the State of U.P. nor is there any representation from the State of Rajasthan. Learned counsel appearing for the State of Haryana wants us to wait for two minutes so that he can get instructions from the State Government. We are not inclined to wait for two minutes so as to enable learned counsel to get instructions. Instructions should have been obtained well before the date of hearing.

Since the State Governments of U.P., Haryana and Rajasthan have no objection and they have not taken any positive action, keeping the pollution level in NCR and particularly in Delhi, we have no option but to place a ban on use of Furnace Oil and Pet-Coke in the States of U.P., Haryana and Rajasthan. The ban will come into effect from 1st November, 2017. We expect the State Governments to issue appropriate notification immediately. Even if they do not issue such notification then in compliance with the order of this Court, the ban will take effect from 1st November, 2017 in any case.

The issue for our consideration today is fixing standards for 34 industries with regard to the SO₂, NOX and SOX emissions.

On 2nd May, 2017, we had directed the Union of India as well as the Central Pollution Control Board (CPCB) to

4/1 85

S
Suresh

fix the standards for the 34 industries mentioned in the order dated 2nd May, 2017.

We had further directed that the standards should be fixed on or before 30th June, 2017. We had given opportunity to the CPCB and the Union of India to move an application for reasonable extension of time. We had also cautioned the above industries, as submitted by learned *amicus curiae*, and agreed to by the learned Additional Solicitor General, that necessary steps would have to be taken by these industries to ensure that the pollution standards that are fixed by the CPCB are adhered to by 31.12.2017 as far as possible. The above industries should, therefore, start making their plans with immediate effect since sufficient notice is being given to them in this regard.

The matter was again taken up by us on 20th July, 2017.

On that date, we had noted the submissions of learned Solicitor General that some more time is required to fix the standards of NOX and SOX and perhaps some other emissions and effluents. Learned Solicitor General had stated that he will file an affidavit during the course of the day.

Several applications were also listed before us on that day and learned counsel for the applicant(s) had stated that they did not press these applications since they have instructions to assure this Court that the

77 86

S
Tunc.

industry would abide by whatever standards are fixed by the CPCB by 31st December, 2017. The assurance was taken on record.

Today, learned Additional Solicitor General has brought to our notice that an affidavit was in fact filed by learned Solicitor General on behalf of the Ministry of Environment, Forest and Climate Change on 20th July, 2017. In that affidavit, it was stated that insofar as 9 industries are concerned, SO₂, NOX and SOX standards had already been fixed. This is confirmed by learned amicus curiae.

It is also brought to our notice that emission standards for SO₂, NOX and SOX are not required to be fixed in respect of two industries, viz., electroplating industries and stone crushing units since there is no emission of SO₂, NOX and SOX.

We have been told by learned counsel appearing on behalf of the CPCB that draft standards were fixed by the CPCB in respect of 16 industries and these were communicated to the Ministry of Environment, Forest and Climate Change on 27.06.2017.

We are told by learned counsel that in respect of these 16 industries, the standards were communicated to the Ministry of Environment, Forest and Climate Change on 27.06.2017.

We are told by learned Additional Solicitor General that with regard to 5 more industries, the draft

standards were sent subsequently.

We are quite distressed that the Ministry of Environment, Forest and Climate Change has been sitting over 16 recommendations at least since 27.06.2017, that is, almost about three months without apparently showing any concern whatsoever for the pollution in Delhi and in NCR.

Learned Additional Solicitor General further informs us that the draft notification with regard to these industries was issued on 23rd October, 2017 inviting objections and in terms of Section 5 of the Environment Protection Rules, 60 days' time is required to be given for inviting objections. This period would expire on or about 23rd December, 2017 when hopefully notifications would be issued.

In any event, since the draft notifications have been issued and since the industry had assured us on 20.07.2017 that they would abide by the standards fixed by the CPCB, we expect the industries to live up to the assurance given to us by the industry even though the Ministry of Environment, Forest and Climate Change does not seem to be concerned about the entire issue.

With regard to two remaining industries, i.e., nitric acid industry and fertilizer industry, we are told that the standards in this regard were sent to the Ministry of Environment, Forest and Climate Change by the CPCB on 14th February, 2014. Three and half years have gone by, but

the Ministry of Environment, Forest and Climate Change has not done anything about it.

This is a completely disgusting state of affairs and this is hardly the way in which the Ministry ought to function if it is expected to perform its duties sincerely, honestly and with dedication.

Learned Additional Solicitor General informs us that necessary steps will be taken (after a lapse of three and half years) to issue a draft notification and needful will be done within one month from today, meaning thereby, the deadline of 31st December, 2017 will be crossed by the Ministry of Environment, Forest and Climate Change.

We record our unhappiness at the attitude of the Ministry of Environment, Forest and Climate Change, but we expect the industry to abide by the assurance that has already been given to us and particularly since they are aware of the standards proposed by the CPCB, maybe for the last couple of years at least.

We make it clear that the Ministry of Environment, Forest and Climate Change is bound by the statement made by learned Additional Solicitor General that the draft notification for the two industries would be issued within one month from today.

Seeing the totally insensitive attitude of the Ministry, We are inclined and we do impose costs of Rs.2,00,000/- (Rupees two lakhs only) on the Ministry of

SD 89

S. M.

Environment, Forest and Climate Change so that at least they now wake up to the problem relating to environment. The amount be deposited in the Supreme Court Legal Services Committee within four weeks from today for utilization of juvenile justice issues.

List the Report No. 72 on 11th December, 2017.

Liberty is granted to the Union of India to file additional affidavit.

IA NO. 104664/2017 (APPLICATION FOR DIRECTIONS ON BEHALF OF INDRAPRASTHA GAS LIMITED)

Issue notice.

Mr. K.V. Mohan, learned counsel accepts notice and seeks some time to file reply.

List the application on 16th November, 2017 with other connected applications.

In the meanwhile, learned counsel for the petitioner has placed before us a letter dated 12th October, 2017 which has been issued by the State of Haryana through the office of the Executive Engineer, HUDA, Division No.1 Gurugram pursuant to the minutes of the meeting held on 8th September, 2017.

The letter has seriously been objected to not only by learned counsel for the petitioner, but also by learned Additional Solicitor General appearing on behalf of the Union of India.

Sthw..

SA 90

In view of the above, until then, the letter dated 12th October, 2017 and the minutes of the meeting dated 8th September, 2017 will be kept in abeyance only as far as M/s. Indraprastha Gas Limited is concerned.

We had already directed that the I.As. on different subjects should be listed separately. We see no reason why the Registry has listed the matter relating to allocation of natural gas to M/s. IGL with Report No. 72. Similarly, in other matters also, all the I.As in the same matter are being listed together, even though they pertain to different subject matters.

A copy of this direction be communicated to the Secretary General of the Registry for compliance.

(SANJAY KUMAR-I)
AR-CUM-PS

(KAILASH CHANDER)
COURT MASTER

S/Sp

SB 91