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-III of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 and Chapter-3, Regulation-9 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 for approval of tariff of **Mauda Super Thermal Power Station Stage-II (1320 MW) for the period from 01.04.2024 to 31.03.2029**.

INDEX

Summary of Issues: Determination of Tariff of Mauda Super Thermal Power Station Stage-II (1320 MW) for the period 2024-29

(In compliance with CERC notice dated 07.06.2024)

The major highlights of the Tariff Petition for Mauda Super Thermal Power Station Stage-II (1320 MW) for determination of tariff for the period 2024-29 are as follows:

1. The present petition is being filed under Section 62 and 79 (1) (a) of the Electricity Act, 2003 read with Chapter-III of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 and Chapter-3, Regulation-9 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 for determination of tariff of Mauda Super Thermal Power Station Stage-II (1320 MW) (hereinafter referred as "Mauda-II") for the 2024-29 based on projected expenditures for the said period.
2. Mauda-II is located at district Nagpur of Maharashtra. The generating station comprises 02 (two) units of 660 MW capacity each, with date of commercial operation (COD) of Unit-1 as 01.02.2017 and that of Unit-2 as 18.09.2017.
3. The power generated from Mauda-II is being supplied to various discoms as per MoP allocation and respective PPAs including Madhya Pradesh Power Management Company Limited, Maharashtra State Electricity Distribution Company, Gujarat Urja Vikas Nigam Limited, Chhattisgarh State Power Distribution Co. Ltd., Electricity Department - Government of Goa, Dadra and Nagar haveli and Daman and Diu Power Distribution Corporation Limited (DNHDDPDCL).
4. The tariff for Mauda-II for the period 2019-24 was determined by the Hon'ble Commission vide order dated 04.03.2023 in Petition No. 423/GT/2020. Subsequently, the petitioner has filed a separate true up petition for the 2019-24 period for revision of tariff in line with the applicable provisions of Tariff Regulations 2019. Accordingly, the opening capital cost as on 01.04.2024 has been considered the same as closing capital cost as on 31.03.2024 as per the said true-up petition, i.e. Rs 7629.30 Cr.

5. The tariff of Mauda-II for the tariff period 2024-29 based on projected expenditures for the period 2024-29 is annexed with the petition as per provisions of Regulation 10 of CERC Tariff Regulations 2024.
6. The projected additional capital expenditures on cash basis for FY 24-25, FY 25-26, FY 26-27, FY 27-28 and FY 28-29 are Rs 1.80 Cr, Rs 28.05 Cr, Rs 27.09 Cr, Rs 13.53 Cr and Rs 0.00 Cr respectively amounting to total of Rs 70.47 Cr for the period 2024-29. The same has been depicted year wise in Form 9 of the Appendix-I along with applicable regulations and justification for the claims. Supporting documents wherever applicable have also been annexed in the Petition. It is humbly requested to approve the projected Additional Capital expenditure during the 2024-29 period.
7. The Petitioner has also provided the estimated water charges, security expenses and ash transportation expenses in Form-3A of Appendix-I. The Hon'ble Commission may be pleased to allow the same subject to retrospective adjustment based on actuals at the time of truing up. Further, to avoid the interest payment liability of the beneficiaries, it is prayed that the petitioner may be allowed to recover/ pass on the ash transportation charges on a monthly basis subject to true-up at the end of the 2024-29 period.
8. The Petitioner has also prayed in the petition for consideration of Gross Station Heat Rate in terms of design heat rate and applicable operating margin.

In the light of above submissions and as per the Petition being filed by the Petitioner for determination of tariff of Mauda Super Thermal Power Station Stage-II (1320 MW), the Hon'ble Commission may please determine the tariff for the period 2024-29 as per provisions of Tariff Regulations 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-III of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 and Chapter-3, Regulation-9 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 for approval of tariff of **Mauda Super Thermal Power Station Stage-II (1320 MW) for the period from 01.04.2024 to 31.03.2029**.
Petitioner:	:	NTPC Ltd. NTPC Bhawan Core-7, Scope Complex 7, Institutional Area, Lodhi Road New Delhi-110 003.
Respondents	**1.**	Madhya Pradesh Power Management Company Ltd.(MPPMCL) Shakti Bhawan, Vidyut Nagar, Jabalpur 482 008
	2.	Maharashtra State Electricity Distribution Co Ltd. (MSEDCL) Prakashgad, Bandra (East), Mumbai 400 051
	3.	Gujarat Urja Vikas Nigam Ltd.(GUVNL) Vidyut Bhavan, Race Course Vadodara – 390 007
	4.	Chhattisgarh State Power Distribution Co. Ltd (CSPDCL) P.O. Sundar Nagar, Danganiya, Raipur – 492013

5 Electricity Department
Government of Goa
Vidyut Bhawan, Panaji, Goa

6 Dadra And Nagar Haveli and Daman and Diu Power Distribution Corporation Limited (DNHDDPDCL);
1st & 2nd Floor, Vidyut Bhavan, Silvassa-396230, DNH, India

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. **Mauda Super Thermal Power Station Stage-II (1320 MW)** (hereinafter referred to as Mauda-II is one such station located in the State of Maharashtra. The power generated from Mauda-II is being supplied to the respondents herein above.

4) The Hon'ble Commission has notified the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2024 (hereinafter 'Tariff Regulations 2024') which came into force from 01.04.2024, specifying the terms & conditions and methodology of tariff determination for the period 01.04.2024 to 31.03.2029.

5) Regulation 9(2) of Tariff Regulations 2024 provides as follows:

"(2) In case of an existing generating station or unit thereof, or transmission system or element thereof, the application shall be made by the generating company or the transmission licensee, as the case may be, by 30.11.2024 , based on admitted capital cost including additional capital expenditure already admitted and incurred up to 31.3.2024 (either based on actual or projected additional capital expenditure) and estimated additional capital expenditure for the respective years of the tariff period 2024-29 along with the true up petition for the period 2019-24 in accordance with the CERC (Terms and Conditions of Tariff) Regulations, 2019."

In terms of above, the Petitioner is filing the present petition for determination of tariff for the instant Mauda-II Station for the period from 01.04.2024 to 31.03.2029 as per the Tariff Regulations 2024.

6) The tariff of the Mauda-II for the tariff period 1.4.2019 to 31.3.2024 was determined by the Hon'ble Commission vide its order dated 04.03.2023 in Petition No.423/GT/2020 in accordance with the CERC (Terms & Conditions of Tariff) Regulations 2019. The petitioner vide affidavit dated 27.11.2024 has filed a separate true up petition for the period 01.04.2019 to 31.03.2024 for revision of tariff in line with the applicable provisions of Tariff Regulations 2019.

7) It is submitted that Hon'ble Commission vide order dated 04.03.2023 in Petition no 423/GT/2020 has allowed a capital cost of Rs 7711.62 Cr as on 31.03.2024 based on the admitted projected capital expenditure for the 2019-24 period. However, the actual closing capital cost as on 31.03.2024 has been worked out in the foresaid true-up petition as Rs 7629.30 Cr based on the actual expenditure after truing up exercise for the period 2019-24. Accordingly, the

Petitioner has adjusted an amount of Rs 82.32 Cr from the admitted capital cost as on 31.03.2024 and accordingly the opening capital cost as on 01.04.2024 has been considered as Rs 7629.30 Cr in the instant petition. The Hon'ble Commission may be pleased to accordingly adopt this adjustment in the admitted capital cost as on 31.3.2024 and determine the tariff in the present petition for the period 2024-29.

8) The capital cost claimed in the instant petition is based on the opening capital cost as on 01.04.2024 considered as above and projected estimated capital expenditures claimed for the period 2024-29 under Regulation 19, Regulation 24, Regulation 25, Regulation 26 and Regulation 102 of the Tariff Regulations, 2024.

9) The Petitioner further respectfully submits that as per Regulation 36(1)(6) of the Tariff Regulations 2024, the water charges, security expenses, ash transportation 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, rate of water charges, etc. as applicable for 2023-24 have been furnished below. Further, water charges for 2024-29 period have been claimed on projection basis based on pertinent factors such as annual allocation, rate of water charges, etc. and the same may be allowed in the tariff for the 2024-29 period subject to retrospective adjustment at the time of truing-up based on actual water charges paid.

Description	**Remarks**
Type of Plant	Coal based Thermal Power Plant
Type of cooling water system	Closed Circuit Cooling System
Rate of Water charges (Rs/cubic meter)	12.10
Total Water Charges for Mauda STPS all stages (2320 MW)	Rs 5383.55 lakh

(For FY 2023-24 as per truing-up petition filed for the instant Station)*

10) Similarly, the Petitioner is claiming the security and ash transportation expenses based on the estimated expenses for the period 2024-29 and 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 36(1)(6) based on actual consumption of spares during the period 2024-29.

11) However, it is submitted that the expenditure towards the ash transportation charges is recurring in nature and the Petitioner has been incurring ash transportation expenditure in its stations in the current tariff period also. In case the same is permitted to be recovered after the issuance of the tariff order for the period 2024-29, there will be additional liability on the beneficiary on account of the interest payment for the period till the time the tariff petitions for the period 2024-29 is decided. To avoid the interest payment liability of the beneficiaries, it is prayed that the petitioner may be allowed to recover/ pass on the ash transportation charges on a monthly basis subject to true-up at the end of the 2024-29 period.

12) The petitioner humbly submits that petition no. 227/MP/2024 has been filed by the petitioner concerning Ash Utilization Expenditure for its stations which is under active consideration of this Hon'ble Commission and the outcome of the said petition will be applicable to the instant petition also.

13) The present petition is filed on the basis of norms specified in the Tariff Regulations 2024. It is submitted that the petitioner is in the process of installing the Wet Limestone based FGD for De-SOx as part of 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 the schemes in compliance of revised emission norms will affect the Station APC, Heat Rate, O&M expenses, water consumption, etc. In addition, the availability of the unit/ station would be also affected due to shutdown of the units for installation of ECS. The petitioner would be filing the details of the same in terms of the Regulation 29 of Tariff Regulations 2024.

14) 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 period 2009-14 and equipment 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 equipment 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 Tariff Regulations 2024-29 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:

Quote

"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."

UNQUOTE

Further, Hon'ble Commission vide its order dated 21.04.2022 in petition no 362/GT/2020 while determining tariff of Kahalgaon STPS-II of NTPC Limited has relaxed the boiler efficiency for computing Gross Heat Rate of the station with appropriate operating margin. The same is quoted below:

Quote

"157. Accordingly, the Commission considered the SHR of 2425 kCal /kWh as approved for 2009-14 tariff period and in exercise of Power to Relax under Regulation 54 and Power to Remove Difficulty under Regulations 55 of Tariff Regulations, 2014 allowed boiler efficiency of the units of the generating station below 0.85 for the period 2014–19"

UNQUOTE

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 85.4%, the Gross Station Heat Rate would work out to be 2229.13 kCal/kWh and the operating margin available over the design heat rate would be 3.77 % only which is much less than the operating margin of 4.5% allowed in the Tariff Regulations 2024. Moreover, it is submitted that boiler efficiency is largely a function of coal quality. In view of above submission, it is prayed that Gross Station Heat rate of 2244.79 kCal/kWh may be allowed based on guaranteed turbine cycle heat rate of 1834.5 kCal/kWh and actual boiler efficiency of 85.4 % with an operating margin of 4.5 % 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 4.5%.

15) The petitioner has accordingly calculated the tariff for 2024-29 period based on the above and the same is enclosed as **Appendix-I** to this petition.

16) The Petitioner humbly submits that the pay/wage revision for the employees of the Petitioner will be due w.e.f. 01.01.2027. Further, the wage/pay revision of CISF and Kendriya Vidyalaya employees will also be due for revision during the tariff period 2024-29. Regulation-36(1)(8) of CERC (Terms & Conditions of Tariff) Regulations-2024 provides as below:

"In the case of a generating company owned by the Central or State Government, the impact on account of implementation of wage or pay revision shall be allowed at the time of truing up of tariff."

In accordance with the above said regulation, the Petitioner craves liberty to approach the Hon'ble Commission for allowing the impact of Pay/wage revision of employees of the Petitioner i.e. NTPC Limited, CISF and Kendriya Vidyalaya (wherever applicable) as additional O&M expenses.

17) It is submitted that in terms of Regulation 60 (5) of the Tariff Regulations 2024, the Petitioner is required to furnish details qua providing the details of Landed Price & Gross Calorific Value ("GCV") of coal in Form 15. It is further submitted that the Petitioner in terms of Regulation 40 of the Tariff Regulations 2019 was required to furnish the details for Landed Price & GCV of coal also as per Form 15 of the Tariff Regulations, 2019.

18) However, in so far as the present Petition is concerned, the Petitioner has prepared & submitted the data of coal as per Form 15 of the Tariff Regulations, 2019. The same is because of the following reasons:-

(a) This Hon'ble Commission had notified the Tariff Regulations, 2019 on 07.03.2019 and the same was in effect till 31.03.2024.

(b) The Petitioner being a diligent utility has been seamlessly providing the said data of coal in terms of the prescribed format (i.e. Form 15 of Annexure-I (Part I)) of the Tariff Regulations, 2019 to this Hon'ble Commission for computation of Interest on Working Capital.

(c) Thereafter, this Hon'ble Commission on 15.03.2024 notified the Tariff Regulations, 2024, wherein the format of Form 15 was changed/ amended by this Hon'ble Commission and a new format was placed in the Tariff Regulations 2024 in the month of June'2024.

(d) By virtue of the said change, the Petitioner has been obligated to furnish the data of coal for its existing plants month wise for the preceding 12 months i.e. for FY 2023-24 for computation of Interest on Working Capital.

19) It is humbly submitted that by virtue of the Tariff Regulations, 2024, this Hon'ble Commission has added a new format/ revised the format of Form-15 which has not prescribed in the past Tariff Regulations i.e. of 2019. Hence, it is only now (in the Tariff Regulations 2024) that the Petitioner has been obligated to furnish the data of coal as per the new format of Form-15.

20) It is respectfully submitted that since the format for Form 15 has been changed in Tariff Regulations, 2024 and was notified in the month of June'2024, the Petitioner could not have been aware about the said changes earlier, hence the Petitioner did not maintain the data required in new format of Form 15 of Tariff Regulations, 2024.

21) Therefore, this Hon'ble Commission may kindly exempt the Petitioner from furnishing the data of coal in terms of new format of Form 15 of the Tariff Regulations, 2024 & may be allowed to furnish the details of coal for FY 2023-24 in terms of the prescribed format of Form-15 of the Tariff Regulations, 2019.

22) In light of the above submissions, it may kindly be noted that no prejudice shall be caused to any party if the Petitioner is allowed for providing the details of Landed Price & GCV of coal to this Hon'ble Commission in terms of Form 15 of the Tariff Regulations, 2019 as the value of Landed Price & GCV of coal will remains unaffected.

23) It is submitted that the Petitioner has already paid the requisite filing fee vide Transaction Id 37c568eba62158b7b321 on 24.04.2024 for the year 2024-25 and the details of the same have been duly furnished to the Hon'ble Commission vide our communication dtd. 27.04.2024. For the subsequent years, it shall be paid as per the provisions of the CERC (Payment of Fees) Regulations, 2012 as amended. Further Regulation 94 (1) of Tariff Regulations 2024 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.

24) It is submitted that the Petitioner has uploaded the copy of the Petition at CERC site (Saudamini), the access of which is available to all the Respondents mentioned herein above and therefore the petition stands served to all the respondents. Further, the petitioner has also posted the Petition on the company website i.e. www.ntpc.co.in.

25) In accordance with the 'Conduct of Business Regulations 2023' of the Hon'ble Commission, the Petitioner shall, after filing the tariff petition, publish a notice about such filing in at least two daily leading digital newspapers one in English language and another in any of the Indian languages, having wide circulation in each of the States and Union Territories where the beneficiaries are situated, as per Form 14 appended to these regulations. Subsequently, the Petitioner shall submit the proof of publications as soft copies of the publications under an affidavit through the e-filing portal of the Hon'ble Commission within one week from the date of publication. Further, the Petitioner shall also submit the detail of expenses incurred for publication of the notice alongwith the prayer for recovery of Publication Expenses as per Regulation-94 of CERC Tariff Regulations 2024.

26) 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 31.03.2024 through true-up exercise are pending before the Hon'ble Commission and would take some time. The Petitioner, therefore, reserves its right to amend the tariff petition as per the outcome in such appeals/ petitions, if required.

Prayers

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

i) Approve tariff of Mauda-II for the tariff period 01.04.2024 to 31.03.2029.

ii) Allow the recovery of filing fees as & when paid to the Hon'ble Commission and publication expenses from the beneficiaries.

iii) Allow reimbursement of Ash Utilization Charges directly from the beneficiaries on monthly basis, subject to true up.

iv) Allow the recovery of pay/wage revision as additional O&M over and above the normative O&M.

v) Consider station heat rate based on design heat rate with applicable operating margin.

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

Petitioner

Noida
Date……

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-III of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 and Chapter-3, Regulation-9 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 for approval of tariff of Mauda Super Thermal Power Station Stage-II (1320 MW) for the period from 01.04.2024 to 31.03.2029.

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

Respondents:

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

and Others

NOTARIAL NOTARIAL

AFFIDAVIT

I, Sameer Kumar Aggarwal, Son of Late Shri B K Aggarwal, aged about 51 years, working as Additional General Manager (Commercial) in the office of NTPC Limited, having its registered office at NTPC Bhawan, Scope Complex, Core-7, Lodhi Road, New Delhi-110003 do hereby solemnly affirm and state as follows:

1. That the deponent is the Additional General Manager (Commercial) of the Petitioner NTPC Ltd., and is well conversant with the facts and the circumstances of the case and therefore competent to swear this affidavit.

NOTARY YOGENDRA SINGH AREA NOIDA G.B. NAGAR REGN. NO. 5677/08 GOVT OF INDIA

Sk Aggarwal

Signature Not Verified
Digitally signed by SAMEER KUMAR AGGARWAL
Date: 2024.11.22 22:49:57 IST
Reason: AGM (Comml)
Location: NTPC Ltd

2. That the accompanying Petition under Section 62 and 79 (1) (a) of the Electricity Act, 2003, has been filed by my authorized representative under my instruction and the contents of the same are true and correct to the best of my knowledge and belief.

3. That the contents as mentioned in the Petition are true and correct based on the my personal knowledge, belief and records maintained in the office.

4. That the annexures annexed to the Petition are correct and true copies of the respective originals.

5. That the Deponent has not filed any other Petition or Appeal before any other forum or court of law with respect to the subject matter of the dispute.

(Deponent)

समीर अग्रवाल/SAMEER AGGARWAL
अपर महाप्रबंधक (वाणिज्यिक)
Addl. General Manager (Commercial)
एन टी पी सी लिमिटेड/NTPC LIMITED
EOC, A-8A, Sector-24, Noida-201 301 (U.P.)

Verification:

Verified at Noida on this ..... day of November 2024, that the contents of my above noted affidavit are true and correct to my knowledge and no part of it is false and nothing material has been concealed therefrom.

(Deponent)

समीर अग्रवाल/SAMEER AGGARWAL
अपर महाप्रबंधक (वाणिज्यिक)
Addl. General Manager (Commercial)
एन टी पी सी लिमिटेड/NTPC LIMITED
EOC, A-8A, Sector-24, Noida-201 301 (U.P.)

NOTARY GOVT. OF INDIA
YOGENDRA SINGH
AREA NOIDA
G.B. NAGAR
REGN. NO. 677/08

ATTESTED
YOGENDRA SINGH
NOTARY NOIDA
G.B. NAGAR (U.P.) INDIA

28 NOV 2024

Signature Not Verified
Digitally signed by SAMEER KUMAR AGGARWAL
Date: 2024.11.28 22:49:57 IST
Reason: AGM (Commil)
Location: NTPC Ltd

APPENDIX-I

TARIFF FILING FORMS (THERMAL)

FOR DETERMINATION OF TARIFF

FOR

Mauda STPS Stage-II (2x660 MW)

(From 01.04.2024 TO 31.03.2029)

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- 4	Details of Foreign loans	**NA**
FORM- 4A	Details of Foreign Equity	**NA**
FORM-5	Abstract of Admitted Capital Cost for the existing Projects	✓
FORM-5A**	Abstract of Claimed Capital Cost for the existing Projects	✓
FORM- 6	Financial Package upto COD	**NA**
FORM- 7	Details of Project Specific Loans	**NA**
FORM- 8	Details of Allocation of corporate loans to various projects	✓
FORM-9A**	Summary of Statement of Additional Capitalisation claimed during the period	✓
FORM-9 ##	Statement of Additional Capitalisation after COD	✓
FORM- 10	Financing of Additional Capitalisation	✓
FORM- 11	Calculation of Depreciation on original project cost	**NA**
FORM- 12	Statement of Depreciation	✓
FORM- 13	Calculation of Weighted Average Rate of Interest on Actual Loans	✓
FORM- 14	Draw Down Schedule for Calculation of IDC & Financing Charges	**NA**
FORM- 15	Details of Fuel for Computation of Energy Charges	✓
FORM- 15A	Details of Seconday Fuel for Computation of Energy Charges	✓
FORM- 16	Details of Limestone for Computation of Energy Charge Rate	**NA**
FORM-17^	Details of Capital Spares	**NA**
FORM- 18^	Non-Tariff Income	**NA**
FORM-19^	Details of Water Charges	**NA**
FORM-20^	Details of Statutory Charges	**NA**

PART-I

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

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

**** Additional Forms**

Provided yearwise for the period 2024-29

^ Shall be provided at truing-up

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

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

PART-I
FORM- 1

Summary of Tariff

Name of the Petitioner:	**NTPC Limited**
Name of the Generating Station:	**Mauda-II**
Place (Region/District/State):	**Western Region/ Nagpur/ Maharashtra**

Amount in Rs. Lakhs

S. No.	Particulars	Unit	Existing 2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7	8	9
1.1	Depreciation	Rs Lakh	39,453.33	39,620.10	39,697.60	39,840.76	39,946.22	39,981.35
1.2	Interest on Loan	Rs Lakh	19,535.93	17,167.33	15,089.42	13,238.11	10,982.47	8,153.36
1.3	Return on Equity	Rs Lakh	42,795.09	42,993.14	43,072.79	43,211.56	43,306.05	43,336.36
1.4	Interest on Working Capital	Rs Lakh	15,508.76	13,920.68	14,026.59	14,143.17	14,254.39	14,377.18
1.5	O&M Expenses	Rs Lakh	43,142.93	46944.73	49683.77	52533.53	55553.18	58759.83
1.6	Special Allowance (If applicable)	Rs Lakh	0.00	0.00	0.00	0.00	0.00	0.00
1.7	Compensation Allowance (If applicable – relevant for column 4 only)	Rs. Lakh						
	Total	Rs Lakh	**160436.04**	**160645.98**	**161570.18**	**162967.13**	**164042.32**	**164608.07**
2.1	Landed Fuel Cost (coal)	Rs/Ton	5,753.90	4,795.93	4,795.93	4,795.93	4,795.93	4,795.93
	(%) of Fuel Quantity	(%)	As per Form-15					
2.2	Landed Fuel Cost Imported Coal	Rs/Ton						
	(%) 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.	Rs/Ton						
	(%) of Fuel Quantity	(%)						
2.5	Secondary fuel oil cost	Rs/KL	76490.650	78522.425	78522.425	78522.425	78522.425	78522.425
2.6	Energy Charge Rate ex-bus (Rs/kWh)	Rs/Unit	4.145	3.474	3.474	3.474	3.474	3.474

(Petitioner)

PART-I
FORM- 1(I)

Name of the Petitioner:	**NTPC Limited**
Name of the Generating Station:	**Mauda-II**

Amount in Rs. Lakhs

Statement showing claimed capital cost – (A+B)

S. No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7
1	Opening Capital Cost	762930.22	763110.22	765915.22	768624.22	769977.26
2	Add: Addition during the year/period	180.00	2805.00	2709.00	1353.04	0.00
3	Less: De-capitalisation during the year/period	0.00	0.00	0.00	0.00	0.00
4	Less: Reversal during the year / period	0.00	0.00	0.00	0.00	0.00
5	Add: Discharges during the year/ period	0.00	0.00	0.00	0.00	0.00
6	Closing Capital Cost	763110.22	765915.22	768624.22	769977.26	769977.26
7	**Average Capital Cost**	**763020.22**	**764512.72**	**767269.72**	**769300.74**	**769977.26**

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

S. No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7
1	Opening Capital Cost	762930.22	763110.22	765186.22	765901.22	765971.22
2	Add: Addition during the year / period	180.00	2076.00	715.00	70.00	0.00
3	Less: De-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
4	Less: Reversal during the year / period	0.00	0.00	0.00	0.00	0.00
5	Add: Discharges during the year / period	0.00	0.00	0.00	0.00	0.00
6	Closing Capital Cost	763110.22	765186.22	765901.22	765971.22	765971.22
7	**Average Capital Cost**	**763020.22**	**764148.22**	**765543.72**	**765936.22**	**765971.22**

Statement showing claimed capital cost eligible for RoE at SBI MCLR plus 350 BP (B)

S. No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7
1	Opening Capital Cost	0.00	0.00	729.00	2723.00	4006.04
2	Add: Addition during the year / period	0.00	729.00	1994.00	1283.04	0.00
3	Less: De-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
4	Less: Reversal during the year / period	0.00	0.00	0.00	0.00	0.00
5	Add: Discharges during the year / period	0.00	0.00	0.00	0.00	0.00
6	Closing Capital Cost	0.00	729.00	2723.00	4006.04	4006.04
7	**Average Capital Cost**	**0.00**	**364.50**	**1726.00**	**3364.52**	**4006.04**

(Petitioner)

PART-I
FORM- 1(IIA)

Name of the Petitioner:	**NTPC Limited**
Name of the Generating Station:	**Mauda-II**

Statement showing Return on Equity at Normal Rate

Amount in Rs. Lakhs

S. No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7
	Return on Equity (@ Normal Rate)					
1	Gross Opening Equity (Normal)	2,28,879.06	2,28,933.06	2,29,555.86	2,29,770.36	229791.3645
2	Less: Adjustment in Opening Equity	-	-	-	-	-
3	Adjustment during the year		-	-	-	-
4	Net Opening Equity (Normal)	2,28,879.06	2,28,933.06	2,29,555.86	2,29,770.36	2,29,791.36
5	Add: Increase in equity due to addition during the year / period	54.00	622.80	214.50	21.00	0.00
6	Less: Decrease due to De-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
7	Less: Decrease due to reversal during the year / period	0.00	0.00	0.00	0.00	0.00
8	Add: Increase due to discharges during the year / period	0.00	0.00	0.00	0.00	0.00
9	Net closing Equity (Normal)	2,28,933.06	2,29,555.86	2,29,770.36	2,29,791.36	2,29,791.36
10	Average Equity (Normal)	2,28,906.06	2,29,244.46	2,29,663.11	2,29,780.86	2,29,791.36
11	Rate of ROE (%)	18.782	18.782	18.782	18.782	18.782
12	Total ROE	**42,993.14**	**43,056.70**	**43,135.33**	**43,157.44**	**43,159.41**

(Petitioner)

PART-I
FORM- 1(IIB)

Name of the Petitioner:	**NTPC Limited**
Name of the Generating Station:	**Mauda-II**

Statement showing Return on Equity at SBI MCLR plus 350 BP

Amount in Rs. Lakhs

S. No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7
	Return on Equity (@ SBI MCLR plus 350 BP)					
1	Gross Opening Equity (SBI MCLR plus 350 BP)	0.00	0.00	218.70	816.90	1201.81
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 (SBI MCLR plus 350 BP)	0.00	0.00	218.70	816.90	1201.81
5	Add: Increase in equity due to addition during the year / period	0.00	218.70	598.20	384.91	0.00
6	Less: Decrease due to De-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
7	Less: Decrease due to reversal during the year / period	0.00	0.00	0.00	0.00	0.00
8	Add: Increase due to discharges during the year / period	0.00	0.00	0.00	0.00	0.00
9	Net closing Equity (SBI MCLR plus 350 BP)	0.00	218.70	816.90	1201.81	1201.81
10	Average Equity (SBI MCLR plus 350 BP)	0.00	109.35	517.80	1009.36	1201.81
11	Rate of ROE - post tax (%)	12.15	12.15	12.15	12.15	12.15
12	Rate of ROE - pre tax (%)	14.723	14.723	14.723	14.723	14.723
13	Total ROE (SBI MCLR plus 350 BP)	**0.00**	**16.10**	**76.24**	**148.61**	**176.94**

(Petitioner)

PART-I
FORM-2

Plant Characteristics

Name of the Petitioner	**NTPC Limited**
Name of the Generating Station	**Mauda Super Thermal Power Station Stage-II (1320 MW)**

Unit(s)/Block(s)/Parameters	**Unit-I**	**Unit-II**
Installed Capacity (MW)	Unit-I	Unit-II
Schedule COD as per Investment Approval	660	660
Actual COD /Date of Taken Over (as applicable)	19.05.2016	19.11.2016
Pit Head or Non Pit Head	1.02.2017	18.09.2017
Name of the Boiler Manufacture	Non pit head	Non pit head
Name of Turbine Generator Manufacture	BHEL/ Alstom	BHEL/ Alstom
Main Steams Pressure at Turbine inlet (kg/Cm^2) abs[1].	247	247
Main Steam Temperature at Turbine inlet (^{0}C) [1]	565	565
Reheat Steam Pressure at Turbine inlet (kg/Cm$^{2)}$ [1]	50.14	50.14
Reheat Steam Temperature at Turbine inlet (^{0}C) [1]	593	593
Main Steam flow at Turbine inlet under MCR condition (tons /hr)[2]	1944.4	1944.4
Main Steam flow at Turbine inlet under VWO condition (tons /hr)[2]	2064.8	2064.8
Unit Gross electrical output under MCR /Rated condition (MW)[2]	660	660
Unit Gross electrical output under VWO condition (MW)[2]	693	693
Guaranteed Design Gross Turbine Cycle Heat Rate (kCal/kWh)3	1834.5	1834.5
Conditions on which design turbine cycle heat rate guaranteed(kcal/kwhr)		
% MCR	100%	
% Makeup Water Consumption	0%	0%
Design Capacity of Make up Water System(% of throttle steam flow)	5255m3/Hr	5255m3/Hr
Design Capacity of Inlet Cooling System	72000cum/hr	72000cum/hr
Design Cooling Water Temperature (^{0}C)	33	33
Back Pressure(Average condenser pressure in mmHg(A))	0.1047	0.1047
Steam flow at super heater outlet under BMCR condition (tons/hr)	2120	2121
Steam Pressure at super heater outlet under BMCR condition) (**kg/Cm^2**)	255 (g)	256 (g)
Steam Temperature at super heater outlet under BMCR condition (**^{0}C**)	568	568
Steam Temperature at Reheater outlet at BMCR condition (^{0}C)	596	596
Design / Guaranteed Boiler Efficiency (%)[4]	85.4 @ 100% TMCR	85.4 @ 100% TMCR
Design Fuel with and without Blending of domestic/imported coal		
(GCV) Domestic Design coal	3300 kcal/kg	3300 kcal/kg
Blended Coal (Domestic Design 70%+ Imported 30%)		
Type of Cooling Tower	IDCT	IDCT
Type of cooling system[5]	Closed cycle	Closed cycle
Type of Boiler Feed Pump[6]	2 X 50 % TDBFP,2x30% MDBFP	2 X 50 % TDBFP,2x30% MDBFP
Fuel Details[7]		
-Primary Fuel	coal	coal
-Secondary Fuel	LDO	LDO
-Alternate Fuels		
Special Features/Site Specific Features[8]		
Special Technological Features[9]		
Environmental Regulation related features[10]	ESP	ESP
Any other special features	Wet Limestone based FGD under implementation	
	Station is having Tangential Fired Boilers.	

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 Naptha or lignite etc.
8: Any site specific feature such as Merry-Go-Round, Vicinity to sea, Intake /makeup water systems etc. scrubbers etc. Specify all such features
9: Any Special Technological feature like Advanced class FA technology in Gas Turbines, etc.
10: Environmental Regulation related features like FGD, ESP etc.,

(PETITIONER)

Normative parameters considered for tariff computations

PART 1
FORM-3

Name of the Petitioner: **NTPC Limited**
Name of the Generating Station: **Mauda-II STPS (2x660 MW)**

							(Year Ending March)
Particulars	**Unit**	**Existing 2023-24**	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**
1	2			5	6	7	8
Base Rate of Return on Equity (Normal)	%	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%
Base Rate of Return on Equity for Add Cap @ MCLR plus 350 BP	%		12.15%	12.15%	12.15%	12.15%	12.15%
Effective Tax Rate 4	%	17.4720%	17.4720%	17.4720%	17.4720%	17.4720%	17.4720%
Target Availability (Peak Hours)	%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%
Target Availability (Off-peak Hours)	%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%
Auxiliary Energy Consumption	%	6.25%	5.75%	5.75%	5.75%	5.75%	5.75%
Gross Station Heat Rate	kCal/kWh	2239.80	2244.79	2244.79	2244.79	2244.79	2244.79
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	50.00	50.00	50.00	50.00	50.00	50.00
Cost of Main Secondary Fuel Oil for WC1	in Months	2	2	2	2	2	2
Fuel Cost for WC2	in Months	NA					
Liquid Fuel Stock for WC2	in Months						
Normative O&M Expenses for coal station	Rs lakh / MW	23.26	25.78	27.13	28.56	30.06	31.64
Maintenance Spares for WC	% of O&M	20%	20%	20%	20%	20%	20%
Receivables for WC	in Days	45	45	45	45	45	45
Storage capacity of Primary fuel	Lakh MT	10.7	10.7	10.7	10.7	10.7	10.7
ß- Average Monthly Frequency Response Performance*	0-1	-	-	-		-	-
Rate of IOWC (SBI MCLR plus 325 BP)	%	12.00	11.90	11.90	11.90	11.90	11.90
Blending ratio of domestic coal/imported coal		As per Form-15					

Note:
i) The storage capacity of primary fuel as indicated above is for the entire Mauda Station (2320 MW).
* Shall be provided at the time of truing-up

Petitioner

Part-I
FORM-3A
ADDITIONAL FORM

Calculation of O&M Expenses

Name of the Company :	**NTPC Limited**
Name of the Power Station :	**Mauda-II**

Amount in Rs. Lakhs

S.No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	7	8
1	**O&M expenses under Reg.36(1)(1)**					
1a	Normative	34029.60	35811.60	37699.20	39679.20	41764.80
2	**O&M expenses under Reg.36(1)(6)**					
2a	Water Charges^	3373.97	3715.34	4085.17	4494.83	4944.31
2b	Secutiry expenses^	1536.21	1689.83	1858.81	2044.29	2249.12
2c	Capital Spares*					
3	O&M expenses-Ash Transportation^	8004.96	8467.00	8890.35	9334.86	9801.60
	Total O&M Expenses	**46944.73**	**49683.77**	**52533.53**	**55553.18**	**58759.83**

Note:
* Shall be provided at truing-up
^ On projected basis

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 :	**Mauda-II**

Last date of order of Commission for the project	**Date (DD-MM-YYYY)**	04.03.2023
Reference of petition no. in which the above order was passed	**Petition no.**	423/GT/2020
Following details (whether admitted and /or considered) as on the last date of the period for which tariff is approved, i.e. as on 31.03.2024, in the above order by the Commission:		**(Rs Lakh)**
Capital cost	**(Rs. in lakh)**	7,71,162.13
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)		38,320.48
Gross Normative Debt		5,39,813.49
Cumulative Repayment		2,56,794.10
Net Normative Debt		2,83,019.39
Normative Equity		2,31,348.64
Cumulative Depreciation		2,56,794.10
Freehold land		-

(Petitioner)

PART 1
FORM- 5A

Abstract of Claimed Capital Cost for the existing Projects

Name of the Company :	**NTPC Limited**
Name of the Power Station :	**Mauda-II**

Reference of Final True-up Tariff Petition	**Affidavit dated**	27.11.2024
Capital Cost as on 31.03.2024 as per Hon'ble Commission's Order dated 04.03.2023	**Rs Lakh**	771162
Adjustment as per Para (7) of this petition		-8231.78
Following details as considered by the Petitioner as on the last date of the period for which final true-up tariff is claimed, i.e. as on 31.03.2024:		**(Rs Lakh)**
Capital cost	**(Rs. in lakh)**	7,62,930.22
Amount of un-discharged liabilities included in above (& forming part of admitted capital cost)		0.00
Amount of un-discharged liabilities corresponding to above claimed capital cost (but not forming part of admitted capital cost being allowed on cash basis)		19,860.41
Gross Normative Debt		5,34,051.15
Cumulative Repayment		2,54,240.23
Net Normative Debt		2,79,810.92
Normative Equity		2,28,879.06
Cumulative Depreciation		2,91,714.17
Freehold land		0.00

(Petitioner)

Form 8

TRANCHE NO

BP NO 5050000791 **T00001** **D00002**

Unsecured Loan From HDFC Bank Ltd. VII		
Source of Loan :	**HDFC Bank Ltd. VII**	
Currency :	INR	
Amount of Loan :	25,00,00,00,000	
Total Drawn amount :	5,00,00,00,000	
Date of drawl	21.06.2019	
Interest Type :	Floating	
Fixed Interest Rate :		
Base Rate, If Floating Interest	8.40%	
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 :	21.06.2019	
Repayment Period (Inc Moratorium) :	15 Years	
Repayment Frequency :	9 Yearly Instalment	
Repayment Type :	AVG	
First Repayment Date :	11.06.2026	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	NCPS-FGD	**10,00,00,000**
	FSTPS R&M	**10,00,00,000**
	KORBA-R&M	**10,00,00,000**
	SOLAPUR	**50,00,00,000**
	MOUDA-II	**50,00,00,000**
	TELANGANA	**30,00,00,000**
	Singrauli-R&M	**30,00,00,000**
	Simhadri-R&M	**15,00,00,000**
	Korba-R&M	**10,00,00,000**
	Ramagundam-R&M	**10,00,00,000**
	VSTPS R&M	**10,00,00,000**
	TANDA-II	**30,00,00,000**
	DARLIPALLI	**30,00,00,000**
	NORTH KARANPURA	**30,00,00,000**
	GADARWARA	**40,00,00,000**
	LARA-I	**15,00,00,000**
	BARH-I	**1,20,00,00,000**
Total Allocated Amount		**5,00,00,00,000**

Form 8

TRANCHE NO

BP NO 5050000531	**T00001**	**D0005**
Unsecured Loan From SBI-IX		
Source of Loan :	**SBI-IX**	
Currency :	INR	
Amount of Loan :	30,00,00,00,000	
Total Drawn amount :	2,15,00,00,000	
Date of Drawal:	13.11.2017	
Interest Type :	Floating	
Fixed Interest Rate :	----------	
Base Rate, If Floating Interest	7.90%	
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 :	13.11.2017	
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**
	KUDGI	1,00,00,00,000
	LARA	20,00,00,000
	MOUDA-II	33,00,00,000
	TAPOVAN VISHNUGAD	57,00,00,000
	KOLDAM	5,00,00,000
Total Allocated Amount		**2,15,00,00,000.00**

Form 8

TRANCHE NO

BP NO 5050000531 **T00001** **D0008**

Unsecured Loan From SBI-IX		
Source of Loan :	**SBI-IX**	
Currency :	INR	
Amount of Loan :	30,00,00,00,000	
Total Drawn amount :	5,00,00,00,000	
Date of Drawal:	20.06.2018	
Interest Type :	Floating	
Fixed Interest Rate :	----------	
Base Rate, If Floating Interest	7.85%	
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 :	20.06.2018	
Repayment Period (Inc Moratorium) :	12 Years	
Repayment Frequency :	9 Yearly Installments	
Repayment Type :	AVG	
First Repayment Date :	31.03.2021	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	**Project Name**	**Amount**
	BARH-I	80,00,00,000
	TAPOVAN VISHNUGARH	20,00,00,000
	BONGAIGAON	8,00,00,000
	TANDA II	12,00,00,000
	RAMMAM	20,00,00,000
	TELANGANA	45,00,00,000
	MAUDA-II	1,20,00,00,000
	BHADLA SOALR PV	35,00,00,000
	ROJAML WIND	5,00,00,000
	PAKRI BARWADIH CMB	1,20,00,00,000
	CHATTI BARIATU CMP	9,00,00,000
	DULANGA COAL MINE	13,00,00,000
	TALAIPALI COAL MINE	13,00,00,000
Total Allocated Amount		**5,00,00,00,000.00**

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	D0004-9.70%	
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**

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	D0005-9.70%	
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**

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	D0006-9.30%	
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 :	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**

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	D0008-9.30%	
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 :	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**

	TRANCHE NO	
BP NO 5050000442	**T00001**	**D00011**

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	D00011-9.30%	
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 :	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**

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	D00012-9.30%	
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 :	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**

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	D00013-9.30%	
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 :	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**

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	D00015-9.30%	
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 :	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**

Form 8

TRANCHE NO

BP NO 5050000442 **T00001** **D00016**

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	D00016-9.30%	
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 :	6 Years	
Moratorium effective from :	31.03.2016	
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	2,24,00,00,000
	BONGAIGAON	60,00,00,000
	MOUDA-II	29,00,00,000
	TAPOVAN VISHNUGARH	51,00,00,000
	SOLAPUR	36,00,00,000
	KUDGI-I	30,00,00,000
	ANANTPUR SOLAR	70,00,00,000
Total Allocated Amount		**5,00,00,00,000**

Form 8

TRANCHE NO

BP NO 5050000442	**T00001**	**D00021**
Unsecured Loan From SBI-VIII		
Source of Loan :	**SBI-VIII**	
Currency :	INR	
Amount of Loan :	1,00,00,00,00,000	
Total Drawn amount :	2,50,00,00,000	
Date of Drawl	21.09.2016	
Interest Type :	Floating	
Fixed Interest Rate :	----------	
Base Rate, If Floating Interest	D00021-9.10%	
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 :	21.09.2016	
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	40,00,00,000
	MOUDA-II	15,00,00,000
	KUDGI	84,00,00,000
	BARH-II	8,00,00,000
	KOLDAM	18,00,00,000
	RIHAND-III	57,00,00,000
	VINDHYACHAL-IV	21,00,00,000
	MOUDA-I	7,00,00,000
Total Allocated Amount		**2,50,00,00,000**

Form 8

TRANCHE NO

BP NO 5050000421 **T00001** D00005

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:	11.07.2016	
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**

Form 8

TRANCHE NO

BP NO 5050000421 **T00001** D00007

Unsecured Loan From HDFC Bank Ltd.-III		
Source of Loan :	**HDFC Bank Ltd.-III**	
Currency :	INR	
Amount of Loan :	15,00,00,00,000	
Total Drawn amount :	2,00,00,00,000	
Date of Drawal:	30.09.2016	
Interest Type :	Floating	
Fixed Interest Rate :		
Base Rate, If Floating Interest	D00005-9.10%	
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 :	30.09.2016	
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
	BONGAIGAON	5,00,00,000
	MOUDA-II	15,00,00,000
	TELANGANA	20,00,00,000
	VINDHYACHAL-IV	10,00,00,000
	MOUDA-I	35,00,00,000
	BARH-I	45,00,00,000
	CHATTI BARIATU	5,00,00,000
	RAMMAM	5,00,00,000
	TAPOVAN VISHNUGAD	5,00,00,000
	SOLAPUR	55,00,00,000
Total Allocated Amount		**2,00,00,00,000**

Form 8

TRANCHE NO

BP NO 5050000421 **T00001** D00008

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:	10.10.2016	
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 :	10.10.2016	
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
	BONGAIGAON	50,00,00,000
	MOUDA-II	45,00,00,000
	TANDA-II	35,00,00,000
	SOLAPUR	70,00,00,000
Total Allocated Amount		**2,00,00,00,000**

	TRANCHE NO	
BP NO 5050000561	**T00001**	**D00001**

Unsecured Loan From HDFC Bank Ltd. V		
Source of Loan :	**HDFC Bank Ltd. V**	
Currency :	INR	
Amount of Loan :	25,00,00,00,000	
Total Drawn amount :	5,00,00,00,000	
Date of drawl	25.09.2017	
Interest Type :	Floating	
Fixed Interest Rate :		
Base Rate, If Floating Interest	7.90%	
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 :	25.09.2017	
Repayment Period (Inc Moratorium) :	15 Years	
Repayment Frequency :	9 Yearly Instalment	
Repayment Type :	AVG	
First Repayment Date :	25.09.2024	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	TANDA-II	13,85,00,000
	RAMMAM	3,00,00,000
	KHARGONE	89,68,00,000
	TELANGANA	16,00,00,000
	MANDSAUR SOLAR PV	11,00,00,000
	ROJMAL WIND	21,00,00,000
	MOUDA-II	39,84,00,000
	KUDGI	2,76,97,00,000
	CHATTI BARIATU CMB	19,13,00,000
	DULANGA COAL MINE	6,00,00,000
	MOUDA-I	3,53,00,000
Total Allocated Amount		**5,00,00,00,000**

Form 8

TRANCHE NO

BP NO 5050000561 **T00001** **D00007**

Unsecured Loan From HDFC Bank Ltd. V		
Source of Loan :	**HDFC Bank Ltd. V**	
Currency :	INR	
Amount of Loan :	25,00,00,00,000	
Total Drawn amount :	1,50,00,00,000	
Date of drawl	01.01.2018	
Interest Type :	Floating	
Fixed Interest Rate :		
Base Rate, If Floating Interest	7.85%	
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 :	01.01.2018	
Repayment Period (Inc Moratorium) :	15 Years	
Repayment Frequency :	9 Yearly Instalment	
Repayment Type :	AVG	
First Repayment Date :	25.09.2024	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	BONGAIGOAN	11,00,00,000
	DARLIPALLI	25,00,00,000
	RAMMAM	10,00,00,000
	KHARGONE	77,00,00,000
	BHADLA SOLAR PV	2,00,00,000
	ROJMAL WIND	3,00,00,000
	MOUDA-II	22,00,00,000
Total Allocated Amount		**1,50,00,00,000**

TRANCHE NO

BP NO 5050000721 **T00001** **D00001**

Unsecured Loan From Corporation Bank-IV		
Source of Loan :	**Corporation Bank-IV**	
Currency :	INR	
Amount of Loan :	20,00,00,00,000	
Total Drawn amount :	20,00,00,00,000	
Date of Drawal:	11.01.2019	
Interest Type :	Floating	
Fixed Interest Rate :	8.20%	
Base Rate, If Floating Interest	-	
Margin, If Floating Interest :	-	
Are there any Caps/ Floor :	Y/N	
Frequency of Intt. Payment	MONTHLY	
If Above is yes, specify Caps/ Floor :		
Moratorium Period :	3 Years	
Moratorium effective from :	11.01.2019	
Repayment Period (Inc Moratorium) :	12 Years	
Repayment Frequency :	9 Yearly Instalments	
Repayment Type :	AVG	
First Repayment Date :	11-Jan-23	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	SINGRAULI 8MW HYDRO	8,75,00,000
	FARIDABAD SOLAR PV	8,75,00,000
	SINGRAULI SOLAR	8,75,00,000
	FARAKKA III	11,42,85,716
	RAJGARH SOLAR	13,12,50,000
	NCTPP-II	14,28,57,139
	GANDHAR R&M	16,60,71,436
	SIMHADRI-II	23,21,42,855
	SIPAT-I	23,43,75,000
	MOUDA-II	50,00,00,000
	VINDHYACHAL-V	1,00,00,00,000
	SIPAT-II	1,01,07,14,287
	MOUDA-I	1,05,44,64,284
	RIHAND-III	1,22,85,71,426
	VINDHYACHAL-IV	2,45,00,00,000
	KOLDAM	2,71,51,78,577
	BARH-II	6,75,75,89,280
	KUDGI	2,00,00,00,000
Total Allocated Amount		**20,00,00,00,000**

Form 8

TRANCHE NO

BP NO 5050000741 **T00001** **D00002**

Unsecured Loan From SBI-XII		
Source of Loan :	**SBI-XII**	
Currency :	INR	
Amount of Loan :	50,00,00,00,000	
Total Drawn amount :	26,35,00,00,000	
Date of Drawal:	18.02.2019	
Interest Type :	Floating	
Fixed Interest Rate :	----------	
Base Rate, If Floating Interest	8.35%	
Margin, If Floating Interest :	NIL	
Are there any Caps/ Floor :	Y/N	
Frequency of Intt. Payment	Monthly	
If Above is yes, specify Caps/ Floor :		
Moratorium Period :	6 Years	
Moratorium effective from :	18.02.2019	
Repayment Period (Inc Moratorium) :	15 Years	
Repayment Frequency :	9 Yearly Installments	
Repayment Type :	AVG	
First Repayment Date :	31.03.2026	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	**Project Name**	**Amount**
	BARH-I	90,00,00,000.00
	FARAKKA-III	24,50,00,000.00
	GADARWARA	90,00,00,000.00
	KORBA-III	25,00,00,000.00
	KUDGI	5,00,00,00,000.00
	LARA	1,00,00,00,000.00
	MOUDA-I	21,00,00,000.00
	MOUDA-II	2,25,00,00,000.00
	NCTPP-II	63,50,00,000.00
	NORTH KARANPURA	10,40,00,00,000.00
	PAKRI BARWADIH CMB	1,20,00,00,000.00
	SIMHADRI-II	21,00,00,000.00
	SOLAPUR	2,40,00,00,000.00
	TELANGANA	75,00,00,000.00
	KUDGI	-3,00,00,00,000.00
	BARH-I	50,00,00,000
	NORTH KARANPURA	80,00,00,000
	TAPOVAN VISHNUGARH	20,00,00,000
	TELANGANA	1,50,00,00,000
Total Allocated Amount		**26,35,00,00,000.00**

Form 8

TRANCHE NO

BP NO 5050000341 **T00001** **D00003**

Unsecured Loan From J & K BANK-III		
Source of Loan :	**J & K BANK-III**	
Currency :	INR	
Amount of Loan :	3,50,00,00,000	
Total Drawn amount :	50,00,00,000	
Date of Drawal :	28.03.2013	
Interest Type :	Floating	
Fixed Interest Rate :		
Base Rate, If Floating Interest	D00002 - 10.25%	
Margin, If Floating Interest :	-	
Are there any Caps/ Floor :	Y/N	
Frequency of Intt. Payment	MONTHLY	
If Above is yes, specify Caps/ Floor :		
Moratorium Period :	5 YEARS	
Moratorium effective from :	28.03.2013	
Repayment Period (Inc Moratorium) :	15 YEARS	
Repayment Frequency :	10 Equal Yearly Instalments	
Repayment Type :	AVG	
First Repayment Date :	18.12.2018	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	LARA-I	30,00,00,000.00
	MOUDA-II	20,00,00,000.00
Total Allocated Amount		**50,00,00,000.00**

Form 8

TRANCHE NO

BP NO 5050000341 **T00001** **D00006**

Unsecured Loan From J & K BANK-III		
Source of Loan :	**J & K BANK-III**	
Currency :	INR	
Amount of Loan :	3,50,00,00,000	
Total Drawn amount :	50,00,00,000	
Date of Drawal :	26.03.2014	
Interest Type :	Floating	
Fixed Interest Rate :		
Base Rate, If Floating Interest	D00006 - 10.25%	
Margin, If Floating Interest :	-	
Are there any Caps/ Floor :	Y/N	
Frequency of Intt. Payment	MONTHLY	
If Above is yes, specify Caps/ Floor :		
Moratorium Period :	5 YEARS	
Moratorium effective from :	26.03.2014	
Repayment Period (Inc Moratorium) :	15 YEARS	
Repayment Frequency :	10 Equal Yearly Instalments	
Repayment Type :	AVG	
First Repayment Date :	18.12.2018	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	MOUDA-II	50,00,00,000.00
Total Allocated Amount		**50,00,00,000.00**

Form 8

TRANCHE NO

BP NO 5050000511 **T00001** **D00001**

Unsecured Loan From Bank of Karnataka Bank		
Source of Loan :	**Jammu & Kashmir Bank-IV**	
Currency :	INR	
Amount of Loan :	7,00,00,00,000	
Total Drawn amount :	5,00,00,00,000	
Date of Drawl:	31.03.2017	
Interest Type :	Floating	
Fixed Interest Rate :		
Base Rate, If Floating Interest	7.85%	
Margin, If Floating Interest :		
Are there any Caps/ Floor :	Y/N	
Frequency of Intt. Payment	MONTHLY	
If Above is yes, specify Caps/ Floor :		
Moratorium Period :	Nil	
Moratorium effective from :	31.03.2017	
Repayment Period (Inc Moratorium) :	12 Years	
Repayment Frequency :	9 Yearly Instalment	
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
	BARH-I	2,10,00,00,000.00
	BONGAIGAON	62,00,00,000.00
	KUDGI	35,00,00,000.00
	MOUDA-II	36,00,00,000.00
	SOLAPUR	40,00,00,000.00
	TAPOVAN VISHNUGAD	46,00,00,000.00
	SIMHADRI-II	52,00,00,000.00
	PAKRI BARWADIH COAL MINE	19,00,00,000.00
Total Allocated Amount		**5,00,00,00,000.00**

Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5050000511 **T00001** **D00002**

Unsecured Loan From Bank of Karnataka Bank		
Source of Loan :	**Jammu & Kashmir Bank-IV**	
Currency :	INR	
Amount of Loan :	7,00,00,00,000	
Total Drawn amount :	2,00,00,00,000	
Date of Drawl:	17.04.2017	
Interest Type :	Floating	
Fixed Interest Rate :		
Base Rate, If Floating Interest	7.85%	
Margin, If Floating Interest :		
Are there any Caps/ Floor :	Y/N	
Frequency of Intt. Payment	MONTHLY	
If Above is yes, specify Caps/ Floor :		
Moratorium Period :	Nil	
Moratorium effective from :	17.04.2017	
Repayment Period (Inc Moratorium) :	12 Years	
Repayment Frequency :	9 Yearly Instalment	
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
	KUDGI	10,00,00,000.00
	MOUDA-II	95,00,00,000.00
	BARH - II	30,00,00,000.00
	VINDHYACHAL-V	22,00,00,000.00
	KOLDAM	38,00,00,000.00
	RIHAND-III	5,00,00,000.00
Total Allocated Amount		**2,00,00,00,000.00**

Form 8

TRANCHE NO

BP NO 5050000521 **T00001** **D00003**

Unsecured Loan From HDFC Bank Ltd.-IV		
Source of Loan :	**HDFC Bank Ltd.-IV**	
Currency :	INR	
Amount of Loan :	20,00,00,00,000	
Total Drawn amount :	2,00,00,00,000	
Date of drawl	01.09.2017	
Interest Type :	Floating	
Fixed Interest Rate :		
Base Rate, If Floating Interest	7.90%	
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 :	3 Years	
Moratorium effective from :	01.09.2017	
Repayment Period (Inc Moratorium) :	12 Years	
Repayment Frequency :	9 Yearly Instalment	
Repayment Type :	AVG	
First Repayment Date :	17.04.2021	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	BONGAIGAON	40,00,00,000
	MANDSAUR SOLAR PV	30,00,00,000
	MOUDA-II	30,00,00,000
	LARA	1,00,00,00,000
Total Allocated Amount		**2,00,00,00,000**

Form 8

TRANCHE NO

BP NO 5050000981	**T00001**	**D00004**
Unsecured Loan From HDFC Bank Ltd. IX		
Source of Loan :	**HDFC Bank Ltd. IX**	
Currency :	INR	
Amount of Loan :	50,00,00,00,000	
Total Drawn amount :	16,10,00,00,000	
Date of drawl	24.08.2020	
Interest Type :	Floating	
Fixed Interest Rate :		
Base Rate, If Floating Interest	6.30%	
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 :	3 Years	
Moratorium effective from :	24.08.2020	
Repayment Period (Inc Moratorium) :	15 Years	
Repayment Frequency :	12 Yearly Instalment	
Repayment Type :	AVG	
First Repayment Date :	30.06.2024	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	BARH-II	**2,54,31,57,061**
	BONGAIGAON	**2,06,81,00,000**
	CHATTI BARIATU CMP	**13,60,00,000**
	JETSAR SOLAR	**20,00,00,000**
	KAHALGAON-II	**11,43,64,133**
	KHARGONE	**1,20,00,00,000**
	KOLDAM	**4,54,00,000**
	KORBA-III	**2,14,43,267**
	KUDGI	**45,00,00,000**
	LARA-I	**7,85,71,430**
	MOUDA-I	**69,46,38,787**
	MOUDA-II	**1,60,00,00,000**
	NORTH KARANPURA	**50,00,00,000**
	PAKRI BARWADIH CMB	**1,07,21,55,097**
	RAMMAM	**50,00,00,000**
	RIHAND-III	**20,43,00,000**
	SIMHADRI-II	**22,70,00,000**
	SIPAT-I	**18,57,38,787**
	SOLAPUR	**53,79,74,298**
	TANDA-II	**1,20,00,00,000**
	UNCHAHAR STPP IV	**18,00,00,000**
	VINDHYACHAL-IV	**85,83,00,000**
	VINDHYACHAL-V	**1,48,28,57,140**
Total Allocated Amount		**16,10,00,00,000**

Form 8

TRANCHE NO

BP NO 5050000321 **T00001**

Unsecured Loan From Union Bank of India-II		
Source of Loan :	**Union Bank of India-II**	
Currency :	INR	
Amount of Loan :	20,00,00,00,000	
Total Drawn amount :	10,60,00,00,000	
Interest Type :	Floating	
Fixed Interest Rate :		
Base Rate, If Floating Interest	D00001 to 2- 10.50%/D00003-12-10.25%/D000013-10%	
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 :	4 Years	
Moratorium effective from :	01.08.2012	
Repayment Period (Inc Moratorium) :	14 Years	
Repayment Frequency :	20 Half Yearly	
Repayment Type :	Average	
First Repayment Date :	01.02.2017	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	MOUDA-II	2,00,00,00,000
	LARA-I	10,00,00,000
	BARH-II	3,00,00,00,000
	KUDGI-I	1,00,00,00,000
	KOLDAM	2,00,00,00,000
	BARH-I	30,00,00,000
	RIHAND-III	25,00,00,000
	VINDHYACHAL-IV	20,00,00,000
	MOUDA-I	25,00,00,000
	SOLAPUR	50,00,00,000
	BONGAIGAON	50,00,00,000
	TAPOVAN VISHNUGAD	50,00,00,000
Total Allocated Amount		**10,60,00,00,000**

Name of the Company NTPC LTD
Name of the Power Station

Particulars					
			1	3	4
Source of Loan	4.375 % Euro Bonds 2024	4.25 % Euro Bonds 2026	2.75% Fixed Rate Notes due 2027	JPY Equ. 350Million A	JPY Equ. 350Million B
Drawal					
Currency	USD	USD	EUR	JPY	JPY
Amount of loan sanctioned	50,00,00,000	50,00,00,000	50,00,00,000	22,52,50,59,128	16,88,99,89,866
Amount of Gross Loan drawn upto 19.03.2024	50,00,00,000	50,00,00,000	50,00,00,000	22,52,50,59,128	16,88,99,89,866
Interest Type	Fixed	Fixed	Fixed	Floating	Floating
Fixed Interest Rate, if applicable	4.375% *	4.25% *	2.75% *	-	-
Base Rate, if floating interest*	-	-	-	6 Month JPY Libor /3 Months TONA*	6 Month JPY Libor /3 Months TONA*
Margin, if floating interest rate	-	-	-	0.95%	0.95%
Are there any Caps / Floor	No	No	No	No	No
If above is Yes, specify Caps / Floor	-	-	-	-	-
Moratorium Period	10 Years	10 Years	10 Years	9 Years	9 Years
Moratorium effective from	26-Nov-2014	26-Feb-2016	01-Feb-2017	12-Nov-2017	12-Nov-2017
Repayment period	Bullet payment	Bullet payment	Bullet payment	1 year	1 year
Repayment effective from	26-Nov-2024	26-Feb-2026	01-Feb-2027	12-Nov-2026	12-Nov-2026
Repayment frequency	One time	One time	One time	Three Time	Three Time
Repayment installment	50,00,00,000	50,00,00,000	50,00,00,000	7,50,83,53,043	5,62,99,96,622
Base Exchange Rate -					
Are foreign currency loan hedged	No	No	No	No	No
If above is Yes, specify details		-	-	-	-

Name of the Projects			%	%	%
Koldam	3.46%				
Sipat I					
Sipat-I FGD					
Sipat-II FGD					
Bongaigaon	1.93%	1.56%	1.71%	1.64%	2.34%
Tapovan Vishugad	1.10%	1.07%			
Rihand-II&III FGD					
VSTPS- I & II					
VSTPS- III & IV					
Simhadari-I&II FGD					
Mouda-I		0.33%			
Barh-I		6.48%			
Barh-II	1.46%				
Barh-II FGD					
Kudgi	18.67%	8.17%	11.09%	14.33%	8.61%
Lara	24.65%	11.09%	7.52%	8.38%	5.37%
Mouda-II	9.69%	8.24%	4.31%	1.72%	1.03%
Solapur	13.49%	6.82%	4.39%	1.26%	5.66%
Solapur FGD					
Vindhyachal-V	5.35%				
Vindhyachal-IV					
Gadarwara	7.78%	15.16%	10.41%	8.15%	5.12%
Kudgi (FGD)					
Singrauli-I&II FGD					
Korba-I,II&III					
North Karanpura	0.77%	8.43%	18.94%	15.11%	6.67%
Dadri-II	0.00%				
Ramagundam-I & II FGD					
Farakka-I,II&III FGD					
Kahalgaon-I&II FGD					
Talcher STPS-I&II FGD					
Talcher III					
Unchahar-I, II &III FGD					
Darlipali	2.43%	18.81%	12.49%	17.77%	8.11%
Tanda II	5.14%	6.97%	9.72%	13.39%	22.21%
Unchahar-IV	4.07%	5.30%	4.59%	1.01%	1.28%
Khargone		0.94%	10.48%	13.00%	22.76%
Ramman		0.62%			
Telangana			4.35%	4.24%	10.85%
Barauni-II					
Dulanga Coal Mine					
Talaipali Coal Mine					
Chatti Bariatu CMB					
Kirendari					
Nabinagar					
Ramagundam- III FGD					
NCPS-FGD					
Unchahar-IV FGD					
Mouda-I FGD					
Mouda-II FGD					
Dadri-II FGD					
Rihand-I FGD					
Darlipali (FGD)					
Telengana					
Pakri Barwadih CMB					
Vindhyachal-I &II FGD					
Vindhyachal-III &IV FGD					
Unallocated					
Total	100.0000%	100.0000%	100.0000%	100.0000%	100.0000%

Notes:-
a) The Interest rate is exclusive of withholding tax currently @ 5.46%(Inclusive of surcharge & education cess)*

Source of Loan	4.375 % Euro Bonds 2024	4.25 % Euro Bonds 2026	2.75% Fixed Rate Notes due 2027	JPY Equ. 350Million A	JPY Equ. 350Million B
Drawal					
Currency	USD	USD	EUR	JPY	JPY
	2,03,51,284.91	2,64,75,893.36	2,29,31,071.40	22,71,33,198.86	21,53,81,834.22
				0.58	

Name of the Company		
Name of the Power Station	**Mauda-II**	**Mauda-II**
Particulars		
Source of Loan	KfW Mauda-II (ECA)	KfW Mauda-II ESP & Others
Currency	EUR	EUR
Amount of loan sanctioned	5,20,00,000.00	5,50,00,000.00
Amount of Gross Loan drawn upto 17.09.2017	5,19,28,100.00	4,50,00,000.00
Amount of Gross Loan drawn after 17.09.2017		1,00,00,000.00
Interest Type	Fixed	Fixed
Fixed Interest Rate, if applicable	2.44%	3.24%
Base Rate, if floating interest	-	-
Margin, if floating interest rate	-	-
Are there any Caps / Floor	NO	NO
If above is Yes, specify Caps / Floor	-	-
Moratorium Period	3 Years 9 Months	4 Years 3 Months
Moratorium effective from	12-Sep-2013	18-Dec-2013
Repayment period	24 Installemnts	16 Installemnts
Repayment effective from	30-Jun-2017	15-Mar-2018
Repayment frequency	Semi Annual	Semi Annual
Repayment installment	EUR 2,163,195/- each except first of EUR 2,166,320/-	EUR 3,437,500/-
Base Exchange Rate (17.09.2017)	77.29	77.29
Base Exchange Rate (27.12.2017)		76.38
Name of the Projects	Mauda-II	Mauda-II

FORM-8 **Details of Allocation of Corporate Bonds to various**

Name of the Company
Name of the Power Station
Commercial Operation Date (COD)

Particulars										
Source of Loan - Bonds Series	**50-2A**	**50-3A**	**50-2B**	**50-3B**	**54**	**61**	**62**	**63**	**64**	**66**
Currency	INR	INR	INR	INR	INR	INR	INR	INR	INR	INR
Amount of Loan sanctioned (In Lakh)	24,994.59	31,202.76	9,139.28	39,996.81	10,30,683.05	1,07,250.00	80,000.00	67,000.00	70,000.00	3,92,500.00
Amount of Gross Loan drawn upto COD (In Lakh)	24,994.59	31,202.76	9,139.28	39,996.81	10,30,683.05	1,07,250.00	80,000.00	67,000.00	70,000.00	3,92,500.00
Interest Type	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
Fixed Interest Rate, if applicable**	8.48%	8.66%	8.73%	8.91%	8.49%	8.10%	7.58%	7.47%	7.49%	7.37%
Base Rate, if Floating Interest	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Margin, if Floating Interest	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Are there any Caps/Floor	No	No	No	No	No	No	No	No	No	No
If above is yes,specify caps/floor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Moratorium Period (In Years)	15	20	15	20	8	5	10	10	15	15
Moratorium effective from*	16-12-2013	16-12-2013	16-12-2013	16-12-2013	25-03-2015	27-05-2016	23-08-2016	16-09-2016	07-11-2016	14-12-2016
Repayment Period	Bullet Repayment	Bullet Repayment	Bullet Repayment	Bullet Repayment	Installments Due on 25/03/2023, 25/03/2024 & 25/03/2025	Installments Due on 27/05/2021, 27/05/2026 & 27/05/2031	Bullet Repayment	Bullet Repayment	Bullet Repayment	Bullet Repayment
Repayment effective from	16-12-2028	16-12-2033	16-12-2028	16-12-2033	25-03-2023	27-05-2021	23-08-2026	16-09-2026	07-11-2031	14-12-2031
Repayment Frequency	Bullet Repayment	Bullet Repayment	Bullet Repayment	Bullet Repayment	Installments Due on 25/03/2023, 25/03/2024 & 25/03/2025	Installments Due on 27/05/2021, 27/05/2026 & 27/05/2031	Bullet Repayment	Bullet Repayment	Bullet Repayment	Bullet Repayment
Repayment Instalment (In Lakh)	24,994.59	31,202.76	9,139.28	39,996.81	Installments 1st - 206,136.61 2nd - 412,273.22 3rd - 412,273.22	Installments 1st - 35,750.00 2nd - 35,750.00 3rd - 35,750.00	80,000.00	67,000.00	70,000.00	3,92,500.00
Base Exchange Rate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Door to Door Maturity (In Years)	15	20	15	20	10	15	10	10	15	15

Name of the Projects	**50-2A**	**50-3A**	**50-2B**	**50-3B**	**54**	**61**	**62**	**63**	**64**	**66**
Mauda II	1,928.15	2,407.07	705.03	3,085.47	45,800.00	4,000.00	4,500.00	4,400.00	3,300.00	11,000.00

*Moratorium period has been taken as the period from Deemed Date of Allotment till the date of first Redemption.
** Excluding Survillience fees of 0.03%

1. Source of loan means the agency from whom the loan has been taken such as WB, ADB, WMB, PNB, SBI, ICICI, IFC, PFC etc.
2. Currency refers to currency of loan such as US$, DM, Yen,Indian Rupee etc.
3. Details are to be submitted as on 31.03.2004 for existing assets and as on COD for the remaining assets.
4. Where the loan has been refinanced, details in the Form is to be given for the loan refinaced. However, the details of the original loan is to be given seperately in the same form.
5. If the Tariff in the petition is claimed seperately for various units, details in the Form is to be given seperately for all the units in the same form.
6. Interest type means whether the interest is fixed or floating.
7. Base rate means the base as PLR, LIBOR etc. over which the margin is to be added. Applicable base rate on different dates from the date of drawl may also be enclosed.
8. Margin means the points over and above the floating rate.
9. At times caps/floor are put at which the floating rates are frozen. If such a condition exists, specify the limits.
10. Moratorium period refers to the period during which loan servicing liability is not required.
11. Repayment period means the repayment of loan such as 7 years, 10 years, 25 years etc.
12. Repayment frequency means the interval at which the debt servicing is to be done such as monthly, quarterly, half yearly, annual, etc.
13. Where there is more than one drawal/repayment for a loan, the date & amount of each drawal/repayement and its allocation may also be given seperately.
14. If the repayment instalment amount and repayment date can not be worked out from the data furnished above, the repayment schedule to be furnished seperately.
15. In case of Foreign loan,date of each drawal & repayment alongwith exchange rate at that date may be given.
16. Base exchange rate means the exchange rate prevailing as on 31.03.2004 for existing assets and as on COD for the remaining assets.

Particulars			
Source of Loan - Bonds Series	**69**	**74**	**75**
Currency	INR	INR	INR
Amount of Loan sanctioned (In Lakh)	4,30,000	3,99,600	3,00,000
Amount of Gross Loan drawn upto COD (In L	4,30,000	3,99,600	3,00,000
Interest Type	Fixed	Fixed	Fixed
Fixed Interest Rate, if applicable	7.32%	6.87%	6.69%
Base Rate, if Floating Interest	N/A	N/A	N/A
Margin, if Floating Interest	N/A	N/A	N/A
Are there any Caps/Floor	No	No	No
If above is yes,specify caps/floor	N/A	N/A	N/A
Moratorium Period (In Years)	10	15 Years and 1 day	10
Moratorium effective from*	17-07-2019	20-04-2021	13-09-2021
Repayment Period	Bullet Repayment	Bullet Repayment	Bullet Repayment
Repayment effective from	17-07-2029	21-04-2036	13-09-2031
Repayment Frequency	Bullet Repayment	Bullet Repayment	Bullet Repayment
Repayment Instalment (In Lakh)	4,30,000	3,99,600	3,00,000
Base Exchange Rate	N/A	N/A	N/A
Door to Door Maturity (In Years)	10	15 Years and 1 day	10

Name of the Projects	69	74	75
MAUDA II	29,000.00	100.00	2,200.00

*Moratorium period has been taken as the period from Deemed Date of Allotment till the date of first Redemption.

1. Source of loan means the agency from whom the loan has been taken such as WB, ADB, WMB, PNB, SBI, ICICI, IFC, PFC etc.
2. Currency refers to currency of loan such as US$, DM, Yen,Indian Rupee etc.
3. Details are to be submitted as on 31.03.2004 for existing assets and as on COD for the remaining assets.
4. Where the loan has been refinanced, details in the Form is to be given for the loan refinaced. However, the details of the original loan is to be given seperately in the same form.
5. If the Tariff in the petition is claimed seperately for various units, details in the Form is to be given seperately for all the units in the same form.
6. Interest type means whether the interest is fixed or floating.
7. Base rate means the base as PLR, LIBOR etc. over which the margin is to be added. Applicable base rate on different dates from the date of drawl may also be enclosed.
8. Margin means the points over and above the floating rate.
9. At times caps/floor are put at which the floating rates are frozen. If such a condition exists, specify the limits.
10. Moratorium period refers to the period during which loan servicing liability is not required.
11. Repayment period means the repayment of loan such as 7 years, 10 years, 25 years etc.
12. Repayment frequency means the interval at which the debt servicing is to be done such as monthly, quarterly, half yearly, annual, etc.
13. Where there is more than one drawal/repayment for a loan, the date & amount of each drawal/repayement and its allocation may also be given seperately
14. If the repayment instalment amount and repayment date can not be worked out from the data furnished above, the same should be furnished seperately.
15. In case of Foreign loan,date of each drawal & repayment alongwith exchange rate at that date may be given.
16. Base exchange rate means the exchange rate prevailing as on 31.03.2004 for existing assets and as on COD for the remaining assets.

PART-I
FORM- 9A

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	**NTPC Limited**
Name of the Generating Station	**Mauda-II**
COD	**18-09-2017**
For Financial Year	**2024-29 (Summary)**

(Amount in Rs Lakh)

Sl. No.	Head of Work /Equipment	ACE Claimed (Projected on cash basis)						Regulation under which claimed
		2024-25	2025-26	2026-27	2027-28	2028-29	Total 2024-29	
A.	**For assets eligible for Normal ROE**							
1	Balance Civil Works in Main Plant & Offsite areas under original scope	35.00		396.00			**431.00**	24(1)(b), 25(1)(f) and Reg 102 (Power to Relax)
2	Balance works in SG area under original scope	80.00	43.00				**123.00**	
3	Balance Electrical Works under original scope	65.00					**65.00**	
4	Balance Works of Ash Handling System and Ash Water Recirculation System under original scope		1,122.00				**1,122.00**	
5	Upgradation of Mass Flow Controllers		708.00				**708.00**	25(2)(c)
6	Upgradation of CCTV camera servers		21.00				**21.00**	25(2)(c), 26(1)(d)
7	HCSD Silo Solid Flow Meter system upgradation		40.00				**40.00**	25(2)(c)
8	Upgradation of Switchyard SCADA System		142.00				**142.00**	25(2)(c)
9	Upgradation of Wagon Tippler PLC System			135.00			**135.00**	25(2)(c), 26(1)(i)
10	ABT Metering System Updradation			114.00			**114.00**	25(2)(b), 25(2)(c)
11	Upgradation of TG Vibration Monitoring System			70.00	70.00		**140.00**	25(2)(c)
	Total (A)	**180.00**	**2,076.00**	**715.00**	**70.00**	**-**	**3,041.00**	
B.	**For assets eligible for RoE @ MCLR plus 350 basis points**							
1	Installation of Weighbridge at Ash Dyke		36.00				**36.00**	26(1)(b), 19(3)(d)
2	Installation of comprehensive Metal Temperature Measurement System in Boiler		693.00	728.00			**1,421.00**	26(1)(i)
3	BioMass Handling System			1,146.00			**1,146.00**	26(1)(b), 26(1)(g)
4	Replacement of Fastoon Trolley with Energy Chain			120.00			**120.00**	26(1)(i)
5	Side Stream Filtration (SSF) System in Cooling Tower				1,283.04		**1,283.04**	26(1)(i)
	Total (B)	**-**	**729.00**	**1,994.00**	**1,283.04**	**-**	**4,006.04**	
Total Add. Cap. Claimed (A+B)		**180.00**	**2,805.00**	**2,709.00**	**1,353.04**	**-**	**7,047.04**	

(Petitioner)

PART-I
Form-9
(Amount in Rs Lakh)

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner : NTPC Ltd
Name of the Generating Station : Mauda-II
COD : 18.09.2017
For Financial Year : 2024-25

Sl. No.	Head of Work / Equipment	ACE (Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2	3	4	5= (3-4)	6	7	8	9
A1	**For assets eligible for Normal ROE**							
1	Balance Civil Works in Main Plant & Offsite areas under original scope	35.00		35.00		24(1)(b), 25(1)(f) and Reg 102 (Power to Relax)	It is submitted that the additional capitalization works under original scope of works after COD of the Station were affected by a number of uncontrollable factors including COVID-19, as submitted in detail by the Petitioner in Petition No 423/GT/2020 for tariff determination for 2019-24 period for the instant Station, based on which the Hon'ble Commission was pleased to allow capitalization of such works under original scope beyond cut-off date vide Order dated 04.03.2023. It is pertinent to note that the Civil Works of Main Plant & Offsite Civil Works package were particularly affected as the financial position of agency for the same, M/s IVRCL, deteriorated and agency went under insolvency vide Order dated 23.02.2018 passed by NCLT (copy attached herewith at **Annexure-A/1**). Subsequently, the balance works under the package have been progressively completed and major works have been completed in the 2019-24 period. However, some works mainly pertaining to roads in offsite areas are yet to be completed and are projected to be completed progressively and put to use in FY 26-27. Also, civil works already under progress will be capitalized and put to use after completion of minor leftover works in FY 24-25. Further, in SG area, certain works such as lift erection is under progress and material is already received for such minor equipments, and thus the works will be capitalized after being erected and put to use. Similarly, minor equipment in Switchgear area are already received and installation is under progress after which works would be put to use and capitalized. It is worth mentioning that progress of works is also affected due to various clearances/ work permits/ and additional precautions that are mandatorily required for carrying out execution/ construction/ installation works in an operational Plant. Pertinently, the said works, not immediately affecting the generation and taken up at a later stage, also protect the beneficiaries against front loading of tariff. In view of above, Hon'ble Commission may be pleased to allow the projected capitalizations for balance works under original scope under Regulation 24(1)(b), 25(1)(f) and exercising Regulation 102, i.e. Power to Relax.	
2	Balance works in SG area under original scope	80.00		80.00		24(1)(b), 25(1)(f) and Reg 102 (Power to Relax)		
3	Balance Electrical Works under original scope	65.00		65.00		24(1)(b), 25(1)(f) and Reg 102 (Power to Relax)		
	Sub total A1	**180.00**	**0.00**	**180.00**	**0.00**			
A2	**For assets eligible for RoE @ MCLR plus 350 basis points**							
1								
	Sub-total A2	**0.00**	**0.00**	**0.00**	**0.00**			
	Total Add Cap (A1+A2)	**180.00**	**0.00**	**180.00**	**0.00**			

PART-I
Form-9
(Amount in Rs Lakh)

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner : NTPC Ltd
Name of the Generating Station : Mauda-II
COD : 18.09.2017
For Financial Year : 2025-26

Sl. No.	Head of Work / Equipment	ACE (Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2	3	4	5= (3-4)	6	7	8	9
A1	For assets eligible for Normal ROE							
1	Balance Works of Ash Handling System and Ash Water Recirculation System under original scope	1122.00		1122.00		24(1)(b), 25(1)(f) and Reg 102 (Power to Relax)	It is submitted that the additional capitalization works under original scope of works after COD of the Station were affected by a number of uncontrollable factors including COVID-19, as submitted in detail by the Petitioner in Petition No 423/GT/2020 for tariff determination for 2019-24 period for the instant Station, based on which the Hon'ble Commission was pleased to allow capitalization of such works under original scope beyond cut-off date vide Order dated 04.03.2023. Further, with respect to the original scope of works of Ash Handling System and Ash Water Recirculation System, it is submitted that the same was awarded to M/s McNally Bharat. However, owing to poor financial position of the agency, the agency was admitted to National Compnay Law Tribunal (NCLT) for Corporate Insolvency Resolution vide NCLT Order dated 29.04.2022 (copy of the same attached herewith at **Annexure-A/2**). Although, major works of the said systems have been completed, due to agency under insolvency resolution, some works such as erection of EOT crane and ventilation fans work in Ash Handling Buildings/ Pump Houses , etc. are balance. Also, major works corresponding to the projected capitalization have been completed however same are yet to be put to use due to non-completion of minor nature of works. The instant projected capitalization is on account of amount to be capitalized after completion of works and getting put to use. In view of the above, the Hon'ble Commission may be pleased to allow the instant projected capitalization.	
2	Balance works in SG area under original scope	43.00		43.00		24(1)(b), 25(1)(f) and Reg 102 (Power to Relax)	Pl refer justification provided for this item in Form-9 for FY 24-25.	
3	Upgradation of Mass Flow Controllers	708.00		708.00		25(2)(c)	It is submitted that Mass Flow Controllers (MFCs) of M/s Alstom (acquired by M/s GE later on) make of Version MFC3000 V1 are installed in the instant Station for control of Balance of Plant (BoP) systems. As the Station was having limited stock of spares for the same, Station vide mail dated 11.01.2024 enquired with M/s GE for providing budgetary offer for the spares of MFC3000 V1 system. However, M/s GE vide mail dated 12.01.2024 intimated that MFC3000 V1 system has become obsolete and no spares of the same are available with M/s GE. M/s GE further intimated that the said controller version has been upgraded to MFC3000 V3. Further, Fan Rack also needs replacement for better heat dissipation thus improving the performance of the controller and its availability. Also, the taken out controllers can be used as spares for existing controllers in other Unit of the Station. Copy of communication with M/s GE in this regard is attached herewith at **Annexure-A/3**. Accordingly, it has been planned to upgrade the MFCs of Unit-1 of the instant Station on account of aforementioned obsolescence. Hon'ble Commission may be pleased to allow instant projected capitalization on this behalf.	
4	Upgradation of CCTV camera servers	21.00		21.00		25(2)(c), 26(1)(d)	It is submitted that servers of CCTV cameras installed in the instant Station are about 8 years old. The operating system for the same is based on Windows 7, which has achieved its End of Life (EOL) in January 2020. Further, the storage capacity of the servers has also exhausted. In view of the above, upgradation of servers is required. The proposed upgraded servers can hadle more cameras, have higher back up capacity and have much higher storage capacity and thereby will serve for longer period. Pertinently, CCTV cameras are one of the most vital elements used by CISF at the instant Station for surveillance and monitoring to ensure security of the Plant and thus upgradation of servers is necessary to ensure effective surveillance. Therefore, Hon'ble Commission may be pleased to allow the same.	

PART-I
Form-9
(Amount in Rs Lakh)

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner : NTPC Ltd
Name of the Generating Station : Mauda-II
COD : 18.09.2017
For Financial Year : 2025-26

Sl. No.	Head of Work / Equipment	ACE (Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2	3	4	5= (3-4)	6	7	8	9
5	HCSD Silo Solid Flow Meter system upgradation	40.00		40.00		25(2)(c)	It is submitted that Solid Flow Meter (SFM) system is being used to measure ash flow from HCSD silos to ART Mixing Tank. The said SFM system is about 8 years old and is LVDT based, due to which it is very sensitive and often does not relfects stable and correct ash flow data. Therefore, it is proposed to replace the same with technologically upgraded version. Hon'ble Commission may be pleased to allow the same.	
6	Upgradation of Switchyard SCADA System	142.00		142.00		25(2)(c)	It is submitted that the Switchgear SCADA System for the instant Station is based on Windows XP/ 7 OS. Pertinently, Microsoft Inc. has declared obsolescence and End of Life (EOL) of Windows XP (EOL April 2014) and Windows 7 (EOL Jan 2020). Also, it is pertinent to note that with respect to cyber security threat to power installations, Mininstry of Power, GoI, CEA, CERT-In, have issued several directions in recent years for implementation of latest cyber security provisions in the power systems. CERT-In, Ministry of Electronics and IT, GoI issued directions dated 28.04.2022 mandating to implement various cyber security measures. Also, CEA has issued CEA (Cyber Security in Power Sector), Guidelines 2021 regarding cyber security measures to be adopted in power sector. Significantly, the OEM, M/s Hitachi, vide its letter dated 16.11.2024 (attached herewith at **Annexure-A/4**), on account of aforesaid reasons has strongly recommended to replace the existing Switchyard SCADA version i.e. MicroSCADA to the latest version MicroSCADA 10 which will ensure compliance to cyber security measures, address issues due to obsolescence of Winsows XP/ 7 OS and additionally will provide several advantages as mentioned in the said annexure. In view of above, Hon'ble Commission may be pleased to allow instant projected capitalization on this behalf.	
	Sub total A1	**2076.00**	**0.00**	**2076.00**	**0.00**			
A2	**For assets eligible for RoE @ MCLR plus 350 basis points**							
1	Installation of Weighbridge at Ash Dyke	36.00		36.00		26(1)(b), 19(3)(d)	MOEF&CC Notification dated 31.12.2021 mandates that every coal or lignite based thermal power plant shall be primarily responsible to ensure 100 per cent utilisation of ash and also provides that Statutory obligation of 100 per cent utilisation of ash shall be treated as a change in law. A copy of relevant extract of the said Notification dated 31.12.2021 is attached herewith at **Annexure-A/5**. It is submitted that the Petitioner has taken substantive measures and has been able to achieve 100% ash utilization in the instant Station. Notably, significant ash utilization is in road projects, wherein ash is transported ash bulkers. As the frequency of bulkers has increased significantly, Weighbridge is proposed to be installed at Ash Dyke to facilitate the flow of ash transport vehicle as it will reduce waiting time for weighment during peak traffic hours and enable sustaining the 100% ash utilization. Accordingly, Hon'ble Commission may be pleased to allow the instant projected capitalization on this behalf.	

PART-I
Form-9
(Amount in Rs Lakh)

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner : NTPC Ltd
Name of the Generating Station : Mauda-II
COD : 18.09.2017
For Financial Year : 2025-26

Sl. No.	Head of Work / Equipment	ACE (Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2	3	4	5= (3-4)	6	7	8	9
2	Installation of comprehensive Metal Temperature Measurement System in Boiler	693.00		693.00		26(1)(i)	It is submitted that Metal Temperature Measurements (MTM) play an important role in monitoring and controling the boiler tubes temperature parameter. Pertinently, MTM is a leading indicator for monitoring the boiler tubes health. For the instant Station, Boiler Final Super Heater (FSH) of each unit has 101 assemblies and each assembly has 8 nos. of tubes, i.e. there are total of 808 no. of tubes. Presently, only 122 nos. MTM system is installed in the FSH tubes, i.e. coverage of MTM is only in about 15% of tubes. Due to the same, high metal temperature in most of the tubes often remains undetected, ultimately resulting at times into Boiler tube leakage and eventual shutdown of the Units. Therefore, it is proposed for 100% temperature mapping in FSH tubes. Continuous monitoring of boiler tube temperature, with 100% coverage of tubes, will help identify temperature aberration/ deviation and common fault reasons in tubes such as leakages, breaks, blockage etc. and help ensure the safety in pressurized boiler parts. The same will also enable identification of residual deposits by understanding temperature differentials in different sections. Timely identification of problem areas help wade off forced outages and critical damages by taking preventive measures by means of replacement or repairs. In addition, boiler throughput can be maintained by elimination of leaks and scaling deposits with scheduled cleaning during planned outages, which increase efficiency and longevity of the boiler tubes, the ultimate benefit of which shall accrure to the beneficiaries only in the form of higher availability of the system. In view of the above, Hon'ble Commission may be pleased to allow the projected capitalizations on this behalf.	
	Sub total A2	**729.00**	**0.00**	**729.00**	**0.00**			
	Total Add Cap (A1+A2)	**2805.00**	**0.00**	**2805.00**	**0.00**			

PART-I
Form-9
(Amount in Rs Lakh)

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner : NTPC Ltd
Name of the Generating Station : Mauda-II
COD : 18.09.2017
For Financial Year : 2026-27

Sl. No.	Head of Work / Equipment	ACE (Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2	3	4	5= (3-4)	6	7	8	9
A1	**For assets eligible for Normal ROE**							
1	Balance Civil Works in Main Plant & Offsite areas under original scope	396.00		396.00		24(1)(b), 25(1)(f) and Reg 102 (Power to Relax)	Pl refer justification provided for this item in Form-9 for FY 24-25.	
2	Upgradation of Wagon Tippler PLC System	135.00		135.00		25(2)(c), 26(1)(i)	It is submitted that in the Wagon Tippler (WT) System, presently there are 03 nos. remote I/O (at individual WT Control Room) for each WT and a common Control room having redundant DPU (+1 standby). Since all the WT are run by single DPU, any problem at DPU panel end eg. power supply failure, communication breakdown or DPU failure, software hang up, results in stopping of unloading of coal racks and incurring of demurrage charges, unsafe operation and may also lead to coal shortage at the Station. In the view of the same, it is proposed that RIO panels located in each WT be reconfigured as stand-alone systems with installation of 1 set of Controllers, 1 no. EWS and OWS for each WT. This configuration would provide reliability against any common problem at main control room DPU panels and have independent operation/control of each WTs. Therefore, following changes are proposed in the control system configuration to have absolute redundancy for each wagon tippler system: 1.Each wagon tippler would have separate set of PLCs in Operator cabin. 2.One Engineering Work Station (EWS) and one Operator Work Station (OWS) station would be configured for each WT. It is submitted that the same will ensure reliability of the control system, safe operation and availability of wagon tipplers. It is also noteworthy that the PLC system for WT installed in the instant Station are more than 10 years old and have become obsolete and the same would be upgraded during the above mentioned reconfiguration. Hon'ble Commission may be pleased to allow instant projected capitalization on this behalf.	
3	ABT Metering System Updradation	114.00		114.00		25(2)(b), 25(2)(c)	It is submitted that existing ABT Online DSM Metering System is based on DSM Regulations prevailing at the time of COD of Units in 2017. However, subsequent to that there have been several amendments in the DSM Regulations. Consequently, to implement the various provisions as per the extant DSM Regulations including CEA/ CERC guidelines for SAMAST, the metering system needs to be upgraded. Also, in the recent years, CEA, CERT-In, have issued directions for implementation of stringent cyber security measures and therefore to implement the provision with respect to Data Acquisition, Network Infrastructure and cyber security features, the ABT Metering System requires upgradation. The OEM, M/s COSPHI Engineering, vide its report dated 28.10.2024 (attached herewith **Annexure-A/6**) has recommended to upgrade the ABT Metering System owing to aforesaid reasons. In view of the above, Hon'ble Commission may be pleased to allow the instant projected capitalization.	

PART-I
Form-9
(Amount in Rs Lakh)

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner : NTPC Ltd
Name of the Generating Station : Mauda-II
COD : 18.09.2017
For Financial Year : 2026-27

Sl. No.	Head of Work / Equipment	ACE (Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2	3	4	5= (3-4)	6	7	8	9
4	Upgradation of TG Vibration Monitoring System	70.00		70.00		25(2)(c)	It is submitted that Healthy Online Vibration Monitoring & Analysis System with availability of live and historical diagnostic data plots and trends is utmost essential for vibration analysis of High-speed rotating equipment such as steam turbine for safe operation during various conditions such as during slow roll speed, Transient speed (start-up /shut down) & steady state conditions. The existing TG VMS has been supplied and installed by OEM, M/s Meggitt. It is pertinent to note that M/s Meggitt vide its letter dated 13.11.2024 has intimated that the existing VMS based on VM600 CMS/CMC16 has been discontinued and has become obsolete and has further recommended to upgrade the same with the latest generation technologically advanced VMS. The said Obsolescence Letter by OEM dated 13.11.2024 and product data sheet are attached herewith at **Annexure-A/7**).The upgraded VMS will have following advantages: i) Appropriate trigger setting for capturing live & historical data for a) Slow roll speed b) Transient c) steady state condition so that any abnormal condition is not missed out. ii) Long term historical data capture enabling large data points for plots to have meaningful information for diagnosis purpose. iii) Provision for all important diagnostic plots including bode plot, polar plot, full spectrum, trend plot of vibration components & gap voltage, Shaft centreline plots during slow roll, transient & steady state conditions. In view of the above, Hon'ble Commission may be pleased to allow the projected capitalizations on this behalf.	
	Sub total A1	**715.00**	**0.00**	**715.00**	**0.00**			
A2	**For assets eligible for RoE @ MCLR plus 350 basis points**							

PART-I
Form-9
(Amount in Rs Lakh)

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner : NTPC Ltd
Name of the Generating Station : Mauda-II
COD : 18.09.2017
For Financial Year : 2026-27

Sl. No.	Head of Work / Equipment	ACE (Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2	3	4	5= (3-4)	6	7	8	9
1	BioMass Handling System	1146.00		1146.00		26(1)(b), 26(1)(g)	It is submitted that Ministry of Power (MoP), GoI, vide their circular dated 08.12.2021 issued "Revised Policy for Biomass Utilization for Power Generation through Co-firing in Coal based Power Plants" as per which coal based power plants are mandated to use bio-mass along with coal for firing. Accordingly, CERC Tariff Regulation 2024 also provides for additional capitalization for works required towards biomass handling system to enable biomass cofiring. A copy of the said Circular dated 08.12.2021 is attached herewith at **Annexure-A/8**. To handle quantity of biomass pellet as mandated by MoP on daily basis, an automated and fire detection and protection equipped silo-based biomass storage and handling infrastructure is required to enable faster unloading of trucks, avoid damage to biomass pellets while handling, avoid dusting and fire hazard, waterproof storage of biomass in silos, metered and controlled feeding of biomass pellet in desired blend ratio, etc. Biomass pellet has high volatile content and low ignition temperature. Prolonged air contact with stagnant pile of biomass pellet may cause auto ignition due to self-heating and thus silo fire. Biomass dust poses fire hazard and needs to be avoided. The Biomass Handling System envisaged also ensures fire safety by avoiding air contact during silo storage, preventing biomass dust as well as adequate measure for fire detection and protection system. Accordingly, a comprehensive Biomass Handling System is envisaged in Mauda STPS (i.e. Mauda-I of 1000 MW and Mauda-II of 1320 MW) comprising of Biomass Pellet Silo & Active Discharge Aid i.e., Mechanical extractor/ rotary feeder, Belt Feeder (Enclosed type), Fire detection and alarm system, Fire Protection System, Dust Extraction System, Truck Tippler, Weigh Bridge, Bulk Reception Unit, Bucket elevator with Accessories and Supporting structures, Chute for conveyor for feeding biomass at coal belt, AC & Ventilation System, Belt Conveyor System, All applicable C&I and Electrical system/ Drives/ Illumination, Civil, Structural and architectural works including underground facilities like drainage, sewerage, trenches, earthing mat/grounding for structures and foundations of associated with weigh bridge, truck tippler, platform and ramp, bulk reception unit, bucket elevator, biomass pellet silo, conveyor, pipe/cable galleries and pipe/cable trenches, duct banks, pedestals, pre-fabricated containers for housing C&I and electrical items, Civil works associated with air-conditioning and ventilation system, general paving to make approach, etc. Accordingly, proportionate projected capital expenditure based on instant Station's capacity (1320 MW), has been claimed for the instant Station. Hon'ble Commission may be pleased to allow the same.	
2	Replacement of Fastoon Trolley with Energy Chain	120.00		120.00		26(1)(i)	It is submitted that for moving equipments like Stacker reclaimers and paddle feeders, energy chain system is required in order to avoid overtension and slackness of cables that pass through a pendulum. With energy chain system, CCRD motors and CRD drums could be avoided thus saving energy and preventing damage/ opening up of control cables. In upcoming thermal power projects, the equipment are equipped with the said Energy chain system only and the existing plants are increasingly upgrading to this more efficient and reliable energy chain system. In view of the same, Hon'ble Commission may be pleased to allow the instant projected capitalization.	
3	Installation of comprehensive Metal Temperature Measurement System in Boiler	728.00		728.00		26(1)(i)	Pl refer justification provided for this item in Form-9 for FY 25-26.	
	Sub-total A2	**1994.00**	**0.00**	**1994.00**	**0.00**			
	Total Add Cap (A1+A2)	**2709.00**	**0.00**	**2709.00**	**0.00**			

PART-I
Form-9
(Amount in Rs Lakh)

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner : NTPC Ltd
Name of the Generating Station : Mauda-II
COD : 18.09.2017
For Financial Year : 2027-28

Sl. No.	Head of Work / Equipment	ACE (Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2	3	4	5= (3-4)	6	7	8	9
A1	**For assets eligible for Normal ROE**							
1	Upgradation of TG Vibration Monitoring System	70.00		70.00		25(2)(c)	Pl refer justification provided for this item in Form-9 for FY 26-27.	
	Sub total A1	**70.00**	**0.00**	**70.00**	**0.00**			
A2	**For assets eligible for RoE @ MCLR plus 350 basis points**							
1	Side Stream Filtration (SSF) System in Cooling Tower	1283.04		1283.04		26(1)(i)	It is submitted that fine particulate in Cooling Tower's (CT) water supply is the underlying cause of many cooling tower problems. These ultra-fine particles can clog the cooling tower, interrupt heat exchange, ruin the effectiveness of chemical treatments and cause an increase in biological growth, scaling, fouling, etc. thereby reducing the overall efficiency of the CTs. Side Stream Filtration (SSF) systems reduce the amount of suspended solids, organics and silt particles by continuously filtering a percentage (5-15%) of the cooling tower water. The filtered water is then returned to the cooling water system for reuse. Side stream filtration is typically used in high-flow cooling towers. The major benefits expected from the installation of Side Stream Filters are: a) Protection of the cleaner surfaces given that solids have been filtered out of the system. This reduces corrosion rates and increases equipment lifetime. b) Side stream filtration, when paired with chemical treatment, will maintain a cleaner system, thus reducing the need to mechanically clean sumps and exchangers. This in turn lowers maintenance costs. c) Side stream filters keep the system clean for better heat transfer rates, for longer periods, lowering operational costs. d) Removing suspended solids from circulating water can in some cases deliver higher cycles, reducing the need to replace membranes. Therefore, the proposed SSF system will enhance the efficiency of the CTs along by enabling reductions in water and energy consumption, reductions in chemical use, lower maintenance costs, productivity improvements and reduced downtime and better control of biological growth. Hon'ble Commission may be pleased to allow the instant projected capitalization on this behalf.	
	Sub-total A2	**1283.04**	**0.00**	**1283.04**	**0.00**			
	Total Add Cap (A1+A2)	**1353.04**	**0.00**	**1353.04**	**0.00**			

PART-I
Form-9
(Amount in Rs Lakh)

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner : NTPC Ltd
Name of the Generating Station : Mauda-II
COD : 18.09.2017
For Financial Year : 2028-29

Sl. No.	Head of Work / Equipment	ACE (Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2	3	4	5= (3-4)	6	7	8	9
A1	For assets eligible for Normal ROE							
	Sub total A1							
A2	For assets eligible for RoE @ MCLR plus 350 basis points							
	Sub-total A2	0.00	0.00	0.00	0.00			
	Total Add Cap (A1+A2)	0.00	0.00	0.00	0.00			

PART-I
FORM- 10

Name of the Petitioner	**NTPC Limited**
Name of the Generating Station	**Mauda-II**
Date of Commercial Operation	**18-09-2017**

Amount in Rs Lakh

Financial Year (Starting from COD)1	Projected				
	2024-25	**2025-26**	**2026-27**	**2027-28**	**2028-29**
1		3	4	5	6
Amount capitalised in Work/ Equipment					
Financing Details	**Add cap is proposed to be financed in Debt:Equity ratio of 70:30**				
Loan-1					
Loan-2					
Loan-3 and so on					
Total Loan2					
Equity Internal Resources					
Others (Pl. specify)					
Total					

Petitioner

Part-I

Form-11

Calculation of Depreciation

Name of the Petitioner : NTPC Ltd
Name of the Power Station : Mauda-II

Sl.No.	Name of the Assets	Depreciation Rates as per CERC's Depreciation Rate Schedule	Gross Block as on 01.04.2024 (Rs Lakh)	Depreciation as on 01.04.2024
1	Freehold Land	0.00%	0.00	0.00
2	Leasehold Land	3.34%	16609.13	554.74
3	Land - Right of use	4.00%	0.00	0.00
4	Roads, bridges, culverts & helipads	3.34%	8049.16	268.84
5	Main Plant Buildings	3.34%	6544.58	218.59
6	Other Buildings	3.34%	12549.24	419.14
7	Temporary erection	100.00%	17.38	17.38
8	Water supply, drainage & sewerage	5.28%	5015.87	264.84
9	Railway siding	5.28%	8325.55	439.59
10	Earth dam reservoir	5.28%	104.40	5.51
11	Plant and machinery	5.28%	753321.51	39775.38
12	Furniture and fixtures	6.33%	2962.76	187.54
13	Other Office Equipments	6.33%	1053.12	66.66
14	EDP, WP machines & SATCOM equipme	15.00%	608.53	91.28
15	Vehicles including speedboats	9.50%	38.81	3.69
16	Construction equipment	5.28%	761.32	40.20
17	Electrical installations	5.28%	7508.03	396.42
18	Communication equipment	6.33%	411.28	26.03
19	Hospital equipment	5.28%	133.14	7.03
20	Laboratory and workshop equipment	5.28%	1822.39	96.22
21	Software	15.00%	27.99	4.20
	Total		**825864.20**	**42883.30**
	Rate of Depreciation			**5.1925%**

PART-I
FORM- 12

Statement of Depreciation

Name of the Company : NTPC Limited

Name of the Power Station : Mauda-II

(Amount in Rs Lakh)

S. No.	Particulars	Existing 2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7	8
1	Opening Capital Cost	7,56,080.67	7,62,930.22	7,63,110.22	7,65,915.22	7,68,624.22	7,69,977.26
2	Closing Capital Cost	7,62,930.22	7,63,110.22	7,65,915.22	7,68,624.22	7,69,977.26	7,69,977.26
3	Average Capital Cost	7,59,505.44	7,63,020.22	7,64,512.72	7,67,269.72	7,69,300.74	7,69,977.26
3a	Opening capital cost of IT/ Software	655.84	636.53	636.53	636.53	636.53	636.53
3b	Addition in capital cost of IT/ Software*	-19.32	0.00	0.00	0.00	0.00	0.00
3c	Closing capital cost of IT/ Software	636.53	636.53	636.53	636.53	636.53	636.53
3d	Average Cost of IT Equipments & Software	646.18	636.53	636.53	636.53	636.53	636.53
4	Freehold land	-	-	-	-	-	-
5	Rate of depreciation	5.1946%	5.1925%	5.1925%	5.1925%	5.1925%	5.1925%
6	Aggregate Depreciable value	6,83,619.51	6,86,781.85	6,88,125.10	6,90,606.40	6,92,434.31	6,93,043.18
7	Remaining Aggregate Depreciable Value at the beginning of the period	4,68,601.65	4,32,541.62	3,94,264.77	3,57,048.47	3,19,035.63	2,79,698.27
8	Balance useful life at the beginning of the period	18.15	17.15	16.15	15.15	14.15	13.15
9	Depreciation (for the period)	39,453.33	39,620.10	39,697.60	39,840.76	39,946.22	39,981.35
10	Depreciation (annualised)	39,453.33	39,620.10	39,697.60	39,840.76	39,946.22	39,981.35
11	Cumulative depreciation at the end of the period	2,54,473.49	2,93,860.33	3,33,557.93	3,73,398.69	4,13,344.91	4,53,326.26
12	Add: Cumulative depreciation adjustment of discharges/ reversals corresponding to un-discharged liabilities deducted as on 1.4.2009	-	-	-	-	-	-
13	Less: Cumulative depreciation adjustment on account of de-capitalisation	233.26	-	-	-	-	-
14	Net Cumulative depreciation at the end of the period after adjustments	2,54,240.23	2,93,860.33	3,33,557.93	3,73,398.69	4,13,344.91	4,53,326.26

*Shall be provided at truing-up

(Petitioner)

Calculation of Interest on Actual Loans

Name of the Company NTPC LTD.
Name of the Power Station MOUDA II

(Amount in lacs)

Sl. no.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	**KfW (ECA), Mauda-II repayment 30.06.2017 24 HY**					
	Gross loan - Opening	40135.23	40135.23	40135.23	40135.23	40135.23
	Cumulative repayments of Loans upto previous period	23362.24	26710.94	30059.64	33408.34	36757.03
	Net loan - Opening	16772.99	13424.29	10075.59	6726.89	3378.20
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period					
	Total	16772.99	13424.29	10075.59	6726.89	3378.20
	Repayments of Loans during the period	3348.70	3348.70	3348.70	3348.70	3348.70
	Net loan - Closing	13424.29	10075.59	6726.89	3378.20	29.50
	Average Net Loan	15098.64	11749.94	8401.24	5052.55	1703.85
	Rate of Interest on Loan	2.4739%	2.4739%	2.4739%	2.4807%	2.4739%
	Interest on Loan Annualised	373.52	290.68	207.84	125.34	42.15
2	**KfW Mauda-II (ESP & Others) repayment 15.03.2018 16 HY**					
	Gross loan - Opening	34780.50	34780.50	34780.50	34780.50	34780.50
	Cumulative repayments of Loans upto previous period	28259.16	32606.72	34780.50	34780.50	34780.50
	Net loan - Opening	6521.34	2173.78	0.00	0.00	0.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period					
	Total	6521.34	2173.78	0.00	0.00	0.00
	Repayments of Loans during the period	4347.56	2173.78	0.00	0.00	0.00
	Net loan - Closing	2173.78	0.00	0.00	0.00	0.00
	Average Net Loan	4347.56	1086.89	0.00	0.00	0.00
	Rate of Interest on Loan	3.2850%	3.2850%	3.2850%	3.2940%	3.2850%
	Interest on Loan Annualised	142.82	35.70	0.00	0.00	0.00
3	**KfW Mauda-II (ESP & Others) repayment 15.03.2018 16 HY (Drwal After COD)**					
	Gross loan - Opening	7638.20	7638.20	7638.20	7638.20	7638.20
	Cumulative repayments of Loans upto previous period	6206.04	7160.81	7638.20	7638.20	7638.20
	Net loan - Opening	1432.16	477.39	0.00	0.00	0.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period					
	Total	1432.16	477.39	0.00	0.00	0.00
	Repayments of Loans during the period	954.78	477.39	0.00	0.00	0.00
	Net loan - Closing	477.39	0.00	0.00	0.00	0.00
	Average Net Loan	954.78	238.69	0.00	0.00	0.00
	Rate of Interest on Loan	3.2850%	3.2850%	3.2850%	3.2940%	3.2850%
	Interest on Loan Annualised	31.36	7.84	0.00	0.00	0.00

Calculation of Interest on Actual Loans

Name of the Company	**NTPC LTD.**
Name of the Power Station	**MOUDA II**

(Amount in lacs)

Sl. no.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
4	**4.375% Eurobonds 2024 bullet payment**					
	Gross loan - Opening	31343.93	31343.93	31343.93	31343.93	31343.93
	Cumulative repayments of Loans upto previous period	0.00	31343.93	31343.93	31343.93	31343.93
	Net loan - Opening	31343.93	0.00	0.00	0.00	0.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period					
	Total	31343.93	0.00	0.00	0.00	0.00
	Repayments of Loans during the period	31343.93	0.00	0.00	0.00	0.00
	Net loan - Closing	0.00	0.00	0.00	0.00	0.00
	Average Net Loan	15671.96	0.00	0.00	0.00	0.00
	Rate of Interest on Loan	4.6277%	4.6277%	4.6277%	4.6277%	4.6277%
	Interest on Loan Annualised	725.25	0.00	0.00	0.00	0.00
5	**4.25% Eurobonds 2026**					
	Gross loan - Opening	26652.36	26652.36	26652.36	26652.36	26652.36
	Cumulative repayments of Loans upto previous period	0.00	0.00	26652.36	26652.36	26652.36
	Net loan - Opening	26652.36	26652.36	0.00	0.00	0.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period					
	Total	26652.36	26652.36	0.00	0.00	0.00
	Repayments of Loans during the period	0.00	26652.36	0.00	0.00	0.00
	Net loan - Closing	26652.36	0.00	0.00	0.00	0.00
	Average Net Loan	26652.36	13326.18	0.00	0.00	0.00
	Rate of Interest on Loan	4.4955%	4.4955%	4.4955%	4.4955%	4.4955%
	Interest on Loan Annualised	1198.16	599.08	0.00	0.00	0.00
6	**2.75% Fixed Rate Notes due 2027**					
	Gross loan - Opening	16652.29	16652.29	16652.29	16652.29	16652.29
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	16652.29	16652.29
	Net loan - Opening	16652.29	16652.29	16652.29	0.00	0.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period					
	Total	16652.29	16652.29	16652.29	0.00	0.00
	Repayments of Loans during the period	0.00	0.00	16652.29	0.00	0.00
	Net loan - Closing	16652.29	16652.29	0.00	0.00	0.00
	Average Net Loan	16652.29	16652.29	8326.14	0.00	0.00
	Rate of Interest on Loan	2.9088%	2.9088%	2.9088%	2.9088%	2.9088%
	Interest on Loan Annualised	484.38	484.38	242.19	0.00	0.00
7	**JPY Equ. 350Million A**					
	Gross loan - Opening	2464.55	2464.55	2464.55	2464.55	2464.55
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	821.52	1643.03
	Net loan - Opening	2464.55	2464.55	2464.55	1643.03	821.52
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period					
	Total	2464.55	2464.55	2464.55	1643.03	821.52
	Repayments of Loans during the period	0.00	0.00	821.52	821.52	821.52
	Net loan - Closing	2464.55	2464.55	1643.03	821.52	0.00
	Average Net Loan	2464.55	2464.55	2053.79	1232.28	410.76
	Rate of Interest on Loan	1.0219%	1.0219%	1.0219%	1.0219%	1.0219%
	Interest on Loan Annualised	25.19	25.19	20.99	12.59	4.20
8	**JPY Equ. 350Million B**					
	Gross loan - Opening	1106.56	1106.56	1106.56	1106.56	1106.56
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	368.85	737.71
	Net loan - Opening	1106.56	1106.56	1106.56	737.71	368.85
	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	1106.56	1106.56	1106.56	737.71	368.85
	Repayments of Loans during the period	0.00	0.00	368.85	368.85	368.85
	Net loan - Closing	1106.56	1106.56	737.71	368.85	0.00
	Average Net Loan	1106.56	1106.56	922.14	553.28	184.43
	Rate of Interest on Loan	1.0219%	1.0219%	1.0219%	1.0219%	1.0219%
	Interest on Loan Annualised	11.31	11.31	9.42	5.65	1.88
9	**SBI VIII Total repayment from 31.01.2022 -9Y**					
	Gross loan - Opening	38600.00	38600.00	38600.00	38600.00	38600.00
	Cumulative repayments of Loans upto previous period	12866.67	17155.56	21444.44	25733.33	30022.22
	Net loan - Opening	25733.33	21444.44	17155.56	12866.67	8577.78
	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	25733.33	21444.44	17155.56	12866.67	8577.78
	Repayments of Loans during the period	4288.89	4288.89	4288.89	4288.89	4288.89
	Net loan - Closing	21444.44	17155.56	12866.67	8577.78	4288.89
	Average Net Loan	23588.89	19300.00	15011.11	10722.22	6433.33
	Rate of Interest on Loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on Loan Annualised	1934.29	1582.60	1230.91	879.22	527.53

Calculation of Interest on Actual Loans

Name of the Company	**NTPC LTD.**
Name of the Power Station	**MOUDA II**

(Amount in lacs)

Sl. no.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
10	**J&K Bank III repayment from 18.12.2018 -10 Y**					
	Gross loan - Opening	7000.00	7000.00	7000.00	7000.00	7000.00
	Cumulative repayments of Loans upto previous period	4200.00	4900.00	5600.00	6300.00	7000.00
	Net loan - Opening	2800.00	2100.00	1400.00	700.00	0.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period	0.00	0.00	0.00	0.00	0.00
	Total	2800.00	2100.00	1400.00	700.00	0.00
	Repayments of Loans during the period	700.00	700.00	700.00	700.00	0.00
	Net loan - Closing	2100.00	1400.00	700.00	0.00	0.00
	Average Net Loan	2450.00	1750.00	1050.00	350.00	0.00
	Rate of Interest on Loan	7.9800%	7.9800%	7.9800%	7.9800%	0.0000%
	Interest on Loan Annualised	195.51	139.65	83.79	27.93	0.00
11	**J&K Bank IV repayment from 31.03.2021 -9 Y**					
	Gross loan - Opening	13100.00	13100.00	13100.00	13100.00	13100.00
	Cumulative repayments of Loans upto previous period	4366.67	7277.78	8733.33	10188.89	11644.44
	Net loan - Opening	8733.33	5822.22	4366.67	2911.11	1455.56
	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	0.00	0.00
	Total	8733.33	5822.22	4366.67	2911.11	1455.56
	Repayments of Loans during the period	2911.11	1455.56	1455.56	1455.56	1455.56
	Net loan - Closing	5822.22	4366.67	2911.11	1455.56	0.00
	Average Net Loan	7277.78	5094.44	3638.89	2183.33	727.78
	Rate of Interest on Loan	7.9800%	7.9800%	7.9800%	7.9800%	7.9800%
	Interest on Loan Annualised	580.77	406.54	290.38	174.23	58.08
12	**Union Bank of India II repayment from 01.02.2017 -20HY**					
	Gross loan - Opening	20000.00	20000.00	20000.00	20000.00	20000.00
	Cumulative repayments of Loans upto previous period	15000.00	17000.00	19000.00	20000.00	20000.00
	Net loan - Opening	5000.00	3000.00	1000.00	0.00	0.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period	0.00	0.00	0.00	0.00	0.00
	Total	5000.00	3000.00	1000.00	0.00	0.00
	Repayments of Loans during the period	2000.00	2000.00	1000.00	0.00	0.00
	Net loan - Closing	3000.00	1000.00	0.00	0.00	0.00
	Average Net Loan	4000.00	2000.00	500.00	0.00	0.00
	Rate of Interest on Loan	8.1000%	8.1000%	8.1000%	0.0000%	0.0000%
	Interest on Loan Annualised	324.00	162.00	40.50	0.00	0.00

Calculation of Interest on Actual Loans

Name of the Company NTPC LTD.
Name of the Power Station MOUDA II

(Amount in lacs)

Sl. no.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
13	**HDFC Bank Ltd.-III repayment from 04.12.2021 -9Y**					
	Gross loan - Opening	8000.00	8000.00	8000.00	8000.00	8000.00
	Cumulative repayments of Loans upto previous period	2666.67	3555.56	4444.44	5333.33	6222.22
	Net loan - Opening	5333.33	4444.44	3555.56	2666.67	1777.78
	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	5333.33	4444.44	3555.56	2666.67	1777.78
	Repayments of Loans during the period	888.89	888.89	888.89	888.89	888.89
	Net loan - Closing	4444.44	3555.56	2666.67	1777.78	888.89
	Average Net Loan	4888.89	4000.00	3111.11	2222.22	1333.33
	Rate of Interest on Loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on Loan Annualised	388.67	318.00	247.33	176.67	106.00
14	**HDFC Bank Ltd.-IV repayment from 17.04.2021 -9Y**					
	Gross loan - Opening	3000.00	3000.00	3000.00	3000.00	3000.00
	Cumulative repayments of Loans upto previous period	1000.00	1333.33	1666.67	2000.00	2333.33
	Net loan - Opening	2000.00	1666.67	1333.33	1000.00	666.67
	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	2000.00	1666.67	1333.33	1000.00	666.67
	Repayments of Loans during the period	333.33	333.33	333.33	333.33	333.33
	Net loan - Closing	1666.67	1333.33	1000.00	666.67	333.33
	Average Net Loan	1833.33	1500.00	1166.67	833.33	500.00
	Rate of Interest on Loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on Loan Annualised	145.75	119.25	92.75	66.25	39.75
15	**Corporation Bank-IV D1 repayment from 11.01.2023 -9Y (ICICI Bank-V prepayment loan)**					
	Gross loan - Opening	5000.00	5000.00	5000.00	5000.00	5000.00
	Cumulative repayments of Loans upto previous period	1111.11	1666.67	2222.22	2777.78	3333.33
	Net loan - Opening	3888.89	3333.33	2777.78	2222.22	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	3888.89	3333.33	2777.78	2222.22	1666.67
	Repayments of Loans during the period	555.56	555.56	555.56	555.56	555.56
	Net loan - Closing	3333.33	2777.78	2222.22	1666.67	1111.11
	Average Net Loan	3611.11	3055.56	2500.00	1944.44	1388.89
	Rate of Interest on Loan	8.2333%	8.2333%	8.2333%	8.2333%	8.2333%
	Interest on Loan Annualised	297.31	251.57	205.83	160.09	114.35
16	**HDFC Bank Ltd. V Total**					
	Gross loan - Opening	6184.00	6184.00	6184.00	6184.00	6184.00
	Cumulative repayments of Loans upto previous period	0.00	687.11	1374.22	2061.33	2748.44
	Net loan - Opening	6184.00	5496.89	4809.78	4122.67	3435.56
	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	0.00	0.00
	Total	6184.00	5496.89	4809.78	4122.67	3435.56
	Repayments of Loans during the period	687.11	687.11	687.11	687.11	687.11
	Net loan - Closing	5496.89	4809.78	4122.67	3435.56	2748.44
	Average Net Loan	5840.44	5153.33	4466.22	3779.11	3092.00
	Rate of Interest on Loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on Loan Annualised	4.64	4.10	3.55	3.00	2.46
17	**SBI-IX Total**					
	Gross loan - Opening	15300.00	15300.00	15300.00	15300.00	15300.00
	Cumulative repayments of Loans upto previous period	5100.00	8500.00	10200.00	11900.00	13600.00
	Net loan - Opening	10200.00	6800.00	5100.00	3400.00	1700.00
	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	10200.00	6800.00	5100.00	3400.00	1700.00
	Repayments of Loans during the period	3400.00	1700.00	1700.00	1700.00	1700.00
	Net loan - Closing	6800.00	5100.00	3400.00	1700.00	0.00
	Average Net Loan	8500.00	5950.00	4250.00	2550.00	850.00
	Rate of Interest on Loan	8.20%	8.20%	8.20%	8.20%	8.20%
	Interest on Loan Annualised	697.00	487.90	348.50	209.10	69.70
18	**SBI-XII D2 repayment from 31.03.2026 -9Y (IDFC Bank III prepayment loan)**					
	Gross loan - Opening	22500.00	22500.00	22500.00	22500.00	22500.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	2500.00	5000.00	7500.00
	Net loan - Opening	22500.00	22500.00	20000.00	17500.00	15000.00
	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	22500.00	22500.00	20000.00	17500.00	15000.00
	Repayments of Loans during the period	0.00	2500.00	2500.00	2500.00	2500.00
	Net loan - Closing	22500.00	20000.00	17500.00	15000.00	12500.00
	Average Net Loan	22500.00	21250.00	18750.00	16250.00	13750.00
	Rate of Interest on Loan	8.3000%	8.3000%	8.3000%	8.3000%	8.3000%
	Interest on Loan Annualised	1867.50	1763.75	1556.25	1348.75	1141.25

Calculation of Interest on Actual Loans

Name of the Company NTPC LTD.
Name of the Power Station MOUDA II

(Amount in lacs)

Sl. no.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
19	**HDFC-VII**					
	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	555.56	1111.11
	Net loan - Opening	5000.00	5000.00	5000.00	4444.44	3888.89
	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	4444.44	3888.89
	Repayments of Loans during the period	0.00	0.00	555.56	555.56	555.56
	Net loan - Closing	5000.00	5000.00	4444.44	3888.89	3333.33
	Average Net Loan	5000.00	5000.00	4722.22	4166.67	3611.11
	Rate of Interest on Loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on Loan Annualised	397.50	397.50	375.42	331.25	287.08
20	**HDFC-IX (Refinancing of Syndicate Bank-III)**					
	Gross loan - Opening	2500.00	2500.00	2500.00	2500.00	2500.00
	Cumulative repayments of Loans upto previous period	0.00	208.33	416.67	625.00	833.33
	Net loan - Opening	2500.00	2291.67	2083.33	1875.00	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	2291.67	2083.33	1875.00	1666.67
	Repayments of Loans during the period	208.33	208.33	208.33	208.33	208.33
	Net loan - Closing	2291.67	2083.33	1875.00	1666.67	1458.33
	Average Net Loan	2395.83	2187.50	1979.17	1770.83	1562.50
	Rate of Interest on Loan	8.4000%	8.4000%	8.4000%	8.4000%	8.4000%
	Interest on Loan Annualised	201.25	183.75	166.25	148.75	131.25
21	**HDFC-IX (Refinancing of Vijaya Bank-VI)**					
	Gross loan - Opening	13500.00	13500.00	13500.00	13500.00	13500.00
	Cumulative repayments of Loans upto previous period	0.00	1125.00	2250.00	3375.00	4500.00
	Net loan - Opening	13500.00	12375.00	11250.00	10125.00	9000.00
	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	13500.00	12375.00	11250.00	10125.00	9000.00
	Repayments of Loans during the period	1125.00	1125.00	1125.00	1125.00	1125.00
	Net loan - Closing	12375.00	11250.00	10125.00	9000.00	7875.00
	Average Net Loan	12937.50	11812.50	10687.50	9562.50	8437.50
	Rate of Interest on Loan	8.3750%	8.3750%	8.3750%	8.3750%	8.3750%
	Interest on Loan Annualised	1083.52	989.30	895.08	800.86	706.64
22	**Bonds- L 2A -repayment on 16.12.2028**					
	Gross loan - Opening	1928.15	1928.15	1928.15	1928.15	1928.15
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	1928.15	1928.15	1928.15	1928.15	1928.15
	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	1928.15	1928.15	1928.15	1928.15	1928.15
	Repayments of Loans during the period	0.00	0.00	0.00	0.00	1928.15
	Net loan - Closing	1928.15	1928.15	1928.15	1928.15	0.00
	Average Net Loan	1928.15	1928.15	1928.15	1928.15	964.08
	Rate of Interest on Loan	8.5100%	8.5100%	8.5100%	8.5100%	8.5100%
	Interest on Loan Annualised	164.09	164.09	164.09	164.09	82.04
23	**Bonds- L 3A -repayment on 16.12.2033**					
	Gross loan - Opening	2407.07	2407.07	2407.07	2407.07	2407.07
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	2407.07	2407.07	2407.07	2407.07	2407.07
	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	2407.07	2407.07	2407.07	2407.07	2407.07
	Repayments of Loans during the period	0.00	0.00	0.00	0.00	0.00
	Net loan - Closing	2407.07	2407.07	2407.07	2407.07	2407.07
	Average Net Loan	2407.07	2407.07	2407.07	2407.07	2407.07
	Rate of Interest on Loan	8.6900%	8.6900%	8.6900%	8.6900%	8.6900%
	Interest on Loan Annualised	209.17	209.17	209.17	209.17	209.17

Calculation of Interest on Actual Loans

Name of the Company	**NTPC LTD.**
Name of the Power Station	**MOUDA II**

(Amount in lacs)

Sl. no.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
24	**Bonds- L 2B-repayment on 16.12.2028**					
	Gross loan - Opening	705.03	705.03	705.03	705.03	705.03
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	705.03	705.03	705.03	705.03	705.03
	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	705.03	705.03	705.03	705.03	705.03
	Repayments of Loans during the period	0.00	0.00	0.00	0.00	705.03
	Net loan - Closing	705.03	705.03	705.03	705.03	0.00
	Average Net Loan	705.03	705.03	705.03	705.03	352.52
	Rate of Interest on Loan	8.7600%	8.7600%	8.7600%	8.7600%	8.7600%
	Interest on Loan Annualised	61.76	61.76	61.76	61.76	30.88
25	**Bonds- L 3B- repayment on 16.12.2033**					
	Gross loan - Opening	3085.47	3085.47	3085.47	3085.47	3085.47
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	3085.47	3085.47	3085.47	3085.47	3085.47
	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	3085.47	3085.47	3085.47	3085.47	3085.47
	Repayments of Loans during the period	0.00	0.00	0.00	0.00	0.00
	Net loan - Closing	3085.47	3085.47	3085.47	3085.47	3085.47
	Average Net Loan	3085.47	3085.47	3085.47	3085.47	3085.47
	Rate of Interest on Loan	8.9400%	8.9400%	8.9400%	8.9400%	8.9400%
	Interest on Loan Annualised	275.84	275.84	275.84	275.84	275.84
26	**Bond LIV repayment on 25.03.2023**					
	Gross loan - Opening	45800.00	45800.00	45800.00	45800.00	45800.00
	Cumulative repayments of Loans upto previous period	27480.00	45800.00	45800.00	45800.00	45800.00
	Net loan - Opening	18320.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period	0.00	0.00	0.00	0.00	0.00
	Total	18320.00	0.00	0.00	0.00	0.00
	Repayments of Loans during the period	18320.00	0.00	0.00	0.00	0.00
	Net loan - Closing	0.00	0.00	0.00	0.00	0.00
	Average Net Loan	9160.00	0.00	0.00	0.00	0.00
	Rate of Interest on Loan	8.5200%	8.5200%	8.5200%	8.5200%	8.5200%
	Interest on Loan Annualised	780.43	0.00	0.00	0.00	0.00

Calculation of Interest on Actual Loans

Name of the Company NTPC LTD.
Name of the Power Station MOUDA II

(Amount in lacs)

Sl. no.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
27	**Bond LXI repayment on 27.05.2021**					
	Gross loan - Opening	4000.00	4000.00	4000.00	4000.00	4000.00
	Cumulative repayments of Loans upto previous period	1333.33	1333.33	1333.33	2666.67	2666.67
	Net loan - Opening	2666.67	2666.67	2666.67	1333.33	1333.33
	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	2666.67	2666.67	2666.67	1333.33	1333.33
	Repayments of Loans during the period	0.00	0.00	1333.33	0.00	0.00
	Net loan - Closing	2666.67	2666.67	1333.33	1333.33	1333.33
	Average Net Loan	2666.67	2666.67	2000.00	1333.33	1333.33
	Rate of Interest on Loan	8.1300%	8.1300%	8.1300%	8.1300%	8.1300%
	Interest on Loan Annualised	216.80	216.80	162.60	108.40	108.40
28	**Bond LXII repayment on 23.08.2026**					
	Gross loan - Opening	4500.00	4500.00	4500.00	4500.00	4500.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	4500.00	4500.00
	Net loan - Opening	4500.00	4500.00	4500.00	0.00	0.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period	0.00	0.00	0.00	0.00	0.00
	Total	4500.00	4500.00	4500.00	0.00	0.00
	Repayments of Loans during the period	0.00	0.00	4500.00	0.00	0.00
	Net loan - Closing	4500.00	4500.00	0.00	0.00	0.00
	Average Net Loan	4500.00	4500.00	2250.00	0.00	0.00
	Rate of Interest on Loan	7.6100%	7.6100%	7.6100%	7.6100%	7.6100%
	Interest on Loan Annualised	342.45	342.45	171.23	0.00	0.00
29	**Bond LXIII repayment on 16.09.2026**					
	Gross loan - Opening	4400.00	4400.00	4400.00	4400.00	4400.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	4400.00	4400.00
	Net loan - Opening	4400.00	4400.00	4400.00	0.00	0.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period	0.00	0.00	0.00	0.00	0.00
	Total	4400.00	4400.00	4400.00	0.00	0.00
	Repayments of Loans during the period	0.00	0.00	4400.00	0.00	0.00
	Net loan - Closing	4400.00	4400.00	0.00	0.00	0.00
	Average Net Loan	4400.00	4400.00	2200.00	0.00	0.00
	Rate of Interest on Loan	7.5000%	7.5000%	7.5000%	7.5000%	7.5000%
	Interest on Loan Annualised	330.00	330.00	165.00	0.00	0.00
30	**Bond LXIV repayment on 07.11.2031**					
	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	0.00	0.00	0.00
	Net loan - Closing	3300.00	3300.00	3300.00	3300.00	3300.00
	Average Net Loan	3300.00	3300.00	3300.00	3300.00	3300.00
	Rate of Interest on Loan	7.5200%	7.5200%	7.5200%	7.5200%	7.5200%
	Interest on Loan Annualised	248.16	248.16	248.16	248.16	248.16
31	**Bond LXVI repayment on 14.12.2031**					
	Gross loan - Opening	11000.00	11000.00	11000.00	11000.00	11000.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	11000.00	11000.00	11000.00	11000.00	11000.00
	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	11000.00	11000.00	11000.00	11000.00	11000.00
	Repayments of Loans during the period	0.00	0.00	0.00	0.00	0.00
	Net loan - Closing	11000.00	11000.00	11000.00	11000.00	11000.00
	Average Net Loan	11000.00	11000.00	11000.00	11000.00	11000.00
	Rate of Interest on Loan	7.4000%	7.4000%	7.4000%	7.4000%	7.4000%
	Interest on Loan Annualised	814.00	814.00	814.00	814.00	814.00
32	**Bond 69 (Refinancing of United Bank of India-IV)**					
	Gross loan - Opening	2812.50	2812.50	2812.50	2812.50	2812.50
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	2812.50	2812.50	2812.50	2812.50	2812.50
	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	2812.50	2812.50	2812.50	2812.50	2812.50
	Repayments of Loans during the period	0.00	0.00	0.00	0.00	0.00
	Net loan - Closing	2812.50	2812.50	2812.50	2812.50	2812.50
	Average Net Loan	2812.50	2812.50	2812.50	2812.50	2812.50
	Rate of Interest on Loan	7.7650%	7.7650%	7.7650%	7.7650%	7.7650%
	Interest on Loan Annualised	218.39	218.39	218.39	218.39	218.39

Calculation of Interest on Actual Loans

Name of the Company	**NTPC LTD.**
Name of the Power Station	**MOUDA II**

(Amount in lacs)

Sl. no.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
33	**Bond 69**					
	Gross loan - Opening	26187.50	26187.50	26187.50	26187.50	26187.50
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	26187.50	26187.50	26187.50	26187.50	26187.50
	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	26187.50	26187.50	26187.50	26187.50	26187.50
	Repayments of Loans during the period	0.00	0.00	0.00	0.00	0.00
	Net loan - Closing	26187.50	26187.50	26187.50	26187.50	26187.50
	Average Net Loan	26187.50	26187.50	26187.50	26187.50	26187.50
	Rate of Interest on Loan	7.3500%	7.3500%	7.3500%	7.3500%	7.3500%
	Interest on Loan Annualised	1924.78	1924.78	1924.78	1924.78	1924.78
34	**Bond 74**					
	Gross loan - Opening	100.00	100.00	100.00	100.00	100.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	100.00	100.00	100.00	100.00	100.00
	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	100.00	100.00	100.00	100.00	100.00
	Repayments of Loans during the period	0.00	0.00	0.00	0.00	0.00
	Net loan - Closing	100.00	100.00	100.00	100.00	100.00
	Average Net Loan	100.00	100.00	100.00	100.00	100.00
	Rate of Interest on Loan	6.9000%	6.9000%	6.9000%	6.9000%	6.9000%
	Interest on Loan Annualised	6.90	6.90	6.90	6.90	6.90
35	**Bond 75**					
	Gross loan - Opening	2200.00	2200.00	2200.00	2200.00	2200.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	2200.00	2200.00	2200.00	2200.00	2200.00
	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	2200.00	2200.00	2200.00	2200.00	2200.00
	Repayments of Loans during the period	0.00	0.00	0.00	0.00	0.00
	Net loan - Closing	2200.00	2200.00	2200.00	2200.00	2200.00
	Average Net Loan	2200.00	2200.00	2200.00	2200.00	2200.00
	Rate of Interest on Loan	6.7200%	6.7200%	6.7200%	6.7200%	6.7200%
	Interest on Loan Annualised	147.84	147.84	147.84	147.84	147.84
	TOTAL LOAN					
	Gross loan - Opening	432883.35	432883.35	432883.35	432883.35	432883.35
	Cumulative repayments of Loans upto previous period	132951.88	208365.07	257459.97	304882.87	324420.17
	Net loan - Opening	299931.46	224518.28	175423.38	128000.47	108463.18
	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	299931.46	224518.28	175423.38	128000.47	108463.18
	Repayments of Loans during the period	75413.19	49094.90	47422.91	19537.29	21470.48
	Net loan - Closing	224518.28	175423.38	128000.47	108463.18	86992.70
	Average Net Loan	262224.87	199970.83	151711.92	118231.82	97727.94
	Rate of Interest on Loan	6.6012%	6.8139%	7.2099%	7.5669%	7.7174%
	Interest on Loan Annualised	17309.98	13625.86	10938.26	8946.46	7542.09

Calculation of Interest on Actual Loans

Name of the Company		**NTPC LTD.**				
Name of the Power Station		**MOUDA II**				
						(Amount in lacs)
Sl. no.	**Particulars**	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**
	SBI VIII D-4 repayment from 31.01.2022 -9Y					
	Gross loan - Opening	8400.00	8400.00	8400.00	8400.00	8400.00
	Cumulative repayments of Loans upto previous period	2800.00	3733.33	4666.67	5600.00	6533.33
	Net loan - Opening	5600.00	4666.67	3733.33	2800.00	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	5600.00	4666.67	3733.33	2800.00	1866.67
	Repayments of Loans during the period	933.33	933.33	933.33	933.33	933.33
	Net loan - Closing	4666.67	3733.33	2800.00	1866.67	933.33
	Average Net Loan	5133.33	4200.00	3266.67	2333.33	1400.00
	Rate of Interest on Loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on Loan Annualised	420.93	344.40	267.87	191.33	114.80
	SBI VIII D-5 repayment from 31.01.2022 -9Y					
	Gross loan - Opening	3500.00	3500.00	3500.00	3500.00	3500.00
	Cumulative repayments of Loans upto previous period	1166.67	1555.56	1944.44	2333.33	2722.22
	Net loan - Opening	2333.33	1944.44	1555.56	1166.67	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	2333.33	1944.44	1555.56	1166.67	777.78
	Repayments of Loans during the period	388.89	388.89	388.89	388.89	388.89
	Net loan - Closing	1944.44	1555.56	1166.67	777.78	388.89
	Average Net Loan	2138.89	1750.00	1361.11	972.22	583.33
	Rate of Interest on Loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on Loan Annualised	175.39	143.50	111.61	79.72	47.83
	SBI VIII D-6 repayment from 31.01.2022 -9Y					
	Gross loan - Opening	7600.00	7600.00	7600.00	7600.00	7600.00
	Cumulative repayments of Loans upto previous period	2533.33	3377.78	4222.22	5066.67	5911.11
	Net loan - Opening	5066.67	4222.22	3377.78	2533.33	1688.89
	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	5066.67	4222.22	3377.78	2533.33	1688.89
	Repayments of Loans during the period	844.44	844.44	844.44	844.44	844.44
	Net loan - Closing	4222.22	3377.78	2533.33	1688.89	844.44
	Average Net Loan	4644.44	3800.00	2955.56	2111.11	1266.67
	Rate of Interest on Loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on Loan Annualised	380.84	311.60	242.36	173.11	103.87
	SBI VIII D-8 repayment from 31.01.2022 -9Y					
	Gross loan - Opening	2500.00	2500.00	2500.00	2500.00	2500.00
	Cumulative repayments of Loans upto previous period	833.33	1111.11	1388.89	1666.67	1944.44
	Net loan - Opening	1666.67	1388.89	1111.11	833.33	555.56
	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	1666.67	1388.89	1111.11	833.33	555.56
	Repayments of Loans during the period	277.78	277.78	277.78	277.78	277.78
	Net loan - Closing	1388.89	1111.11	833.33	555.56	277.78
	Average Net Loan	1527.78	1250.00	972.22	694.44	416.67
	Rate of Interest on Loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on Loan Annualised	125.28	102.50	79.72	56.94	34.17

Calculation of Interest on Actual Loans

Name of the Company	**NTPC LTD.**
Name of the Power Station	**MOUDA II**

(Amount in lacs)

Sl. no.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
	SBI VIII D-11 repayment from 31.01.2022 -9Y					
	Gross loan - Opening	2600.00	2600.00	2600.00	2600.00	2600.00
	Cumulative repayments of Loans upto previous period	866.67	1155.56	1444.44	1733.33	2022.22
	Net loan - Opening	1733.33	1444.44	1155.56	866.67	577.78
	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	1733.33	1444.44	1155.56	866.67	577.78
	Repayments of Loans during the period	288.89	288.89	288.89	288.89	288.89
	Net loan - Closing	1444.44	1155.56	866.67	577.78	288.89
	Average Net Loan	1588.89	1300.00	1011.11	722.22	433.33
	Rate of Interest on Loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on Loan Annualised	130.29	106.60	82.91	59.22	35.53
	SBI VIII D-12 repayment from 31.01.2022 -9Y					
	Gross loan - Opening	4400.00	4400.00	4400.00	4400.00	4400.00
	Cumulative repayments of Loans upto previous period	1466.67	1955.56	2444.44	2933.33	3422.22
	Net loan - Opening	2933.33	2444.44	1955.56	1466.67	977.78
	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	2933.33	2444.44	1955.56	1466.67	977.78
	Repayments of Loans during the period	488.89	488.89	488.89	488.89	488.89
	Net loan - Closing	2444.44	1955.56	1466.67	977.78	488.89
	Average Net Loan	2688.89	2200.00	1711.11	1222.22	733.33
	Rate of Interest on Loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on Loan Annualised	220.49	180.40	140.31	100.22	60.13
	SBI VIII D-13 repayment from 31.01.2022 -9Y					
	Gross loan - Opening	3200.00	3200.00	3200.00	3200.00	3200.00
	Cumulative repayments of Loans upto previous period	1066.67	1422.22	1777.78	2133.33	2488.89
	Net loan - Opening	2133.33	1777.78	1422.22	1066.67	711.11
	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	2133.33	1777.78	1422.22	1066.67	711.11
	Repayments of Loans during the period	355.56	355.56	355.56	355.56	355.56
	Net loan - Closing	1777.78	1422.22	1066.67	711.11	355.56
	Average Net Loan	1955.56	1600.00	1244.44	888.89	533.33
	Rate of Interest on Loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on Loan Annualised	160.36	131.20	102.04	72.89	43.73
	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	666.67	888.89	1111.11	1333.33	1555.56
	Net loan - Opening	1333.33	1111.11	888.89	666.67	444.44
	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	1333.33	1111.11	888.89	666.67	444.44
	Repayments of Loans during the period	222.22	222.22	222.22	222.22	222.22
	Net loan - Closing	1111.11	888.89	666.67	444.44	222.22
	Average Net Loan	1222.22	1000.00	777.78	555.56	333.33
	Rate of Interest on Loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on Loan Annualised	100.22	82.00	63.78	45.56	27.33

Calculation of Interest on Actual Loans

Name of the Company	**NTPC LTD.**
Name of the Power Station	**MOUDA II**

(Amount in lacs)

Sl. no.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
	SBI VIII D-16 repayment from 31.01.2022 -9Y					
	Gross loan - Opening	2900.00	2900.00	2900.00	2900.00	2900.00
	Cumulative repayments of Loans upto previous period	966.67	1288.89	1611.11	1933.33	2255.56
	Net loan - Opening	1933.33	1611.11	1288.89	966.67	644.44
	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	1933.33	1611.11	1288.89	966.67	644.44
	Repayments of Loans during the period	322.22	322.22	322.22	322.22	322.22
	Net loan - Closing	1611.11	1288.89	966.67	644.44	322.22
	Average Net Loan	1772.22	1450.00	1127.78	805.56	483.33
	Rate of Interest on Loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on Loan Annualised	145.32	118.90	92.48	66.06	39.63
	SBI VIII D-21 repayment from 31.01.2022 -9Y					
	Gross loan - Opening	1500.00	1500.00	1500.00	1500.00	1500.00
	Cumulative repayments of Loans upto previous period	500.00	666.67	833.33	1000.00	1166.67
	Net loan - Opening	1000.00	833.33	666.67	500.00	333.33
	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	1000.00	833.33	666.67	500.00	333.33
	Repayments of Loans during the period	166.67	166.67	166.67	166.67	166.67
	Net loan - Closing	833.33	666.67	500.00	333.33	166.67
	Average Net Loan	916.67	750.00	583.33	416.67	250.00
	Rate of Interest on Loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on Loan Annualised	75.17	61.50	47.83	34.17	20.50
	SBI VIII Total					
	Gross loan - Opening	38600.00	38600.00	38600.00	38600.00	38600.00
	Cumulative repayments of Loans upto previous period	12866.67	17155.56	21444.44	25733.33	30022.22
	Net loan - Opening	25733.33	21444.44	17155.56	12866.67	8577.78
	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	25733.33	21444.44	17155.56	12866.67	8577.78
	Repayments of Loans during the period	4288.89	4288.89	4288.89	4288.89	4288.89
	Net loan - Closing	21444.44	17155.56	12866.67	8577.78	4288.89
	Average Net Loan	23588.89	19300.00	15011.11	10722.22	6433.33
	Rate of Interest on Loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on Loan Annualised	1934.29	1582.60	1230.91	879.22	527.53
	J&K Bank IV D1 repayment from 31.03.2021 -9 Y					
	Gross loan - Opening	3600.00	3600.00	3600.00	3600.00	3600.00
	Cumulative repayments of Loans upto previous period	1200.00	2000.00	2400.00	2800.00	3200.00
	Net loan - Opening	2400.00	1600.00	1200.00	800.00	400.00
	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	1600.00	1200.00	800.00	400.00
	Repayments of Loans during the period	800.00	400.00	400.00	400.00	400.00
	Net loan - Closing	1600.00	1200.00	800.00	400.00	0.00
	Average Net Loan	2000.00	1400.00	1000.00	600.00	200.00
	Rate of Interest on Loan	7.9800%	7.9800%	7.9800%	7.9800%	7.9800%
	Interest on Loan Annualised	159.60	111.72	79.80	47.88	15.96

Calculation of Interest on Actual Loans

Name of the Company	**NTPC LTD.**
Name of the Power Station	**MOUDA II**

(Amount in lacs)

Sl. no.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
	J&K Bank IV D2 repayment from 31.03.2021 -9 Y					
	Gross loan - Opening	9500.00	9500.00	9500.00	9500.00	9500.00
	Cumulative repayments of Loans upto previous period	3166.67	5277.78	6333.33	7388.89	8444.44
	Net loan - Opening	6333.33	4222.22	3166.67	2111.11	1055.56
	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	6333.33	4222.22	3166.67	2111.11	1055.56
	Repayments of Loans during the period	2111.11	1055.56	1055.56	1055.56	1055.56
	Net loan - Closing	4222.22	3166.67	2111.11	1055.56	0.00
	Average Net Loan	5277.78	3694.44	2638.89	1583.33	527.78
	Rate of Interest on Loan	7.9800%	7.9800%	7.9800%	7.9800%	7.9800%
	Interest on Loan Annualised	421.17	294.82	210.58	126.35	42.12
	J&K Bank IV Total					
	Gross loan - Opening	13100.00	13100.00	13100.00	13100.00	13100.00
	Cumulative repayments of Loans upto previous period	4366.67	7277.78	8733.33	10188.89	11644.44
	Net loan - Opening	8733.33	5822.22	4366.67	2911.11	1455.56
	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	8733.33	5822.22	4366.67	2911.11	1455.56
	Repayments of Loans during the period	2911.11	1455.56	1455.56	1455.56	1455.56
	Net loan - Closing	5822.22	4366.67	2911.11	1455.56	0.00
	Average Net Loan	7277.78	5094.44	3638.89	2183.33	727.78
	Rate of Interest on Loan	7.9800%	7.9800%	7.9800%	7.9800%	7.9800%
	Interest on Loan Annualised	580.77	406.54	290.38	174.23	58.08
	Union Bank of India II D1 repayment from 01.02.2017 -20HY					
	Gross loan - Opening	10000.00	10000.00	10000.00	10000.00	10000.00
	Cumulative repayments of Loans upto previous period	7500.00	8500.00	9500.00	10000.00	10000.00
	Net loan - Opening	2500.00	1500.00	500.00	0.00	0.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE	0.00	0.00	0.00	0.00	0.00
	Total	2500.00	1500.00	500.00	0.00	0.00
	Repayments of Loans during the period	1000.00	1000.00	500.00	0.00	0.00
	Net loan - Closing	1500.00	500.00	0.00	0.00	0.00
	Average Net Loan	2000.00	1000.00	250.00	0.00	0.00
	Rate of Interest on Loan	8.1000%	8.1000%	8.1000%	8.1000%	8.1000%
	Interest on Loan Annualised	162.00	81.00	20.25	0.00	0.00
	Union Bank of India II D2 repayment from 01.02.2017 -20HY					
	Gross loan - Opening	10000.00	10000.00	10000.00	10000.00	10000.00
	Cumulative repayments of Loans upto previous period	7500.00	8500.00	9500.00	10000.00	10000.00
	Net loan - Opening	2500.00	1500.00	500.00	0.00	0.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE	0.00	0.00	0.00	0.00	0.00
	Total	2500.00	1500.00	500.00	0.00	0.00
	Repayments of Loans during the period	1000.00	1000.00	500.00	0.00	0.00
	Net loan - Closing	1500.00	500.00	0.00	0.00	0.00
	Average Net Loan	2000.00	1000.00	250.00	0.00	0.00
	Rate of Interest on Loan	8.1000%	8.1000%	8.1000%	8.1000%	8.1000%
	Interest on Loan Annualised	162.00	81.00	20.25	0.00	0.00
	Union Bank of India II Total					
	Gross loan - Opening	20000.00	20000.00	20000.00	20000.00	20000.00
	Cumulative repayments of Loans upto previous period	15000.00	17000.00	19000.00	20000.00	20000.00
	Net loan - Opening	5000.00	3000.00	1000.00	0.00	0.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE	0.00	0.00	0.00	0.00	0.00
	Total	5000.00	3000.00	1000.00	0.00	0.00
	Repayments of Loans during the period	2000.00	2000.00	1000.00	0.00	0.00
	Net loan - Closing	3000.00	1000.00	0.00	0.00	0.00
	Average Net Loan	4000.00	2000.00	500.00	0.00	0.00
	Rate of Interest on Loan	8.1000%	8.1000%	8.1000%		
	Interest on Loan Annualised	324.00	162.00	40.50	0.00	0.00

Calculation of Interest on Actual Loans

Name of the Company	**NTPC LTD.**
Name of the Power Station	**MOUDA II**

(Amount in lacs)

Sl. no.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
	HDFC Bank Ltd.-III D5 repayment from 04.12.2021 - 9Y					
	Gross loan - Opening	2000.00	2000.00	2000.00	2000.00	2000.00
	Cumulative repayments of Loans upto previous period	666.67	888.89	1111.11	1333.33	1555.56
	Net loan - Opening	1333.33	1111.11	888.89	666.67	444.44
	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	1333.33	1111.11	888.89	666.67	444.44
	Repayments of Loans during the period	222.22	222.22	222.22	222.22	222.22
	Net loan - Closing	1111.11	888.89	666.67	444.44	222.22
	Average Net Loan	1222.22	1000.00	777.78	555.56	333.33
	Rate of Interest on Loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on Loan Annualised	97.17	79.50	61.83	44.17	26.50
	HDFC Bank Ltd.-III D7 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	500.00	666.67	833.33	1000.00	1166.67
	Net loan - Opening	1000.00	833.33	666.67	500.00	333.33
	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	1000.00	833.33	666.67	500.00	333.33
	Repayments of Loans during the period	166.67	166.67	166.67	166.67	166.67
	Net loan - Closing	833.33	666.67	500.00	333.33	166.67
	Average Net Loan	916.67	750.00	583.33	416.67	250.00
	Rate of Interest on Loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on Loan Annualised	72.88	59.63	46.38	33.13	19.88
	HDFC Bank Ltd.-III D8 repayment from 04.12.2021 - 9Y					
	Gross loan - Opening	4500.00	4500.00	4500.00	4500.00	4500.00
	Cumulative repayments of Loans upto previous period	1500.00	2000.00	2500.00	3000.00	3500.00
	Net loan - Opening	3000.00	2500.00	2000.00	1500.00	1000.00
	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	3000.00	2500.00	2000.00	1500.00	1000.00
	Repayments of Loans during the period	500.00	500.00	500.00	500.00	500.00
	Net loan - Closing	2500.00	2000.00	1500.00	1000.00	500.00
	Average Net Loan	2750.00	2250.00	1750.00	1250.00	750.00
	Rate of Interest on Loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on Loan Annualised	218.63	178.88	139.13	99.38	59.63
	HDFC Bank Ltd.-III Total					
	Gross loan - Opening	8000.00	8000.00	8000.00	8000.00	8000.00
	Cumulative repayments of Loans upto previous period	2666.67	3555.56	4444.44	5333.33	6222.22
	Net loan - Opening	5333.33	4444.44	3555.56	2666.67	1777.78
	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	5333.33	4444.44	3555.56	2666.67	1777.78
	Repayments of Loans during the period	888.89	888.89	888.89	888.89	888.89
	Net loan - Closing	4444.44	3555.56	2666.67	1777.78	888.89
	Average Net Loan	4888.89	4000.00	3111.11	2222.22	1333.33
	Rate of Interest on Loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on Loan Annualised	388.67	318.00	247.33	176.67	106.00
	J&K Bank III D3					
	Gross loan - Opening	2000.00	2000.00	2000.00	2000.00	2000.00
	Cumulative repayments of Loans upto previous period	1200.00	1400.00	1600.00	1800.00	2000.00
	Net loan - Opening	800.00	600.00	400.00	200.00	0.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period	0.00	0.00	0.00	0.00	0.00
	Total	800.00	600.00	400.00	200.00	0.00
	Repayments of Loans during the period	200.00	200.00	200.00	200.00	0.00
	Net loan - Closing	600.00	400.00	200.00	0.00	0.00
	Average Net Loan	700.00	500.00	300.00	100.00	0.00
	Rate of Interest on Loan	7.9800%	7.9800%	7.9800%	7.9800%	7.9800%
	Interest on Loan Annualised	55.86	39.90	23.94	7.98	0.00

Calculation of Interest on Actual Loans

Name of the Company	**NTPC LTD.**
Name of the Power Station	**MOUDA II**

(Amount in lacs)

Sl. no.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
	J&K Bank III D6					
	Gross loan - Opening	5000.00	5000.00	5000.00	5000.00	5000.00
	Cumulative repayments of Loans upto previous period	3000.00	3500.00	4000.00	4500.00	5000.00
	Net loan - Opening	2000.00	1500.00	1000.00	500.00	0.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period	0.00	0.00	0.00	0.00	0.00
	Total	2000.00	1500.00	1000.00	500.00	0.00
	Repayments of Loans during the period	500.00	500.00	500.00	500.00	0.00
	Net loan - Closing	1500.00	1000.00	500.00	0.00	0.00
	Average Net Loan	1750.00	1250.00	750.00	250.00	0.00
	Rate of Interest on Loan	7.9800%	7.9800%	7.9800%	7.9800%	7.9800%
	Interest on Loan Annualised	139.65	99.75	59.85	19.95	0.00
	J&K Bank III Total					
	Gross loan - Opening	7000.00	7000.00	7000.00	7000.00	7000.00
	Cumulative repayments of Loans upto previous period	4200.00	4900.00	5600.00	6300.00	7000.00
	Net loan - Opening	2800.00	2100.00	1400.00	700.00	0.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period	0.00	0.00	0.00	0.00	0.00
	Total	2800.00	2100.00	1400.00	700.00	0.00
	Repayments of Loans during the period	700.00	700.00	700.00	700.00	0.00
	Net loan - Closing	2100.00	1400.00	700.00	0.00	0.00
	Average Net Loan	2450.00	1750.00	1050.00	350.00	0.00
	Rate of Interest on Loan	7.9800%	7.9800%	7.9800%	7.9800%	0.0000%
	Interest on Loan Annualised	195.51	139.65	83.79	27.93	0.00
	HDFC Bank Ltd. V D1 repayment from 25.09.2024 -9Y					
	Gross loan - Opening	3984.00	3984.00	3984.00	3984.00	3984.00
	Cumulative repayments of Loans upto previous period	0.00	442.67	885.33	1328.00	1770.67
	Net loan - Opening	3984.00	3541.33	3098.67	2656.00	2213.33
	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	3984.00	3541.33	3098.67	2656.00	2213.33
	Repayments of Loans during the period	442.67	442.67	442.67	442.67	442.67
	Net loan - Closing	3541.33	3098.67	2656.00	2213.33	1770.67
	Average Net Loan	3762.67	3320.00	2877.33	2434.67	1992.00
	Rate of Interest on Loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on Loan Annualised	299.13	263.94	228.75	193.56	158.36
	HDFC Bank Ltd. V D7 repayment from 25.09.2024 -9Y					
	Gross loan - Opening	2200.00	2200.00	2200.00	2200.00	2200.00
	Cumulative repayments of Loans upto previous period	0.00	244.44	488.89	733.33	977.78
	Net loan - Opening	2200.00	1955.56	1711.11	1466.67	1222.22
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period	0.00	0.00	0.00	0.00	0.00
	Total	2200.00	1955.56	1711.11	1466.67	1222.22
	Repayments of Loans during the period	244.44	244.44	244.44	244.44	244.44
	Net loan - Closing	1955.56	1711.11	1466.67	1222.22	977.78
	Average Net Loan	2077.78	1833.33	1588.89	1344.44	1100.00
	Rate of Interest on Loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on Loan Annualised	165.18	145.75	126.32	106.88	87.45
	HDFC Bank Ltd. V Total					
	Gross loan - Opening	6184.00	6184.00	6184.00	6184.00	6184.00
	Cumulative repayments of Loans upto previous period	0.00	687.11	1374.22	2061.33	2748.44
	Net loan - Opening	6184.00	5496.89	4809.78	4122.67	3435.56
	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	0.00	0.00
	Total	6184.00	5496.89	4809.78	4122.67	3435.56
	Repayments of Loans during the period	687.11	687.11	687.11	687.11	687.11
	Net loan - Closing	5496.89	4809.78	4122.67	3435.56	2748.44
	Average Net Loan	5840.44	5153.33	4466.22	3779.11	3092.00
	Rate of Interest on Loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on Loan Annualised	464.32	409.69	355.06	300.44	245.81

Calculation of Interest on Actual Loans

Name of the Company	**NTPC LTD.**
Name of the Power Station	**MOUDA II**

(Amount in lacs)

Sl. no.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
	SBI-IX D5 repayment from 31.03.2021 -9Y					
	Gross loan - Opening	3300.00	3300.00	3300.00	3300.00	3300.00
	Cumulative repayments of Loans upto previous period	1100.00	1833.33	2200.00	2566.67	2933.33
	Net loan - Opening	2200.00	1466.67	1100.00	733.33	366.67
	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	2200.00	1466.67	1100.00	733.33	366.67
	Repayments of Loans during the period	733.33	366.67	366.67	366.67	366.67
	Net loan - Closing	1466.67	1100.00	733.33	366.67	0.00
	Average Net Loan	1833.33	1283.33	916.67	550.00	183.33
	Rate of Interest on Loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on Loan Annualised	150.33	105.23	75.17	45.10	15.03
	SBI-IX D8 repayment from 31.03.2021 -9Y					
	Gross loan - Opening	12000.00	12000.00	12000.00	12000.00	12000.00
	Cumulative repayments of Loans upto previous period	4000.00	6666.67	8000.00	9333.33	10666.67
	Net loan - Opening	8000.00	5333.33	4000.00	2666.67	1333.33
	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	8000.00	5333.33	4000.00	2666.67	1333.33
	Repayments of Loans during the period	2666.67	1333.33	1333.33	1333.33	1333.33
	Net loan - Closing	5333.33	4000.00	2666.67	1333.33	0.00
	Average Net Loan	6666.67	4666.67	3333.33	2000.00	666.67
	Rate of Interest on Loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on Loan Annualised	546.67	382.67	273.33	164.00	54.67
	SBI-IX Total					
	Gross loan - Opening	15300.00	15300.00	15300.00	15300.00	15300.00
	Cumulative repayments of Loans upto previous period	5100.00	8500.00	10200.00	11900.00	13600.00
	Net loan - Opening	10200.00	6800.00	5100.00	3400.00	1700.00
	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	10200.00	6800.00	5100.00	3400.00	1700.00
	Repayments of Loans during the period	3400.00	1700.00	1700.00	1700.00	1700.00
	Net loan - Closing	6800.00	5100.00	3400.00	1700.00	0.00
	Average Net Loan	8500.00	5950.00	4250.00	2550.00	850.00
	Rate of Interest on Loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on Loan Annualised	697.00	487.90	348.50	209.10	69.70

INTEREST RATE as on 31-03-2024				
S.NO	**BANK**	**RATE OF INTEREST**	**From**	**To**
	State Bank of India - VIII	8.20%	14-Feb-24	31-Mar-24
	Jammu & Kashmir Bank-III	7.98%	01-Apr-23	31-Mar-24
	Jammu & Kashmir Bank-IV	7.98%	01-Apr-23	31-Mar-24
	Union Bank-II	8.10%	11-Jan-24	31-Mar-24
	HDFC Bank Limited-III	7.95%	01-Jun-23	31-Mar-24
	HDFC Bank Limited-IV	7.95%	01-Jun-23	31-Mar-24
	Corporation Bank-IV	8.10%	11-Jan-24	31-Mar-24
	HDFC Bank Limited-V	7.95%	01-Jun-23	31-Mar-24
	State Bank of India - IX	8.20%	14-Feb-24	31-Mar-24
	State Bank of India - XII	8.20%	11-Jan-24	31-Mar-24
	HDFC Bank Limited-VII	7.95%	01-Jun-23	31-Mar-24
	HDFC-IX	7.95%	01-Jun-23	31-Mar-24

From 31-03-2024
To 31-03-2024

Name of the Loan	From	To	Floating Rate of interest	Withholding Tax (WHT)	Applicability of Withholding Tax	Interest Basis	Financial year	Interest rate (incl WHT)	Loan Proportion	No of days	Product	WAVG rate
JPY Equ. 350Million A	12-01-2024	31-03-2024	0.96342%	5.46000%	100.00000%	Act/365	2023-24	1.019061%	100%	1	0.010218527	
JPY Equ. 350Million A Weighted Average rate												1.02190%
JPY Equ. 350Million B	12-01-2024	31-03-2024	0.96342%	5.46000%	100.00000%	Act/365	2023-24	1.019061%	100%	1	0.010218527	
JPY Equ. 350Million B Weighted Average rate												1.02190%

Year wise Prepayment of Loans

Sr. No.	Bank	ROI on prepayment date	Date of Prepayment	Replaced with Bank	ROI of relplaced Loan	Prepayment Amount	Saving	Saving retained
Prepayment of Loans in 2019-20								
1	United Bank of India-IV	8.15%	23-Dec-19	Bond 69	7.32%	281250000	0.83%	0.4150%
Prepayment of Loans during 2020-21								
1	Syndicate Bank-III	7.20%	24-Aug-20	HDFC-IX	6.30%	250000000	0.90%	0.45%
2	Vijaya Bank-VI	7.15%	24-Aug-20	HDFC-IX	6.30%	1350000000	0.85%	0.43%

MOUDA II **(Rs Lakhs)**

Year wise Prepayment of Loans

Sr. No.	Bank	ROI on prepayment date	Date of Prepayment	Replaced with Bank	ROI of relplaced Loan	Prepayment Amount	Benefit(%)	Benefit(%) retained with NTPC
Prepayment of Loans during 2018-19								
1	ICICI Bank-V	8.60%	11-Jan-19	Corporation Bank IV	8.20%	5000.00	0.40%	0.13%
2	IDFC Bank III	8.65%	18-Feb-19	SBI-XII	8.35%	22500.00	0.30%	0.10%
						27500.00		

Details of Sourcewise fuel for computation of Energy Charges

Part-I
Form-15

	Company		NTPC						NTPC					
	Name of the generating Station		MOUDA STAGE II						MOUDA STAGE II					
	Month		APRIL 23						MAY 23					
SL	Particulars	Unit	Domestic Coal-Special arrangement	Domestic Coal	Domestic Coal (NTPC Mines)	E-auction coal	Imported coal	Bio Mass	Domestic Coal-Special arrangement	Domestic Coal	Domestic Coal (NTPC Mines)	E-auction coal	Imported coal	Bio Mass
A)	**OPENING QUANTITY**													
1	Opening Stock of coal	(MT)	287395.30	6494.34	2073.23	0.00	24902.26	0.00	335718.20	99599.98	6755.15	0.00	61541.98	0.00
2	Value of Stock	Rs	998334615.87	34015720.54	9872432.53	0.00	360803048.15	0.00	1156031886.26	550914810.11	30902751.25	0.00	865045724.60	0.00
B)	**QUANTITY**													
3	Quantity of Coal /Lignite supplied by Coal / Lignite Company	(MT)	450652.32	387645.07	23680.20	0.00	148108.50	274.07	377247.71	427014.93	0.00	0.00	159159.20	348.03
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	Coal supplied by Coal/Lignite Company (3+4)	(MT)	450652.32	387645.07	23680.20	0.00	148108.50	274.07	377247.71	427014.93	0.00	0.00	159159.20	348.03
6	Normative transit & Handling losses (for Coal /Lignite based projects)	(MT)	3605.22	3101.16	189.44	0.00	296.22	0.00	3017.98	3416.12	0.00	0.00	318.32	0.00
7	Net Coal / Lignite supplied (5 - 6)	(MT)	447047.10	384543.91	23490.76	0.00	147812.28	274.07	374229.73	423598.81	0.00	0.00	158840.88	348.03
C)	**PRICE**													
8	Amount charged by the Coal / Lignite Company	Rs	985033575.06	1835287314.12	106749191.00	0.00	2082861656.15	2404635.38	793069708.93	1976003607.00	0.00	0.00	2253765169.75	3059928.71
9	Adjustment (+ / -) in amount charged by coal / Lignite Company	Rs	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00		0.00	0.00
10	Handling,Sampling and such other Similar charges	Rs	25110001.98	2951311.35	180287.68	0.00	-15956382.85	0.00	30262325.27	-12130875.01	0.00	0.00	3621272.99	0.00
11	**Total Amount charged (8 +9+10)**	Rs	1010143577.04	1838238625.47	106929478.68	0.00	2066905273.30	2404635.38	823332034.20	1963872731.99	0.00	0.00	2257386442.74	3059928.71
D)	**TRANSPORTATION**	Rs												
12	Transportation charges by Rail / Ship / Road Transport													
	By Rail	Rs	522139423.76	292057655.03	229376.37	0.00	524281.98	143886.75	454201471.54	323517463.00	0.00	0.00	0.00	182715.75
	By Road	Rs												
	By Ship	Rs												
13	Adjustment (+/-) in amount charged by railways / transport company	Rs												
14	Demurrage charges, if any	Rs	1595241.95	1372205.69	83824.37	0.00	524281.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	Cost of diesel in transporting Coal through MGR system, if applicable	Rs												
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	520544181.81	290685449.34	145552.00	0.00	0.00	143886.75	454201471.54	323517463.00	0.00	0.00	0.00	182715.75
17	Total amount charged for Coal / Lignite supplied including transportation (11 + 16)	Rs	1530687758.85	2128924074.81	107075030.68	0.00	2066905273.30	2548522.13	1277533505.74	2287390194.99	0.00	0.00	2257386442.74	3242644.46
E)	**TOTAL COST**													
18	Landed Cost of Coal/Lignite (2+17) / (1+7)	**Rs/MT**	3443.46	5531.27	4574.70		14056.19	9298.80	3427.81	5424.91	4574.70		14168.22	9317.14
19	Blending Ratio (Domestic/Imported)		0.28	0.59	0.04	0.00	0.09	0.00	0.33	0.57	0.00	0.00	0.09	0.00
20	**Weighted average cost of Coal /Lignite (Including biomass)**	**Rs/MT**	5691.81						5588.92					
F)	**QUALITY**													
21	GCV of Domestic coal of the opening coal stock as per bill of coal company	(Kcal/Kg)	3932.99	4698.51	4750.00	0.00			3928.00	4687.00	4750.00	0.00		
22	GCV of Domestic coal supplied as per bill of coal company	(Kcal/Kg)	3924.00	4687.00	4750.00	0.00		3700.00	3933.00	4653.00	4750.00	0.00		3398.00
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Kg)					5000.26						5000.00	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Kg)					5000.00						5088.00	
25	Weighted average GCV of Coal /Lignite as billed (Including biomass)	(Kcal/Kg)	4506.32						4453.47					
26	GCV of Domestic coal of the Opening stock as received at station	(Kcal/Kg)	3384.77	3378.24	3633.00	0.00			3379.00	3369.00	3336.00	0.00		
27	GCV of Domestic coal/biomass supplied as received at station	(Kcal/Kg)	3375.00	3369.00	3310.00	0.00		3557.00	3298.00	3256.00	3338.00	0.00		3589.00
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Kg)					5169.90						5149.00	
29	GCV of Imported coal supplied as received at station	(Kcal/Kg)					5145.00						5141.00	
30	**Weighted average GCV of coal/ Lignite as Received (Including biomass)**	**(Kcal/Kg)**	3533.00						3475.00					

Details of Sourcewise fuel for computation of Energy Charges — **Part-I Form-15**

	Company		**NTPC**						**NTPC**					
	Name of the generating Station		**MOUDA STAGE II**						**MOUDA STAGE II**					
	Month		**JUNE 23**						**JULY 23**					
SL	**Particulars**	**Unit**	**Domestic Coal-Special arrangement**	**Domestic Coal**	**Domestic Coal (NTPC Mines)**	**E-auction coal**	**Imported coal**	**Bio Mass**	**Domestic Coal-Special arrangement**	**Domestic Coal**	**Domestic Coal (NTPC Mines)**	**E-auction coal**	**Imported coal**	**Bio Mass**
A)	**OPENING QUANTITY**													
1	Opening Stock of coal	(MT)	296471.38	242458.88	6755.15	0.00	107846.86	0.00	184832.93	279901.66	25590.65	0.00	48177.71	0.00
2	Value of Stock	Rs	1016247047.45	1315316982.08	30902751.25	0.00	1527997718.89	0.00	559194166.90	1385493528.19	121136231.49	0.00	681140629.24	0.00
B)	**QUANTITY**													
3	Quantity of Coal /Lignite supplied by Coal / Lignite Company	(MT)	306556.48	274957.17	18987.40	0.00	56628.80	272.94	413244.09	267418.32	0.00	0.00	975.30	277.49
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	Coal supplied by Coal/Lignite Company (3+4)	(MT)	306556.48	274957.17	18987.40	0.00	56628.80	272.94	413244.09	267418.32	0.00	0.00	975.30	277.49
6	Normative transit & Handling losses (for Coal /Lignite based projects)	(MT)	2452.45	2199.66	151.90	0.00	113.26	0.00	3305.95	2139.35	0.00	0.00	1.95	0.00
7	Net Coal / Lignite supplied (5 - 6)	(MT)	304104.03	272757.51	18835.50	0.00	56515.54	272.94	409938.14	265278.97	0.00	0.00	973.35	277.49
C)	**PRICE**													
8	Amount charged by the Coal / Lignite Company	Rs	626766936.08	1202436950.00	83925610.00	0.00	813556297.10	2379907.55	891750521.50	1276665464.00	0.00	0.00	106632.45	2354467.63
9	Adjustment (+ / -) in amount charged by coal / Lignite Company	Rs	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00		0.00	0.00
10	Handling,Sampling and such other Similar charges	Rs	-199322044.06	-173396268.18	1443942.24	0.00	-17784331.02	0.00	5146294.22	1813139.44	0.00	0.00	-21305746.83	0.00
11	**Total Amount charged (8 +9+10)**	Rs	427444892.02	1029040681.82	85369552.24	0.00	795771966.08	2379907.55	896896815.72	1278478603.44	0.00	0.00	-21199114.38	2354467.63
D)	**TRANSPORTATION**	Rs												
12	Transportation charges by Rail / Ship / Road Transport													
	By Rail	Rs	376214493.73	208581451.62	5047218.76	0.00	546653.88	89871.36	450130064.49	200497176.00	0.00	0.00	1142.00	0.00
	By Road	Rs	0.00						0.00					
	By Ship	Rs												
13	Adjustment (+/-) in amount charged by railways / transport company	Rs												
14	Demurrage charges, if any	Rs	2923547.73	2654239.62	183290.76	0.00	546653.88	0.00	478907.00	313121.00	0.00	0.00	1142.00	0.00
15	Cost of diesel in transporting Coal through MGR system, if applicable	Rs												
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	373290946.00	205927212.00	4863928.00	0.00	0.00	89871.36	449651157.49	200184055.00	0.00	0.00	0.00	0.00
17	Total amount charged for Coal / Lignite supplied including transportation (11 + 16)	Rs	800735838.02	1234967893.82	90233480.24	0.00	795771966.08	2469778.91	1346547973.21	1478662658.44	0.00	0.00	-21199114.38	2354467.63
E)	**TOTAL COST**													
18	Landed Cost of Coal/Lignite (2+17) / (1+7)	**Rs/MT**	3025.40	4949.93	4733.61		14138.09	9048.80	3204.16	5253.59	4733.61		13426.80	8484.87
19	Blending Ratio (Domestic/Imported)		0.40	0.45	0.00	0.00	0.15	0.00	0.18	0.80	#DIV/0!	0.00	0.02	0.00
20	**Weighted average cost of Coal /Lignite (Including biomass)**	**Rs/MT**			5515.95						5033.37			
F)	**QUALITY**													
21	GCV of Domestic coal of the opening coal stock as per bill of coal company	(Kcal/Kg)	3930.64	4659.47	4750.00	0.00			4118.68	4679.87	4750.00	0.00		
22	GCV of Domestic coal supplied as per bill of coal company	(Kcal/Kg)	4302.00	4698.00	4750.00	0.00		3382.00	4243.00	4722.00	0.00	0.00		3277.00
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Kg)					5063.43						5110.39	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Kg)					5200.00						5000.00	
25	Weighted average GCV of Coal /Lignite as billed (Including biomass)	(Kcal/Kg)	4515.75						4618.11					
26	GCV of Domestic coal of the Opening stock as received at station	(Kcal/Kg)	3336.30	3277.51	3336.00	0.00			3435.90	3419.12	3374.27	0.00		
27	GCV of Domestic coal/biomass supplied as received at station	(Kcal/Kg)	3533.00	3545.00	3388.00	0.00		3382.00	3186.00	3257.00	0.00	0.00		3277.00
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Kg)					5143.23						5150.37	
29	GCV of Imported coal supplied as received at station	(Kcal/Kg)					5164.00						5155.00	
30	**Weighted average GCV of coal/ Lignite as Received (Including biomass)**	**(Kcal/Kg)**			3679.00						3359.00			

Details of Sourcewise fuel for computation of Energy Charges — **Part-I Form-15**

	Company		**NTPC**						**NTPC**					
	Name of the generating Station		**MOUDA STAGE II**						**MOUDA STAGE II**					
	Month		**AUGUST 23**						**SEPTEMBER 23**					
SL	**Particulars**	**Unit**	**Domestic Coal-Special arrangement**	**Domestic Coal**	**Domestic Coal (NTPC Mines)**	**E-auction coal**	**Imported coal**	**Bio Mass**	**Domestic Coal-Special arrangement**	**Domestic Coal**	**Domestic Coal (NTPC Mines)**	**E-auction coal**	**Imported coal**	**Bio Mass**
A)	**OPENING QUANTITY**													
1	Opening Stock of coal	(MT)	294619.50	35395.38	25590.65	0.00	9161.48	0.00	151950.98	1686.03	5058.55	0.00	0.00	0.00
2	Value of Stock	Rs	944008271.12	185952838.69	121136231.49	0.00	123009408.45	0.00	494696972.43	10630242.01	23386097.64	0.00	0.00	0.00
B)	**QUANTITY**													
3	Quantity of Coal /Lignite supplied by Coal / Lignite Company	(MT)	604150.36	171995.60	35965.89	0.00	571.20	492.27	729309.58	115668.57	22286.47	0.00	65486.58	680.34
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	Coal supplied by Coal/Lignite Company (3+4)	(MT)	604150.36	171995.60	35965.89	0.00	571.20	492.27	729309.58	115668.57	22286.47	0.00	65486.58	680.34
6	Normative transit & Handling losses (for Coal /Lignite based projects)	(MT)	4833.20	1375.97	287.73	0.00	1.14		5834.48	925.35	178.29	0.00	130.97	
7	Net Coal / Lignite supplied (5 - 6)	(MT)	599317.16	170619.64	35678.16	0.00	570.06	492.27	723475.10	114743.22	22108.18	0.00	65355.61	680.34
C)	**PRICE**													
8	Amount charged by the Coal / Lignite Company	Rs	1188693628.83	980846668.61	161203843.00	0.00	8556689.75	3985716.44	1594493859.00	526560842.00	59436062.73	0.00	731861657.12	5658718.10
9	Adjustment (+ / -) in amount charged by coal / Lignite Company	Rs	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00		0.00	0.00
10	Handling,Sampling and such other Similar charges	Rs	19316305.47	4354362.27	910537.92	0.00	13250.62	0.00	50143978.34	7952839.81	1532315.31	0.00	920791.35	0.00
11	**Total Amount charged (8 +9+10)**	Rs	1208009934.30	985201030.88	162114380.92	0.00	8569940.37	3985716.44	1644637837.34	534513681.81	60968378.04	0.00	732782448.47	5658718.10
D)	**TRANSPORTATION**	Rs												
12	Transportation charges by Rail / Ship / Road Transport													
	By Rail	Rs	758985590.40	127939202.68	40010.00	0.00	635.00	0.00	945427243.97	84469725.00	36828403.00	0.00	655629.00	0.00
	By Road	Rs	0.00						0.00					
	By Ship	Rs												
13	Adjustment (+/-) in amount charged by railways / transport company	Rs												
14	Demurrage charges, if any	Rs	672073.00	191332.00	40010.00	0.00	635.00	0.00	7301591.00	1158033.00	223124.00	0.00	655629.00	0.00
15	Cost of diesel in transporting Coal through MGR system, if applicable	Rs												
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	758313517.40	127747870.68	0.00	0.00	0.00	0.00	938125652.97	83311692.00	36605279.00	0.00	0.00	0.00
17	Total amount charged for Coal / Lignite supplied including transportation (11 + 16)	Rs	1966323451.70	1112948901.56	162114380.92	0.00	8569940.37	3985716.44	2582763490.31	617825373.81	97573657.04	0.00	732782448.47	5658718.10
E)	**TOTAL COST**													
18	Landed Cost of Coal/Lignite (2+17) / (1+7)	**Rs/MT**	3255.64	6304.89	4623.08		13520.92	8096.61	3515.39	5397.75	4452.50		11212.24	8317.49
19	Blending Ratio (Domestic/Imported)		0.67	0.26	0.07	0.00	0.00	0.00	0.77	0.21	0.02	0.00	0.00	0.00
20	**Weighted average cost of Coal /Lignite (Including biomass)**	**Rs/MT**			4149.14						3949.93			
F)	**QUALITY**													
21	GCV of Domestic coal of the opening coal stock as per bill of coal company	(Kcal/Kg)	4204.37	4700.37	4750.00	0.00			4147.00	4717.00	4750.00	0.00		
22	GCV of Domestic coal supplied as per bill of coal company	(Kcal/Kg)	4119.00	4720.00	4750.00	0.00		3217.00	3996.00	4775.00	4407.00	0.00		3397.00
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Kg)					5108.20						5102.00	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Kg)					5000.00						5000.00	
25	Weighted average GCV of Coal /Lignite as billed (Including biomass)	(Kcal/Kg)	4338.16						4191.31					
26	GCV of Domestic coal of the Opening stock as received at station	(Kcal/Kg)	3263.66	3340.23	3374.27	0.00			3311.00	3429.00	3302.00	0.00		
27	GCV of Domestic coal/biomass supplied as received at station	(Kcal/Kg)	3334.00	3447.00	3251.00	0.00		3217.00	3250.00	3375.00	3460.00	0.00		3397.00
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Kg)					5150.47						5156.00	
29	GCV of Imported coal supplied as received at station	(Kcal/Kg)					5253.00						5083.00	
30	**Weighted average GCV of coal/ Lignite as Received (Including biomass)**	**(Kcal/Kg)**			3341.00						3293.00			

Details of Sourcewise fuel for computation of Energy Charges — **Part-I Form-15**

	Company		**NTPC**						**NTPC**					
	Name of the generating Station		**MOUDA STAGE II**						**MOUDA STAGE II**					
	Month		**OCTOBER 23**						**NOVEMBER 23**					
SL	**Particulars**	**Unit**	**Domestic Coal-Special arrangement**	**Domestic Coal**	**Domestic Coal (NTPC Mines)**	**E-auction coal**	**Imported coal**	**Bio Mass**	**Domestic Coal-Special arrangement**	**Domestic Coal**	**Domestic Coal (NTPC Mines)**	**E-auction coal**	**Imported coal**	**Bio Mass**
A)	**OPENING QUANTITY**													
1	Opening Stock of coal	(MT)	94971.23	5283.01	15530.31	0.00	50470.28	0.00	88870.38	17380.91	305.32	0.00	16221.46	613.39
2	Value of Stock	Rs	333860530.79	28516364.12	69148645.46	0.00	565884624.94	0.00	276260878.57	87174819.54	1359443.98	0.00	183452384.90	6609885.44
B)	**QUANTITY**													
3	Quantity of Coal /Lignite supplied by Coal / Lignite Company	(MT)	621826.76	92789.55	0.00	0.00	35041.30	1410.19	667613.30	221991.67	0.00	0.00	36039.40	0.00
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	Coal supplied by Coal/Lignite Company (3+4)	(MT)	621826.76	92789.55	0.00	0.00	35041.30	1410.19	667613.30	221991.67	0.00	0.00	36039.40	0.00
6	Normative transit & Handling losses (for Coal /Lignite based projects)	(MT)	4974.61	742.32	0.00	0.00	70.08		5340.91	1775.93	0.00	0.00	72.08	
7	Net Coal / Lignite supplied (5 - 6)	(MT)	616852.15	92047.23	0.00	0.00	34971.22	1410.19	662272.39	220215.74	0.00	0.00	35967.32	0.00
C)	**PRICE**													
8	Amount charged by the Coal / Lignite Company	Rs	1089759155.00	394334722.00	0.00	0.00	399757830.83	12362970.52	1355595163.11	1156912512.56	0.00	0.00	433279378.53	0.00
9	Adjustment (+ / -) in amount charged by coal / Lignite Company	Rs	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00		0.00	0.00
10	Handling,Sampling and such other Similar charges	Rs	10658001.60	-4618247.43	0.00	0.00	635670.79	2487348.40	4684965.09	1557822.77	0.00	0.00	11213178.07	0.00
11	**Total Amount charged (8 +9+10)**	Rs	1100417156.60	389716474.57	0.00	0.00	400393501.62	14850318.92	1360280128.20	1158470335.33	0.00	0.00	444492556.60	0.00
D)	**TRANSPORTATION**	Rs												
12	Transportation charges by Rail / Ship / Road Transport													
	By Rail	Rs	780184186.00	70185690.00	0.00	0.00	95821.00	345876.56	787094649.18	168650993.85	0.00	0.00	73711.00	0.00
	By Road	Rs	0.00						0.00					
	By Ship	Rs												
13	Adjustment (+/-) in amount charged by railways / transport company	Rs												
14	Demurrage charges, if any	Rs	1700402.00	253736.00	0.00	0.00	95821.00	0.00	1365460.00	454037.00	0.00	0.00	73711.00	0.00
15	Cost of diesel in transporting Coal through MGR system, if applicable	Rs												
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	778483784.00	69931954.00	0.00	0.00	0.00	345876.56	785729189.18	168196956.85	0.00	0.00	0.00	0.00
17	Total amount charged for Coal / Lignite supplied including transportation (11 + 16)	Rs	1878900940.60	459648428.57	0.00	0.00	400393501.62	15196195.48	2146009317.38	1326667292.18	0.00	0.00	444492556.60	0.00
E)	**TOTAL COST**													
18	Landed Cost of Coal/Lignite (2+17) / (1+7)	**Rs/MT**	3108.58	5015.55	4452.50		11309.24	10775.99	3224.78	5950.60	4452.50		12032.18	10775.99
19	Blending Ratio (Domestic/Imported)		0.68	0.25	0.00	0.00	0.07	0.00	0.81	0.17	0.00	0.00	0.02	0.00
20	**Weighted average cost of Coal /Lignite (Including biomass)**	**Rs/MT**			4169.46						3871.67			
F)	**QUALITY**													
21	GCV of Domestic coal of the opening coal stock as per bill of coal company	(Kcal/Kg)	4022.00	4774.00	4471.00	0.00			4015.00	4655.00	4471.00	0.00		3597.00
22	GCV of Domestic coal supplied as per bill of coal company	(Kcal/Kg)	4014.00	4648.00	0.00	0.00		3597.00	4125.00	4491.00	0.00	0.00		0.00
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Kg)					5000.00						5000.00	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Kg)					5000.00						5000.00	
25	Weighted average GCV of Coal /Lignite as billed (Including biomass)	(Kcal/Kg)	4243.39						4195.73					
26	GCV of Domestic coal of the Opening stock as received at station	(Kcal/Kg)	3261.00	3376.00	3431.00	0.00			3249.00	3564.00	3431.00	0.00		3597.00
27	GCV of Domestic coal/biomass supplied as received at station	(Kcal/Kg)	3247.00	3575.00	0.00	0.00		3597.00	3015.00	3435.00	0.00	0.00		0.00
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Kg)					5083.00						5120.00	
29	GCV of Imported coal supplied as received at station	(Kcal/Kg)					5174.00						5233.00	
30	**Weighted average GCV of coal/ Lignite as Received (Including biomass)**	**(Kcal/Kg)**			3459.00						3151.00			

Details of Sourcewise fuel for computation of Energy Charges — **Part-I Form-15**

	Company		**NTPC**						**NTPC**					
	Name of the generating Station		**MOUDA STAGE II**						**MOUDA STAGE II**					
	Month		**DECEMBER 23**						**JANUARY 24**					
SL	**Particulars**	**Unit**	**Domestic Coal-Special arrangement**	**Domestic Coal**	**Domestic Coal (NTPC Mines)**	**E-auction coal**	**Imported coal**	**Bio Mass**	**Domestic Coal-Special arrangement**	**Domestic Coal**	**Domestic Coal (NTPC Mines)**	**E-auction coal**	**Imported coal**	**Bio Mass**
A)	**OPENING QUANTITY**													
1	Opening Stock of coal	(MT)	88700.85	181753.32	305.32	0.00	24075.42	47.39	41127.36	392478.64	305.32	0.00	47428.48	0.00
2	Value of Stock	Rs	286040739.42	1081540963.59	1359443.98	0.00	289679766.71	510674.24	138459861.71	2288195970.73	1359443.98	0.00	570211606.18	0.00
B)	**QUANTITY**													
3	Quantity of Coal /Lignite supplied by Coal / Lignite Company	(MT)	640053.40	288838.79	0.00	0.00	49379.20	0.00	675673.06	265303.82	0.00	0.00	149738.10	1017.97
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	Coal supplied by Coal/Lignite Company (3+4)	(MT)	640053.40	288838.79	0.00	0.00	49379.20	0.00	675673.06	265303.82	0.00	0.00	149738.10	1017.97
6	Normative transit & Handling losses (for Coal /Lignite based projects)	(MT)	5120.43	2310.71	0.00	0.00	98.76		5405.38	2122.43	0.00	0.00	299.48	
7	Net Coal / Lignite supplied (5 - 6)	(MT)	634932.97	286528.08	0.00	0.00	49280.44	0.00	670267.68	263181.39	0.00	0.00	149438.62	1017.97
C)	**PRICE**													
8	Amount charged by the Coal / Lignite Company	Rs	1299624149.68	1479851294.74	0.00	0.00	591512532.00	0.00	1595288694.32	1237749285.00	0.00	0.00	1800566535.56	7406227.10
9	Adjustment (+ / -) in amount charged by coal / Lignite Company	Rs	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00		0.00	0.00
10	Handling,Sampling and such other Similar charges	Rs	88277042.49	-76807387.65	0.00	0.00	732732.17	0.00	5410327.44	2124371.35	0.00	0.00	1139361.58	0.00
11	**Total Amount charged (8 +9+10)**	Rs	1387901192.17	1403043907.09	0.00	0.00	592245264.17	0.00	1600699021.76	1239873656.35	0.00	0.00	1801705897.14	7406227.10
D)	**TRANSPORTATION**	Rs												
12	Transportation charges by Rail / Ship / Road Transport													
	By Rail	Rs	766883390.95	247639748.47	0.00	0.00	357263.00	0.00	644487032.43	232808119.58	0.00	0.00	664360.03	0.00
	By Road	Rs	0.00						0.00					
	By Ship	Rs												
13	Adjustment (+/-) in amount charged by railways / transport company	Rs												
14	Demurrage charges, if any	Rs	4630841.00	2089774.00	0.00	0.00	357263.00	0.00	2997835.39	1177103.58	0.00	0.00	664360.03	0.00
15	Cost of diesel in transporting Coal through MGR system, if applicable	Rs												
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	762252549.95	245549974.47	0.00	0.00	0.00	0.00	641489197.04	231631016.00	0.00	0.00	0.00	0.00
17	Total amount charged for Coal / Lignite supplied including transportation (11 + 16)	Rs	2150153742.12	1648593881.56	0.00	0.00	592245264.17	0.00	2242188218.80	1471504672.35	0.00	0.00	1801705897.14	7406227.10
E)	**TOTAL COST**													
18	Landed Cost of Coal/Lignite (2+17) / (1+7)	**Rs/MT**	3366.61	5830.12	4452.50		12022.56	10775.99	3346.45	5734.22	4452.50		12048.32	7275.49
19	Blending Ratio (Domestic/Imported)		0.80	0.18	0.00	0.00	0.01	0.00	0.62	0.27	0.00	0.00	0.10	0.00
20	**Weighted average cost of Coal /Lignite (Including biomass)**	**Rs/MT**			3940.32						4874.30			
F)	**QUALITY**													
21	GCV of Domestic coal of the opening coal stock as per bill of coal company	(Kcal/Kg)	4112.00	4503.00	4471.00	0.00		3597.00	4030.00	4507.00	4471.00	0.00		0.00
22	GCV of Domestic coal supplied as per bill of coal company	(Kcal/Kg)	4018.00	4509.00	0.00	0.00		0.00	3952.00	4426.00	0.00	0.00		3105.00
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Kg)					5000.00						5000.00	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Kg)					5000.00						5167.00	
25	Weighted average GCV of Coal /Lignite as billed (Including biomass)	(Kcal/Kg)	4130.38						4215.24					
26	GCV of Domestic coal of the Opening stock as received at station	(Kcal/Kg)	3043.00	3444.00	3431.00	0.00		3597.00	3197.00	3373.00	3431.00	0.00		0.00
27	GCV of Domestic coal/biomass supplied as received at station	(Kcal/Kg)	3218.00	3328.00	0.00	0.00		0.00	3204.00	3191.00	0.00	0.00		3105.00
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Kg)					5198.00						5270.00	
29	GCV of Imported coal supplied as received at station	(Kcal/Kg)					5305.00						5391.00	
30	**Weighted average GCV of coal/ Lignite as Received (Including biomass)**	**(Kcal/Kg)**			3260.00						3446.00			

Details of Sourcewise fuel for computation of Energy Charges — **Part-I Form-15**

	Company		**NTPC**						**NTPC**					
	Name of the generating Station		**MOUDA STAGE II**						**MOUDA STAGE II**					
	Month		**FEBRUARY 24**						**MARCH 24**					
SL	**Particulars**	**Unit**	**Domestic Coal-Special arrangement**	**Domestic Coal**	**Domestic Coal (NTPC Mines)**	**E-auction coal**	**Imported coal**	**Bio Mass**	**Domestic Coal-Special arrangement**	**Domestic Coal**	**Domestic Coal (NTPC Mines)**	**E-auction coal**	**Imported coal**	**Bio Mass**
A)	**OPENING QUANTITY**													
1	Opening Stock of coal	(MT)	0.00	475564.63	305.32	0.00	79694.95	228.21	1346.81	382970.78	0.00	0.00	98487.98	0.00
2	Value of Stock	Rs	0.00	2726993506.38	1359443.98	0.00	960190139.66	1660338.80	4746614.85	2215108166.11	0.00	0.00	1209703103.56	0.00
B)	**QUANTITY**													
3	Quantity of Coal /Lignite supplied by Coal / Lignite Company	(MT)	501090.13	245339.59	0.00	0.00	113662.20	692.36	539639.44	297624.82	19623.06	0.00	167835.80	925.65
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	Coal supplied by Coal/Lignite Company (3+4)	(MT)	501090.13	245339.59	0.00	0.00	113662.20	692.36	539639.44	297624.82	19623.06	0.00	167835.80	925.65
6	Normative transit & Handling losses (for Coal /Lignite based projects)	(MT)	4008.72	1962.72	0.00	0.00	227.32		4317.12	2381.00	156.98	0.00	335.67	
7	Net Coal / Lignite supplied (5 - 6)	(MT)	497081.41	243376.87	0.00	0.00	113434.88	692.36	535322.32	295243.82	19466.08	0.00	167500.13	925.65
C)	**PRICE**													
8	Amount charged by the Coal / Lignite Company	Rs	1286297332.67	1231966056.00	0.00	0.00	1409860322.86	4665277.23	1308916489.33	1699037878.77	91046711.00	0.00	2077741235.67	5971721.94
9	Adjustment (+ / -) in amount charged by coal / Lignite Company	Rs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	Handling,Sampling and such other Similar charges	Rs	9745148.31	4771338.59	0.00	0.00	2114731.94	0.00	24045218.06	21187571.91	574931.85	0.00	2764803.84	210576.91
11	**Total Amount charged (8 +9+10)**	Rs	1296042480.98	1236737394.59	0.00	0.00	1411975054.80	4665277.23	1332961707.39	1720225450.68	91621642.85	0.00	2080506039.51	6182298.85
D)	**TRANSPORTATION**	Rs												
12	Transportation charges by Rail / Ship / Road Transport													
	By Rail	Rs	461803093.00	197554982.00	0.00	0.00	1352118.00	0.00	473350298.80	230408063.35	198550.00	0.00	1698192.00	-3312249.02
	By Road	Rs												
	By Ship	Rs												
13	Adjustment (+/-) in amount charged by railways / transport company	Rs												
14	Demurrage charges, if any	Rs	5960934.00	2918543.00	0.00	0.00	1352118.00	0.00	5460167.00	3011420.00	198550.00	0.00	1698192.00	0.00
15	Cost of diesel in transporting Coal through MGR system, if applicable	Rs												
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	455842159.00	194636439.00	0.00	0.00	0.00	0.00	467890131.80	227396643.35	0.00	0.00	0.00	-3312249.02
17	Total amount charged for Coal / Lignite supplied including transportation (11 + 16)	Rs	1751884639.98	1431373833.59	0.00	0.00	1411975054.80	4665277.23	1800851839.19	1947622094.03	91621642.85	0.00	2080506039.51	2870049.83
E)	**TOTAL COST**													
18	Landed Cost of Coal/Lignite (2+17) / (1+7)	**Rs/MT**	3524.34	5784.01	4452.50		12282.75	6871.41	3364.45	6137.78	4706.73		12369.76	3100.58
19	Blending Ratio (Domestic/Imported)		0.49	0.40	0.00	0.00	0.11	0.00	0.49	0.36	0.04	0.00	0.11	0.00
20	**Weighted average cost of Coal /Lignite (Including biomass)**	**Rs/MT**			5388.47						5377.85			
F)	**QUALITY**													
21	GCV of Domestic coal of the opening coal stock as per bill of coal company	(Kcal/Kg)	0.00	4474.00	4471.00	0.00		3105.00	3472.00	4541.00	0.00	0.00		0.00
22	GCV of Domestic coal supplied as per bill of coal company	(Kcal/Kg)	3472.00	4673.00	0.00	0.00		3338.00	3811.00	4542.00	4396.00	0.00		3411.00
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Kg)					5127.00						5052.00	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Kg)					5000.00						5200.00	
25	Weighted average GCV of Coal /Lignite as billed (Including biomass)	(Kcal/Kg)	4072.72						4238.17					
26	GCV of Domestic coal of the Opening stock as received at station	(Kcal/Kg)	0.00	3300.00	3431.00	0.00		3105.00	3169.00	3279.00	0.00	0.00		0.00
27	GCV of Domestic coal/biomass supplied as received at station	(Kcal/Kg)	3169.00	3237.00	0.00	0.00		3338.00	3158.00	3285.00	3472.00	0.00		3411.00
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Kg)					5362.00						5257.00	
29	GCV of Imported coal supplied as received at station	(Kcal/Kg)					5183.00						5186.00	
30	**Weighted average GCV of coal/ Lignite as Received (Including biomass)**	**(Kcal/Kg)**			3441.00						3435.00			

Part-I
Form-15A

Details of Sourcewise fuel for computation of Energy Charges

	Company		NTPC	NTPC	NTPC	NTPC	NTPC	NTPC	NTPC	NTPC	NTPC	NTPC	NTPC	NTPC
	Name of the generating Station		MOUDA STAGE II	MOUDA STAGE II	MOUDA STAGE II	MOUDA STAGE II	MOUDA STAGE II	MOUDA STAGE II	MOUDA STAGE II	MOUDA STAGE II	MOUDA STAGE II	MOUDA STAGE II	MOUDA STAGE II	MOUDA STAGE II
	Month		APRIL 23	MAY 23	JUNE 23	JULY 23	AUG 23	SEP 23	OCT 23	NOV 23	DEC 23	JAN 24	FEB 24	MAR 24
SL	Particulars	Unit	LDO	LDO	LDO	LDO	LDO	LDO	LDO	LDO	LDO	LDO	LDO	LDO
A)	**OPENING QUANTITY**													
1	Opening Stock of Oil	KL	2707.296	5365.646	5010.646	4429.646	4069.646	3674.646	2447.646	5158.756	4948.756	3417.756	3017.756	2884.756
2	Value of Stock	Rs	208782836.3	410534914.6	383373246.6	338919925.4	311375698.7	281153561.3	187273655.6	421524360.1	404365162.1	279266437.6	246582251	235714758.9
B)	**QUANTITY**													
3	Quantity of LDO/HFO supplied by Oil Company	KL	3032.35	0	0	0	0	0	3091.11	0	0	0	0	3029.83
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0	0	0	0	0	0	0	0	0	0	0	0
5	LDO/HFO supplied by Oil Company (3+4)	KL	3032.35	0	0	0	0	0	3091.11	0	0	0	0	3029.83
6	Normative transit & Handling losses	KL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	Net Oil supplied (5 - 6)	KL	3032.35	0	0	0	0	0	3091.11	0	0	0	0	3029.83
C)	**PRICE**													
8	Amount charged by the Oil Company	Rs	230594429	0	0	0	0	0	265677062	0	0	0	0	205151538.8
9	Adjustment (+ / -) in amount charged by Oil Company	Rs	0	0	0	0	0	0	0	0	0	0	0	0
10	Handling,Sampling and such other Similar charges	Rs	0	0	0	0	0	0	0	0	0	0	0	0
11	**Total Amount charged (8 +9+10)**	Rs	230594429	0	0	0	0	0	265677062	0	0	0	0	205151538.8
D)	**TRANSPORTATION**	Rs												
12	Transportation charges by Rail / Ship / Road Transport													
	By Rail	Rs	0	0	0	0	0	0	0	0	0	0	0	0
	By Road	Rs	0	0	0	0	0	0	0	0	0	0	0	0
	By Ship	Rs	0	0	0	0	0	0	0	0	0	0	0	0
13	Adjustment (+/-) in amount charged by railways / transport company	Rs	0	0	0	0	0	0	0	0	0	0	0	0
14	Demurrage charges, if any	Rs	0	0	0	0	0	0	0	0	0	0	0	0
15	Cost of diesel in transporting LDO/HFO through MGR system, if applicable	Rs	0	0	0	0	0	0	0	0	0	0	0	0
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	0	0	0	0	0	0	0	0	0	0	0	0
17	Total amount charged for Oil supplied including transportation (11 + 16)	Rs	230594429	0	0	0	0	0	265677062	0	0	0	0	205151538.8
E)	**TOTAL COST**													
18	**Landed Cost of Oil (HFO/LDO) (2+17) / (1+7)**	Rs/KL	76551.283	76511.74054	76511.74053	76511.74053	76511.74051	76511.74052	81778.42057	81710.46665	81710.46664	81710.46664	81710.46664	74538.82617
19	Blending Ratio		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
20	Weighted average cost of Oil		76551.283	76511.74054	76511.74053	76511.74053	76511.74051	76511.74052	81778.42057	81710.46665	81710.46664	81710.46664	81710.46664	74538.82617
F)	**QUALITY**													
21	GCV of OIl of the opening stock as per bill of Oil company	(Kcal/Ltr)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
22	GCV of oil supplied as per bill of oil company	(Kcal/Ltr)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Ltr)												
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Ltr)												
25	Weighted average GCV of Oil as billed	(Kcal/Ltr)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
26	GCV of Oil of the Opening stock as received at station	(Kcal/Ltr)	9448	9438	9438	9438	9438	9438	9438	9438	9438	9438	9438	9438
27	GCV of Oil supplied (HFO/LDO)	(Kcal/Ltr)	9430						9438					9480
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Ltr)												
29	GCV of Imported coal supplied as received at station	(Kcal/Ltr)												
30	**Weighted average GCV of Oil (HFO/LDO)**	**(Kcal/Ltr)**	9438	9438	9438	9438	9438	9438	9438	9438	9438	9438	9438	9460

PART-I
FORM- L

Statement of Capital cost

Name of the Petitioner	**NTPC Limited**
Name of the Generating Station	**Mauda-II**
COD	**18-09-2017**

Amount in Rs Lakh

Sl. No.	Particulars	2024-25		
		Accrual Basis	Un-discharged Liabilities	Cash Basis
A	a) Opening Gross Block Amount as per books	8,25,864.20	20,218.85	8,05,645.35
	b) Amount of IDC in A(a) above	88,928.65	0.00	88,928.65
	c) Amount of FC in A(a) above	0.00	0.00	0.00
	d) Amount of FERV in A(a) above	35,263.37	0.00	35,263.37
	e) Amount of Hedging Cost in A(a) above	0.00	0.00	0.00
	f) Amount of IEDC in A(a) above	23,032.06	0.00	23,032.06
B	a) Addition in Gross Block Amount during the period (Direct purchases)	Shall be provided at truing-up for 2024-29 for subsequent periods		
	b) Amount of IDC in B(a) above			
	c) Amount of FC in B(a) above			
	d) Amount of FERV in B(a) above			
	e) Amount of Hedging Cost in B(a) above			
	f) Amount of IEDC in B(a) above			
C	a) Addition in Gross Block Amount during the period (Transferred from CWIP)			
	b) Amount of IDC in C(a) above			
	c) Amount of FC in C(a) above			
	d) Amount of FERV in C(a) above			
	e) Amount of Hedging Cost in C(a) above			
	f) Amount of IEDC in C(a) above			
D	a) Deletion in Gross Block Amount during the period			
	b) Amount of IDC in D(a) above			
	c) Amount of FC in D(a) above			
	d) Amount of FERV in D(a) above			
	e) Amount of Hedging Cost in D(a) above			
	f) Amount of IEDC in D(a) above			
E	a) Closing Gross Block Amount as per books			
	b) Amount of IDC in E(a) above			
	c) Amount of FC in E(a) above			
	d) Amount of FERV in E(a) above			
	e) Amount of Hedging Cost in E(a) above			
	f) Amount of IEDC in E(a) above			

PART-I
FORM- M

Statement of Capital Works in Progress

Name of the Petitioner	**NTPC Limited**
Name of the Generating Station	**Mauda-II**
COD	**18-09-2017**

(Amount in Rs Lakh)

Sl. No.	Particulars	2024-25		
		Accrual Basis	Un-discharged Liabilities	Cash Basis
A	a) Opening CWIP as per books	7,266.43	2,061.29	5,228.88
	b) Amount of IDC in A(a) above	148.00	-	148.00
	c) Amount of FC in A(a) above	-	-	-
	d) Amount of FERV in A(a) above	-	-	-
	e) Amount of Hedging Cost in A(a) above	-	-	-
	f) Amount of IEDC in A(a) above	100.37	-	100.37
				-
B	a) Addition in CWIP during the period	Shall be provided at truing-up for 2024-29 for subsequent periods		
	b) Amount of IDC in B(a) above			
	c) Amount of FC in B(a) above			
	d) Amount of FERV in B(a) above			
	e) Amount of Hedging Cost in B(a) above			
	f) Amount of IEDC in B(a) above			
C	a) Transferred to Gross Block Amount during the period			
	b) Amount of IDC in C(a) above			
	c) Amount of FC in C(a) above			
	d) Amount of FERV in C(a) above			
	e) Amount of Hedging Cost in C(a) above			
	f) Amount of IEDC in C(a) above			
D	a) Deletion in CWIP during the period			
	b) Amount of IDC in D(a) above			
	c) Amount of FC in D(a) above			
	d) Amount of FERV in D(a) above			
	e) Amount of Hedging Cost in D(a) above			
	f) Amount of IEDC in D(a) above			
E	a) Closing CWIP as per books			
	b) Amount of IDC in E(a) above			
	c) Amount of FC in E(a) above			
	d) Amount of FERV in E(a) above			
	e) Amount of Hedging Cost in E(a) above			
	f) Amount of IEDC in E(a) above			

PART-I
FORM- N

Calculation of Interest on Normative Loan

Name of the Company :	**NTPC Limited**
Name of the Power Station :	**Mauda-II**

(Amount in Rs Lakh)

S. No.	Particulars	Existing 2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7	8
1	Gross Normative loan – Opening	5,29,256.47	5,34,051.15	5,34,177.15	5,36,140.65	5,38,036.95	5,38,984.08
2	Cumulative repayment of Normative loan up to previous year	2,15,020.15	2,54,240.23	2,93,860.33	3,33,557.93	3,73,398.69	4,13,344.91
3	**Net Normative loan – Opening**	3,14,236.31	2,79,810.92	2,40,316.82	2,02,582.72	1,64,638.26	1,25,639.17
4	Add: Increase due to addition during the year / period	2011.52	126.00	1963.50	1896.30	947.13	0.00
5	Less: Decrease due to de-capitalisation during the year / period	518.57	0.00	0.00	0.00	0.00	0.00
6	Less: Decrease due to reversal during the year / period						
7	Add: Increase due to discharges during the year / period	3301.73	0.00	0.00	0.00	0.00	0.00
8	Repayment during the year	39453.33	39620.10	39697.60	39840.76	39946.22	39981.35
9	Repayment adj on account of Decap	233.26	0.00	0.00	0.00	0.00	0.00
10	Repayment adj for discharges upto 01.04.09	0.00	0.00	0.00	0.00	0.00	0.00
11	Less: Net repayment of loan	39220.08	39620.10	39697.60	39840.76	39946.22	39981.35
12	**Net Normative loan - Closing**	2,79,810.92	2,40,316.82	2,02,582.72	1,64,638.26	1,25,639.17	85,657.82
13	**Average Normative loan**	2,97,023.62	2,60,063.87	2,21,449.77	1,83,610.49	1,45,138.72	1,05,648.50
14	Weighted average rate of interest (%)	6.5772	6.6012	6.8139	7.2099	7.5669	7.7174
15	**Interest on Loan**	**19535.93**	**17167.33**	**15089.42**	**13238.11**	**10982.47**	**8153.36**

(Petitioner)

Form-O(i)
Additional Form

Name of Petitioner: NTPC Ltd
Name of Station: Mauda-II

Computation of Energy Charges

Parameter	Unit	2024-25	2025-26	2026-27	2027-28	2028-29
Station Capacity		**1320**	**1320**	**1320**	**1320**	**1320**
No of Days in the year	Days	365.00	365.00	365.00	366.00	365.00
Sp. Oil consumption	ml/kWh	0.50	0.50	0.50	0.50	0.50
Auxiliary consumption	%	5.75	5.75	5.75	5.75	5.75
Heat Rate	kCal/kWh	2244.79	2244.79	2244.79	2244.79	2244.79
Coal & Oil Parameters						
Wtd. Avg. Price of Coal	Rs./MT	4795.93	4795.93	4795.93	4795.93	4795.93
Wtd. Avg. GCV of Coal as received	kCal/kg	3406.00	3406.00	3406.00	3406.00	3406.00
Wtd. Avg. GCV of Coal as received after adj of 85 kcal/kg	kCal/kg	3321.00	3321.00	3321.00	3321.00	3321.00
Wtd. Avg. Price of Secondary Fuel	Rs/KL	78522.42	78522.42	78522.42	78522.42	78522.42
Wtd. Avg. GCV of Secondary Fuel	kCal/L	9439.83	9439.83	9439.83	9439.83	9439.83
Computation of Variable Charges						
Heat Contribution from SFO/ Alternate Fuel	kCal/kWh	4.72	4.72	4.72	4.72	4.72
Heat Contribution from coal	kCal/kWh	2,240.07	2,240.07	2,240.07	2,240.07	2,240.07
Specific Primary Fuel Consumption	kg/kWh	0.675	0.675	0.675	0.675	0.675
Variable Charge (Coal)	paise/kWh	343.230	343.230	343.230	343.230	343.230
Variable Charge (Oil)	paise/kWh	4.166	4.166	4.166	4.166	4.166
Total Variable Charges	paise/kWh	347.395	347.395	347.395	347.395	347.395
Computation of Fuel Expenses for Calculation of IOWC:						
ESO in a year	(MUs)	9263.57	9263.57	9263.57	9288.95	9263.57
ESO for 50 days	(MUs)	1268.982	1268.982	1268.982	1268.982	1268.982
ESO for 45 days	(MUs)	1142.084	1142.084	1142.084	1142.084	1142.084
Cost of coal for 50 Days	(Rs. Lakh)	43555.239	43555.239	43555.239	43555.239	43555.239
Cost of oil for 2 months	(Rs. Lakh)	643.15	643.15	643.15	644.91	643.15
Energy Expenses for 45 days	(Rs. Lakh)	39675.47	39675.47	39675.47	39675.47	39675.47

PETITIONER

PART 1
FORM- O

Calculation of Interest on Working Capital

Name of the Company :	**NTPC Limited**
Name of the Power Station :	**Mauda-II**

(Amount in Rs Lakh)

S. No.	Particulars	Existing 2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7	8
1	Cost of Coal/Lignite	51,805.84	43555.24	43555.24	43555.24	43555.24	43555.24
2	Cost of Main Secondary Fuel Oil	628.22	643.15	643.15	643.15	644.91	643.15
3	Fuel Cost						
4	Liquid Fuel Stock						
5	O & M Expenses	3,137.30	3912.06	4140.31	4377.79	4629.43	4896.65
6	Maintenance Spares	7,529.51	9388.95	9936.75	10506.71	11110.64	11751.97
7	Receivables	66,138.78	59481.14	59595.08	59767.31	59844.60	59969.61
8	Total Working Capital	129239.65	116980.53	117870.53	118850.19	119784.82	120816.62
9	Rate of Interest (%)	12.00	11.90	11.90	11.90	11.90	11.90
10	**Interest on Working Capital**	**15508.76**	**13920.68**	**14026.59**	**14143.17**	**14254.39**	**14377.18**

Petitioner

Summary of issue involved in the petition

Name of the Company :		**NTPC Limited**	
Name of the Power Station :		**Mauda STPS Stage-II**	
1	**Petitioner:**	**NTPC Limited**	
2	**Subject**	**APPROVAL OF TARIFF FOR THE PERIOD 2024-29**	
3	i)Approve tariff of Mauda-II for the tariff period 01.04.2024 to 31.03.2029. ii)Allow the recovery of filing fees as & when paid to the Hon'ble Commission and publication expenses from the beneficiaries. iii)Allow reimbursement of Ash Utilization Charges directly from the beneficiaries on monthly basis, subject to true up. iv)Allow the recovery of pay/wage revision as additional O&M over and above the normative O&M v)Consider station heat rate based on design heat rate with applicable operating margin. vi)Pass any other order as it may deem fit in the circumstances mentioned above.		
4	**Respondents: 6**		
	Name of Respondents		
	1.Madhya Pradesh Power Management Company Limited Shakti Bhawan, Vidyut Nagar, Rampur, Jabalpur – 110003	2.Maharashtra State Electricity Distribution Company Limited Prakashgad, Bandra (East), Mumbai – 400051.	
	3.Gujarat Urja Vikas Nigam Limited 2nd Floor, Sardar Patel Vidyut Bhawan, Race Course, Vadodara – 390007.	4. Chattisgarh State Power Distribution Co. Ltd., P.O. Sundar Nagar, Danganiya, Raipur – 492013	
	5.Electricity Department Government of Goa, 3rd Floor, Vidyut Bhawan, Panaji, Goa – 403001.	6.Dadra and Nagar haveli and Daman and Diu Power Distribution Corporation Limited (DNHDDPDCL) 1st & 2nd floor, Vidyut Bhavan, 66 kV Road Dadra and Nagar haveli and Daman and Diu - 396230	
6	**Project Scope**	**2x660 MW Coal based Station**	
7	**COD**	**18.09.2017**	
8	**Claim: Add Cap**	**(Rs Lakh)**	
	2024-25	**180.00**	
	2025-26	**2,805.00**	
	2026-27	**2,709.00**	
	2027-28	**1,353.04**	
	2028-29	**-**	
9	**AFC (2028-29)**	**1,64,608.07**	
10	**Capital cost as on 31.03.29**	**7,69,977.26**	
11	**NAPAF (Gen)**	**85%**	
12	**Any Specific**	**-**	

Annexure-A/1

FORM A

PUBLIC ANNOUNCEMENT

[Under Regulation 6 of the Insolvency and Bankruptcy Board of India (Insolvency Resolution Process for Corporate Persons) Regulations, 2016]

FOR THE ATTENTION OF THE CREDITORS OF IVRCL LIMITED

RELEVANT PARTICULARS

1	Name of Corporate Debtor	**IVRCL LIMITED**
2	Date of Incorporation of Corporate Debtor	16th November 1987
3	Authority under which Corporate Debtor is Incorporated / Registered	Registrar of Companies–Hyderabad
4	Corporate Identity Number / Limited Liability Identification Number of Corporate Debtor	CIN: L45201AP1987PLC007959
5	Address of the Registered Office and Principal Office (If Any) of Corporate Debtor	**A. Registered Office:** **IVRCL LIMITED** M-22/3RT, Vijayanagar Colony, Hyderabad – 500057, Telangana **B. Corporate Office:** MIHIR, 8-2-350/5/A/24/1-B & 2, Road No. 2, Panchavati Colony, Banjara Hills, Hyderabad – 500034, Telangana
6	Insolvency Commencement Date in Respect of Corporate Debtor	23rd February 2018 (As per Order of NCLT dated 23rd February 2018 in C.P. (IB) No.294/7/HDB/2017)
7	Estimated Date of Closure of Insolvency Resolution Process	22nd August 2018 (180 days from the Insolvency Commencement Date)
8	Name, Address, Email Address and the Registration Number of the Interim Resolution Professional	**Name:** Mr. Sutanu Sinha **A. Registered address with IBBI:** Floor 4, Duckback House, 41, Shakespeare Sarani, Kolkata - 700017, West Bengal **Registered Email Address:** sutanusinha@bdo.in **B. Address for all correspondence on claims:** **BDO RESTRUCTURING ADVISORY LLP** **Nos. 201 & 202, II floor, Manbhum Jade Towers, MCH No 6-3-1090/A/12&13, Somajiguda, Hyderabad – 500082, Telangana** **Email Id for correspondence on claims:** irp.ivrcl@bdo.in **IBBI Registration No.:** IBBI/IPA-003/IP-N00020/2017-18/10167
9	Last Date for Submission of Claims	**15th March 2018**

Notice is hereby given that the Hon'ble National Company Law Tribunal (NCLT), Hyderabad has ordered the commencement of a corporate insolvency resolution process against the IVRCL Limited vide Order No. C.P. (IB) No. 294/7/HDB/2017 dated 23rd February 2018; copy made ready and communicated on 1st March 2018.

The creditors of IVRCL Limited, are hereby called upon to submit a proof of their claims on or before 15th March 2018 to the Interim Resolution Professional at the address mentioned above in item 8 B.

The submission of proof of claims is to be made in accordance with Chapter IV of the Insolvency and Bankruptcy Board of India (Insolvency Resolution Process for Corporate Person) Regulations 2016. The proof of claim is to be submitted by way of the following specified forms along with Affidavit and documentary proof in support of claim.

1. Form B - Claim by Operational Creditors except Workmen and Employees
2. Form C - Claim by Financial Creditors
3. Form D - Claim by Workmen or an Employee
4. Form E – Claim by Authorised Representative of Workmen and Employees
5. Form F - Claim by Creditors (Other than Financial Creditors & Operational Creditors)

The abovementioned forms can be downloaded from the website www.ibbi.gov.in of Insolvency and Bankruptcy Board of India (Insolvency Resolution Process for Corporate Persons) Regulation 2016.

The financial creditors shall submit their proof of claims by electronic means only. The operational creditors, including workmen(s) and employee(s), may submit the proof of claims in person, by post or electronic means. The moratorium for prohibiting, inter alia, all types of suits, recovery, action against said corporate debtor under section 14 of the IBC is ordered with effect from the date of communication of above order till completion of the corporate insolvency process or until the Bench approves the resolution plan under sub-section (1) of Section 31 or passes an order for liquidation of corporate debtor under section 33, whichever is earlier.

Submission of false or misleading proofs of claim shall attract penalties.

Date: 3rd March 2018
Place: Hyderabad

Sd/-
Sutanu Sinha
Interim Resolution Professional for IVRCL Limited
IBBI/IPA-003 /IP-N00020/2017-18/10167

McNally Bharat Engineering Company Limited
CIN: L45202WB1961PLC025181
Corporate Office: Ecospace Campus 2B 11F/12
New Town Rajarhat North 24 Parganas Kolkata 700 160
T +91 334459111
E mbe.corp@mbecl.co.in W www.mcnallybharat.com
Registered Office : 4 Mangoe Lane Kolkata-700 001

May 5, 2022

BSE Limited
Floor 25, Phiroze Jeejeebhoy Towers
Dalal Street, Mumbai – 400001

The National Stock Exchange of India Ltd.
Exchange Plaza, Plot no. C/1, G Block
Bandra - Kurla Complex, Bandra (E), Mumbai - 400051

Dear Madam/Sir,

Sub: Intimation of Order passed by National Company Law Tribunal ("NCLT"), Kolkata Bench-I
Disclosure Pursuant to Regulation 30 of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015

Pursuant to the aforesaid Regulation, we request you to note the following:

(i) The Company has been admitted in Corporate Insolvency Resolution Process ('CIRP') vide an Order pronounced by the Hon'ble National Company Law Tribunal (NCLT), Kolkata on 29th April 2022 in Company Application No. C.P.(IB)No.891/KB/2020 under Section 7 of the Insolvency and Bankruptcy Code, 2016 (IBC);
(ii) The Company has received a copy of the said Order on 4th May 2022 for initiation of CIRP of the Company (enclosed);
(iii) Pursuant to the said Order, the Hon'ble NCLT has appointed Mr. Anuj Jain (Registration No. IBBI/IPA-001/IP-P00142/2017-2018/10306) as the Interim Resolution Professional (IRP) as proposed by the Financial Creditor.

This intimation is being made available on the website of the Company at www.mcnallybharat.com.

We request you to kindly take the same on record.

Yours faithfully,
For **McNally Bharat Engineering Company Limited**

Indrani Ray
Company Secretary

Encl: As above.

From: Tandon, Rishabh (GE Vernova) <RISHABH.TANDON@ge.com>
Sent: Friday, January 12, 2024 3:56 PM
To: SOME NATH KUNDU <SOMENATHKUNDU@NTPC.CO.IN>
Cc: Dafe, Chetan (GE Vernova) <chetan.dafe@ge.com>; Uppal, Nitin (GE Vernova) <nitin.uppal@ge.com>; Abhay G P Sahu <AGSAHU@NTPC.CO.IN>; Ashok Kumar Yadava <AKYADAVA@NTPC.CO.IN>; Seema Deo <SEEMADEO@NTPC.CO.IN>; rahul bavaskar <RAHULBAVASKAR@NTPC.CO.IN>; Saurabh, Kumar1 (GE Vernova) <kumar-p.saurabh@ge.com>; Alok Kumar <ALOKKUMARSINHA@NTPC.CO.IN>; KULDEEP <KULDEEP01@NTPC.CO.IN>; Lal Babu <LALBABU@NTPC.CO.IN>
Subject: RE: Purchase of MFC 3000 V1 for NTPC Mouda

Dear Sir,

Greetings for the New Year,

As informed earlier also the MFC3000 V3 is the new upgraded model of the same MFC3000 V1P which is obsolete now and no stock is available now.
MFC3000 V3 is one to one replacement solution which has to be replaced as a redundant pair in the existing same Rack, retaining all the other modules in the rack e.g. Power Supply, Quad port Ethernet Card etc.
The Fan Rack needs replacement for better heat dissipation thus improving the performance of the controller and its availability.
The taken out controllers can be used as spares for other existing controllers in the unit.

Hope it clarifies and in case you need any further clarification please feel free to contact us.

Thanks and Best Regards,

Rishabh Tandon
GEPIL
9717744949

From: SOME NATH KUNDU <SOMENATHKUNDU@NTPC.CO.IN>
Sent: Friday, January 12, 2024 10:53 AM
To: Tandon, Rishabh (GE Vernova) <RISHABH.TANDON@ge.com>
Cc: Dafe, Chetan (GE Vernova) <chetan.dafe@ge.com>; Uppal, Nitin (GE Vernova) <nitin.uppal@ge.com>; Abhay G P Sahu <AGSAHU@NTPC.CO.IN>; Ashok Kumar Yadava <AKYADAVA@NTPC.CO.IN>; Seema Deo <SEEMADEO@NTPC.CO.IN>; rahul bavaskar <RAHULBAVASKAR@NTPC.CO.IN>; Saurabh, Kumar1 (GE Vernova) <kumar-p.saurabh@ge.com>; Alok Kumar <ALOKKUMARSINHA@NTPC.CO.IN>; KULDEEP <KULDEEP01@NTPC.CO.IN>; Lal Babu <LALBABU@NTPC.CO.IN>
Subject: EXT: RE: Purchase of MFC 3000 V1 for NTPC Mouda

Dear Sir,

Subsequent to our discussion we had last year December, the availability of MFC spares in NTPC sites is of utmost importance. May please like to expedite for quick resolution and offer.

सादर(Regards),
नाम (Name): **सोम नाथ कुंडु SOME NATH KUNDU**
पदनाम (Designation): **अलटेरनेत सीआईएसओ (Alternate CISO), उप महाप्रबंधक (DEPUTY GENERAL MANAGER)**
विभाग (Department): परियोजना अभियांत्रिकी – सी एण्ड आई (PE-C&I),
एनटीपीसी केन्द्रीय कार्यालय अभियांत्रिकी कार्यालय परिसर (NTPC CC EOC)
एनटीपीसी लिमिटेड (NTPC LIMITED)
Noida
दूरभाष (PHONE): 09650997664, 01204948305
Mail: somenathkundu@ntpc.co.in;

From: Seema Deo <SEEMADEO@NTPC.CO.IN>
Sent: Thursday, January 11, 2024 3:54 PM
To: DAFE, CHETAN (GE Power Portfolio) <chetan.dafe@ge.com>
Cc: Tandon, Rishabh (GE Vernova) <RISHABH.TANDON@ge.com>; Uppal, Nitin (GE Power Portfolio) <nitin.uppal@ge.com>; SOME NATH KUNDU <SOMENATHKUNDU@NTPC.CO.IN>; Abhay G P Sahu <AGSAHU@NTPC.CO.IN>; Ashok Kumar Yadava <AKYADAVA@NTPC.CO.IN>; rahul bavaskar <RAHULBAVASKAR@NTPC.CO.IN>
Subject: Purchase of MFC 3000 V1 for NTPC Mouda

आदरणीय महोदय/ महोदया,

This is to provide budgetary offer for ALSPA Alstom controller MFC 3000 V1 supplied under Stg-II Station C&I package for control of
BOP systems at Mouda by M/s GE.As you are aware that we have limited stock of MFC 3000 V1 as spare and in order to maintain sufficient spares against total population of 80 No.s we are required to purchase few more .
Hence you are requested to kindly provide budgetary offer for MFC 3000 V1 version so that the procurement can be initiated from our side.

सादर,
सीमा देव / Seema Deo
उप महाप्रबंधक (सी एंड आई)/ DGM (C&I)
मौदा सुपर थर्मल पावर स्टेशन/ Mouda Super Thermal Power Station
एनटीपीसी लिमिटेड/ NTPC Limited
मौदा रामटेक रोड/ Mouda Ramtek Road
नागपुर -४४११०४/ Nagpur – 441104
G20
G20

Signature Not Verified
Digitally signed by SAMEER KUMAR AGGARWAL
Date: 2024.11.29 22:48:57 IST
Reason: AGM (Comml)
Location: NTPC Ltd

REF.NO.: OPP-20-3696718

HITACHI
Inspire the Next

To,
NTPC Mouda
Nagpur-441104

Dt: *16/11/2024*

Sub: Upgradation of obsolete window OS will reduce the risk of Cyber security issues.

Dear Sir,

With reference to above mentioned subject and our telephonic discussion for Upgradation of ABB make MicroSCADA System at your station which is presently working on obsoleted Microsoft window.

We would like to bring to your kind notice that as per latest Notice issued by Ministry of power dated 02-07-2020. regarding Security, Integrity and reliability of the strategically important and critical power supply system and network mainly arises due to cyber threat.

You may download copy from attached Link below.
(https://powermin.nic.in/sites/default/files/webform/notices/ORDER.pdf)

As you know, window OS XP & 7 are declared obsolete by Microsoft and they are not releasing patches to fix vulnerabilities for these OS which will lead to systems are not fully secured toward latest cyber security requirements and are vulnerable to cyber-attacks through malware / Trojans etc., This issue need to be addressed by PowerGrid as notified in the order from Ministry of Power.

Older versions of MicroSCADA are built on some of the technologies such as dot-net framework based on Windows XP/7 platforms. These older versions of MicroSCADA are already now in "Limited" phase of their life cycle meaning; only limited support is available from ABB for such versions. In view of this, we strongly recommend upgrading MicroSCADA to the latest version i.e., MicroSCADA 10 which complies to Cyber security requirements.

Apart from exposing your valuable assets to unnecessary high cyber security risk, the impact of not upgrading Windows XP/7 would also heavily decrease the system availability for the following main reasons:

1. Issues with replacement of defective hardware parts: Compatible Device drivers for new hardware (example: new Network Interface Card that are available in market today) will not be available in older Windows XP/7 PC.
2. Availability of compatible hardware spares parts for old PCs may be scarce e.g., DDR2 memory.
3. In the event of Windows OS crash, activation of outdated Windows OS after re-installation is not supported by Microsoft.
4. No support for fixing issues in other software running on Windows XP/7 PCs such as NMS, SNMP-OPC, MS Office, IED tools, etc.,

Hence once aging we request you kindly review the above notification and do necessary action on the same.

For Hitachi Energy India Limited

Digitally signed by pandurang.narute@hitachienergy.com
DN: cn=pandurang.narute@hitachienergy.com, o=Hitachi Energy Ltd, ou=Hitachi Energy Ltd
Date: 2024.11.16 17:15:28 +05'30'

Mr. Pandurang Narute,
Service Sales Specialist – Grid Automation

Hitachi Energy India Limited

Registered and Corporate Office:
8th Floor, Brigade Opus, 70/401,
Kodigehalli Main Road, Bengaluru - 560 092
Phone: 080 68473700, 080 22041800

CIN: L31904KA2019PLC121597
www.hitachienergy.com/in

Local Address:
5B-106 & 103, 5th Floor, WeWork Raheja Platinum, Sag Baug Road, Off Andheri-Kurla Road, Marol, Andheri (E), 400059 Mumbai

MicroSCADA 9.3/9.4 upgrade to MicroSCADA 10.x - List of features/benefits:

(please corelate with existing license, version, configuration for applicability of any features)

1. **Support for latest Windows:** Latest version of MicroSCADA enhances the life of the Substation Automation system by supporting Microsoft Windows 10 & Windows Server 2019 operating systems.

2. **IEC 61850 Ed2 Support:** Latest version of MicroSCADA is IEC 61850 Ed. 2 & 2.1 compliant. With this latest version it is possible to integrate existing Ed.1 IEDs/devices and future Ed.2 IEDs/devices.
   MicroSCADA now supports setting substituted values in the IEDs. If the IED supports substitution, the object's Control Dialog will have a new tab for setting substituted values (This needs configuration in MicroSCADA). The Control Dialogs for switching devices now also recognize objects in the test mode and in this mode, test commands can also be issued. MicroSCADA can now also recognize control commands originating from another IEC 61850 client and present these in the event list. This feature is based on the Service Tracking events from the IED in question.

3. **IEC 60870-5-101/104 Security extensions:** The IEC 60870-5-101/104 communication protocols have been extended with security features according to IEC60870-5-7 which in turn is based on IEC62351. The support includes secure authentication according to IEC62351-5 as well as communication encryption based on IEC62351-3. The encryption is applicable only for IEC60870-5-104.
   The new security features are available both for master and slave variants of the protocols.

4. **SNMP support:** SNMP is included within MicroSCADA as an option for device supervision. Devices supporting SNMP like Ethernet switch, GPS etc., can be monitored from MicroSCADA.

5. **Workplace session restoration after HSB switchover:** The workplace handling at Hot Stand-by switch-over is improved so that the workplaces can be fully automatically restored to correct displays and layouts. This functionality can be achieved using Remote Desktop Services (previously Terminal Services) and the OpenRemoteDesktop facility.

6. **Measurement Reports and Trends Display -Graphical View:** Curve highlighting: Curves and their associated Y-axis can be highlighted (inversed color blinking) for a short time when the object is selected in the legend. This helps to locate the selected curve in the graph. Also, if a curve is selected in the graphical area the associated legend line will be selected.

7. **Process Display object highlight**: Clickable objects are now highlighted with a frame when the mouse hovers on top of the object. This function must be activated in the Display Builder. The colors and frame size can be configured.

8. **Control Panel:** The control panel has been completely revised. The main functionality of Control Panel can be divided to four parts:
   a. SYS600 service activation and supervision
   b. Application, process and service monitoring
   c. Base system configuration

d. License handling

9. **Backup in Control Panel:** The SYS600 Control Panel now includes a convenient way to take disk backups. The disk backup can be taken during system operation.

10. **Hot-Standby optimization:** several improvements have been implemented to enhance the functionality and performance of Hot-Standby functionality. The time taken for Standby system to get ready has been substantially reduced.

11. **Workstation-specific role selection:** Now you can define the user roles per workstation. For example, operator role can only be used at the one control room workstation or the Administrator and Engineering roles can only be used at the other workstation.

12. **Single login mode for stricter user session policy:** The single login mode means that defined users can only have one active session at a time. If the user with the single login mode activated tries to open several sessions, the system will deny subsequent login attempts after the first one. With this feature, the administrator can enforce a stricter user session policy.

13. **Area of Responsibility (AoR):** The process can be divided into freely defined areas (i.e. voltage levels, bay or sub-systems) in order to allow operators to have different roles per area. AoR incorporates Exclusive Access Rights, where the system ensures that there is only one operator with control authority at a time for a particular area.

14. **Windows SSO user mapping**: Now it is possible to map credential of SSO account to MicroSCADA user account. Single Sign-On user account is blocked for local login access.

15. **Anonymous user:** Logs in an “anonymous” user automatically when the Workplace (Monitor Pro) is started. It has one pre-defined role with configurable access rights. When the anonymous user is logged in, another user can also log in, for instance to perform some control operations.

16. **Security Compliance Tool:** Easily install Windows security configuration with a graphical user interface. Engineer can select the security features to harden Windows operating system for better control over the settings compared to using scripts.

17. **Encryption of SYS-SYS Communication:** Now protecting the communication from i.e. sniffing and tampering of the traffic. The secure communication between SYS600 nodes (e.g. Hot-Standby systems) is based on the TLS protocol and public key cryptography-based authentication.

18. **TLS support in DR collection**: Now new MicroSCADA IEC 61850 Client supports disturbance recording transfer and TLS (Transport Layer Security) up to version 1.3.

19. **Extended Central User Account Management (UAM):** Besides local now the UAM function works in two modes: local and central. In the new central mode, Central Account Management (CAM) function is used for user authentication, -data management and password policy management, whilst role management, authorization management and authorization are handled by Station level MicroSCADA.

20. **Role Based Access Control:** The revised User Account Management tool supports defining roles and assigning them to the user accounts. Defining roles for the users directly allows a fast and an easy way of maintaining permissions of multiple same level users.

21. **User Activity Logging:** For improved security, user session and user account events management are separated from other types of events. User activity events go now under cyber security events, where they are stored securely and require a dedicated viewer that obliges specific access rights.

22. **Improvements in Security Compliance Manager:** The Security Compliance Manager (SCM) has been enhanced with improved functionality. The SCM can now produce reports both for the baselines (recommended security settings) and for the audit (differences between the recommended and the actual settings). Security Compliance Manager (SCM) now includes security baselines for Windows 10 and Windows Server 2019.

23. **Improved password protection:** User account cannot be modified or deleted without proper access rights.

24. **Enhanced password policy:** Administrator can define password policies for a minimum complexity of the passwords.

25. **Auto-logout after inactivity:** Avoid leaving user sessions open by mistake in Pro Workplace.

26. **Automated registration of username:** The event history registers the username for all operations initiated by the user. The username can be shown in a separate column in the event list.

27. **Alarm Generation from Low Warning and High Warning Limits:** High Warning (HW) and Low Warning (LW) limits can be configured to generate alarms for analog input objects.

28. **Control supervision:** It is possible to activate a control supervision for the Power Process switch devices. This means that when the control supervision is enabled, an event (and alarm) is generated if the switch indication is not received before the timeout is elapsed. The timeout starts to run after the execute command has been sent.

रजिस्ट्री सं. डी.एल.- 33004/99 REGD. No. D. L.-33004/99

भारत का राजपत्र
The Gazette of India

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असाधारण
EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)
PART II—Section 3—Sub-section (ii)

प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

सं. 5075] नई दिल्ली, शुक्रवार, दिसम्बर 31, 2021/पौष 10, 1943
No. 5075] NEW DELHI, FRIDAY, DECEMBER 31, 2021/PAUSHA 10, 1943

पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

अधिसूचना

नई दिल्ली, 31 दिसम्बर, 2021

का.आ. 5481(अ).—केन्द्रीय सरकार ने भारत सरकार के तत्कालीन पर्यावरण और वन मंत्रालय की अधिसूचना सं. का.आ. 763 (अ) तारीख 14 सितम्बर, 1999 द्वारा कोयला या लिग्नाइट आधारित ताप विद्युत संयंत्रों से तीन सौ किलोमीटर के विनिर्दिष्ट व्यास के भीतर ईंटों के विनिर्माण के लिए उपजाऊ मिट्टी के उत्खनन को प्रतिबंधित करने के लिए और भवन निर्माण सामग्री के विनिर्माण में और संनिर्माण क्रियाकलाप में फ्लाई-राख के उपयोग को बढ़ावा देने के लिए निदेश जारी किए हैं;

और, प्रदूषणकर्ता भुगतान सिद्धांत (पीपीपी) के आधार पर, ऐसा करके कोयला या लिग्नाइट आधारित ताप विद्युत संयंत्रों द्वारा फ्लाई-राख का 100 प्रतिशत उपयोग सुनिश्चित करते हुए और फ्लाई-राख प्रबंधन प्रणाली की संधारणीयता के लिए पूर्वोक्त अधिसूचना को और अधिक प्रभावकारी ढंग से कार्यान्वित करने हेतु, केंद्रीय सरकार ने मौजूदा अधिसूचना की समीक्षा की;

और प्रदूषणकर्ता भुगतान सिद्धांत के आधार पर पर्यावरणीय प्रतिकर निर्धारित किए जाने की आवश्यकता है;

और, विनिर्माण को बढ़ावा देकर तथा निर्माण कार्य के क्षेत्र में राख आधारित उत्पादों तथा भवन निर्माण सामग्रियों के प्रयोग को अनिवार्य करके उपजाऊ मिट्टी को संरक्षित करने की आवश्यकता है;

	सीमेंट शीट या पाइप या बोर्ड या पैनल): ii. सीमेंट विनिर्माण: iii. रेडी मिक्स कंक्रीट: iv. राख और जीओ-पॉलिमर आधारित निर्माण सामग्री: v. सिंटर्ड या कोल्ड बॉन्डेड राख एग्रीगेट का निर्माण: vi. सड़कों, सड़क और फ्लाई ओवर के पुश्तों का निर्माण: vii. बांधों का निर्माण: viii. निम्न भू-क्षेत्र का भराव: ix. खनिज क्षेत्रों का भराव: x. अधिभार वाले डम्पों में उपयोग: xi. कृषि: xii. तटीय जिलों में तटरेखा सुरक्षा संरचनाओं का निर्माण: xiii. अन्य देशों को राख का निर्यात xiv. अन्य (कृपया विनिर्दिष्ट करें):			
20.	**सार :**			
	ब्यौरा	सृजित मात्रा (एमटीपी)	उपयोग की गई मात्रा (एमटीपी) और (%)	शेष मात्रा (एमटीपी)
	रिपोर्टिंग की अवधि के दौरान राख			
	पुरानी राख			
	कुल			
21.	कोई अन्य सूचना : वार्षिक अनुपालन रिपोर्ट, और विद्युत संयंत्रों और राख कुण्डों की शेप फाइलों की सॉफ्ट कॉपी ई-मेल:- moefcc-coalash@gov.in पर भेजी जाए।			
22.	प्राधिकृत हस्ताक्षरकर्ता के हस्ताक्षर			

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 31st December, 2021

S.O. 5481(E).—Whereas by notification of the Government of India in the erstwhile Ministry of Environment and Forests *vide* S.O.763 (E), dated the 14th September, 1999, as amended from time to time, the Central Government, issued directions for restricting the excavation of top soil for manufacturing of bricks and promoting the utilisation of fly ash in the manufacturing of building materials and in construction activity within a specified radius of three hundred kilometres from the coal or lignite based thermal power plants;

And whereas, to implement the aforesaid notification more effectively based on the polluter pays principle (PPP) thereby ensuring 100 per cent utilisation of fly ash by the coal or lignite based thermal power plants and for the sustainability of the fly ash management system, the Central Government reviewed the existing notification; and whereas environmental compensation needs to be introduced based on the polluter pays principle;

And whereas, there is a need to conserve top soil by promoting manufacture and mandating use of ash based products and building materials in the construction sector;

And whereas, there is a need to conserve top soil and natural resources by promoting utilisation of ash in road laying, road and flyover embankments, shoreline protection measures, low lying areas of approved projects, backfilling of mines, as an alternative for filling of earthen materials;

And whereas, it is necessary to protect the environment and prevent the dumping and disposal of fly ash discharged from coal or lignite based thermal power plants on land;

And whereas, in the said notification the phrase 'ash', has been used which includes both fly ash as well as bottom ash generated from the Coal or Lignite based thermal power plants;

And whereas, the Central Government intends to bring out a comprehensive framework for ash utilisation including system of environmental compensation based on polluter pays principle;

And whereas, a draft notification on ash utilisation by coal or lignite thermal power plants in supersession of the notification of the Government of India, Ministry of Environment and Forests published in the Gazette of India, Extra Ordinary part II, section 3, sub-section (i) *vide* S.O.763 (E), dated the 14th September, 1999, by notification in exercise of the powers conferred under sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) read with clause (d) of sub-rule (3) of rule (5) of the Environment (Protection) Rules, 1986, was published in the Gazette of India, Extraordinary, Part II, section 3, sub-section (i), *vide* G.S.R. 285(E), dated the 22nd April, 2021 inviting objections and suggestions from all persons likely to be affected thereby before the expiry of sixty days from the date on which copies of the Gazette containing the said draft provisions were made available to the public;

And, whereas all the objections and suggestions received from all persons likely to be affected thereby in respect of the said draft notification have been duly considered by the Central Government;

Now, therefore, in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) read with clause (d) of sub-rule (3) of rule (5) of the Environment (Protection) Rules, 1986, and in supersession of the Notification S.O.763 (E), dated the 14th September, 1999 except as respect things done or omitted to be done before such supersession, the Central Government hereby issues the following notification on ash utilisation from coal or lignite thermal power plants which shall come into force on the date of the publication of this notification, namely:-

A. Responsibilities of thermal power plants to dispose fly ash and bottom ash.—

(1) Every coal or lignite based thermal power plant (including captive or co-generating stations or both) shall be primarily responsible to ensure 100 per cent utilisation of ash (fly ash, and bottom ash) generated by it in an eco-friendly manner as given in sub-paragraph (2);

(2) The ash generated from coal or lignite based thermal power plants shall be utilised only for the following eco-friendly purposes, namely:-

(i) Fly ash based products viz. bricks, blocks, tiles, fibre cement sheets, pipes, boards, panels;

(ii) Cement manufacturing, ready mix concrete;

(iii) Construction of road and fly over embankment, Ash and Geo-polymer based construction material;

(iv) Construction of dam;

(v) Filling up of low lying area;

(vi) Filling of mine voids;

(vii) Manufacturing of sintered or cold bonded ash aggregate;

(viii) Agriculture in a controlled manner based on soil testing;

(ix) Construction of shoreline protection structures in coastal districts;

(x) Export of ash to other countries;

(xi) Any other eco-friendly purpose as notified from time to time.

(3) A committee shall be constituted under the chairmanship of Chairman, Central Pollution Control Board (CPCB) and having representatives from Ministry of Environment, Forest and Climate Change (MoEFCC), Ministry of Power, Ministry of Mines, Ministry of Coal, Ministry of Road Transport and Highways, Department of Agricultural Research and Education, Institute of Road Congress, National Council for Cement and Building Materials, to examine and review and recommend the eco-friendly ways of utilisation of ash and make inclusion or exclusion or modification in the list of such ways as mentioned in Sub-paragraph (2) based on technological developments and requests received from stakeholders. The committee may invite State Pollution Control Board or Pollution Control Committee, operators of thermal power plants and mines, cement plants and other stakeholders as and when required for this purpose. Based on the recommendations of the Committee, Ministry of Environment, Forest and Climate Change (MoEFCC) may publish such eco-friendly purpose.

(4) Every coal or lignite based thermal power plant shall be responsible to utilise 100 per cent ash (fly ash and bottom ash) generated during that year, however, in no case shall utilisation fall below 80 per cent in any year, and the thermal power plant shall achieve average ash utilisation of 100 per cent in a three years cycle:

Provided that the three years cycle applicable for the first time is extendable by one year for the thermal power plants where ash utilisation is in the range of 60-80 per cent, and two years where ash utilisation is below 60 per cent and for the purpose of calculation of percentage of ash utilisation, the percentage quantity of utilisation in the year 2021- 2022 shall be taken into account as per the table below:

Utilisation percentages of thermal power plants	First compliance Cycle to meet 100 per cent utilisation	Second compliance cycle onwards, to meet 100 per cent utilisation
>80 per cent	3 years	3 years
60-80 per cent	4 years	3 years
<60 per cent	5 years	3 years

Provided further that the minimum utilisation percentage of 80 per cent shall not be applicable to the first year and first two years of the first compliance cycle for the thermal power plants under the utilisation category of 60-80 per cent and <60 per cent, respectively.

Provided also that 20per cent of ash generated in the final year of compliance cycle may be carried forward to the next cycle which shall be utilised in the next three years cycle along with the ash generated during that cycle.

(5) The unutilised accumulated ash i.e. legacy ash, which is stored before the publication of this notification, shall be utilised progressively by the thermal power plants in such a manner that the utilization of legacy ash shall be completed fully within ten years from the date of publication of this notification and this will be over and above the utilisation targets prescribed for ash generation through current operations of that particular year:

Provided that the minimum quantity of legacy ash in percentages as mentioned below shall be utilised during the corresponding year and the minimum quantity of legacy ash is to be calculated based on the annual ash generation as per installed capacity of thermal power plant.

Year from date of publication	1st	2nd	3rd -10th
Utilisation of legacy ash (in percentage of Annual ash)	At least 20 per cent	At least 35 per cent	At least 50 per cent

Provided further that the legacy ash utilisation shall not be required where ash pond or dyke has stabilised and the reclamation has taken place with greenbelt or plantation and the concerned State Pollution Control Board shall certify in this regard. Stabilisation and reclamation of an ash pond or dyke including certification by the Central Pollution Control Board (CPCB) or State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) shall be carried out within a year from the date of publication of this notification. The ash remaining in all other ash ponds or dykes shall be utilised in progressive manner as per the above mentioned timelines.

Note: The obligations under sub-paragraph (4) and (5) above for achieving the ash utilisation targets shall be applicable from 1st April, 2022.

(6) Any new as well as operational thermal power plant may be permitted an emergency or temporary ash pond with an area of 0.1 hectare per Mega Watt (MW). Technical specifications of ash ponds or dykes shall be as per the guidelines of Central Pollution Control Board (CPCB) made in consultation with Central Electricity Authority (CEA) and these guidelines shall also lay down a procedure for annual certification of the ash pond or dyke on its safety, environmental pollution, available volume, mode of disposal, water consumption or conservation in disposal, ash water recycling and greenbelt, etc., and shall be put in place within three months from the date of publication of this notification.

(7) Every coal or lignite based thermal power plant shall ensure that loading, unloading, transport, storage and disposal of ash is done in an environmentally sound manner and that all precautions to prevent air and water pollution are taken and status in this regard shall be reported to the concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) in Annexure attached to this notification.

(8) Every coal or lignite based thermal power plant shall install dedicated silos for storage of dry fly ash silos for at least sixteen hours of ash based on installed capacity and it shall be reported upon to the concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) in the Annexure and shall be inspected by Central Pollution Control Board (CPCB) or State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) from time to time.

(9) Every coal or lignite based thermal power plant (including captive or co-generating stations or both) shall provide real time data on daily basis of availability of ash with Thermal Power Plant (TPP), by providing link to Central Pollution Control Board's web portal or mobile phone App for the benefit of actual user(s).

(10) Statutory obligation of 100 per cent utilisation of ash shall be treated as a change in law, wherever applicable.

B. **For the purpose of utilisation of ash, the subsequent sub-paras shall apply.—**

(1) All agencies (Government, Semi-government and Private) engaged in construction activities such as road laying, road and flyover embankments, shoreline protection structures in coastal districts and dams within 300 kms from the lignite or coal based thermal power plants shall mandatorily utilise ash in these activities:

Provided that it is delivered at the project site free of cost and transportation cost is borne by such coal or lignite based thermal power plants.

Provided further that thermal power plant may charge for ash cost and transportation as per mutually agreed terms, in case thermal power plant is able to dispose the ash through other means and those agencies makes a request for it and the provisions of ash free of cost and free transportation shall be applicable, if thermal power plant serves a notice on the construction agency for the same.

(2) The utilisation of ash in the said activities shall be carried out in accordance with specifications and guidelines laid down by the Bureau of Indian Standards, Indian Road Congress, Central Building Research Institute, Roorkee, Central Road Research Institute, Delhi, Central Public Works Department, State Public Works Departments and other Central and State Government Agencies.

Annexure-A/6

Customer

NTPC Limited

Name of Work

Recommendation to Upgrade the ABT DSM Online Monitoring System

Document Name

Recommendation

Document Number

CPPSQTD040 00 00

Date

Monday, 28 October 2024

Upgradation of ABT Online DSM System at Mauda STPP

The Mauda STPP ABT Online DSM is based on the first release of DSM Regulations by the CERC in 2014. The system was designed in 2014 and commissioned in 2014. Subsequently the five CERC amendments have been implemented on the system successfully (Dec 2014, August 2015, May 2016, January 2019 & May 2019). Subsequently the DSM Regulation 2022 is released vide No. L-1/260/2021/CERC Dated:14th March, 2022 and the same is implemented with subsequent amendments to date i.e CERC No. L-1/260/2021/CERC Gazette CG-DL-E-11092024-257070 September 2024.

The Need for Upgradation of the System comes in the following key aspects that needs to be compiled with at earliest instance.

1. The meters need upgrading as per the CEA & CERC guidelines for SAMAST. The new generation ABT Meters have the following features (a) Auxiliary Power (b) Time Synchronization on NTP (c) Redundant Communication on Ethernet and Serial (c) User configurable blocks for 1min, 5 min, 15 mins (d) Site Configurable CT / PT.
2. Implementation of standalone and dedicated network for ABT meters to comply with the recommendation i.e Data Acquisition, **Network Infrastructure**, Data Concentrator and Head End System. The network infrastructure is in accordance to the Cyber Security recommendations of CEA/CERC and IT polices of NTPC.
3. Upgradation of the existing SW compatible to the current Operating Systems for seamless running and 100% availability. New Operating Systems also calls for upgrading of IT hardware.

Record of Discussions

Additional Notes if Any	Additional Notes if Any

Revision History

Date	Revision
Monday, 28 October 2024	Rev 00
	Rev 01
	Rev 02

For COSPHI Engineering India (P) Limited

Authorized Signatory

Date: 13 November 2024

Discontinuation of CMC16 / IOC16T Cards & CMS Software

Dear Customer,

Meggitt has always been committed to provide the best technology for Industrial machinery protection and condition monitoring systems. We are continuously doing research to improve our products and adding new functionalities which shall be helpful in precise Monitoring / Analysis of the machine behavior and update our customers with new software and firmware releases published on regular basis.

Since the Era of Solutions based on System 501 or VM600 CMS/CMC16, Our Products have evolved considerably and CMS / CMC16 had been discontinued and obsolete, so we recommend that these existing systems should be upgraded by the latest generation Vibrosight software and the new VM600 XMV16 + XIO16T Cards.

Upgradation shall offer the below key advantages over previous generation systems.

- State-of-the-art technology.
- Stronger System Capabilities
  - Increased amplitude resolution of 22 bits vs. 13 bits.
  - Upto 6400 lines of spectrum resolution.
  - Deeper data buffers allowing more pre event, and pre trip data to be captured in case of sudden change in the machinery being monitored using Pre & Post logging rules.
  - Data Processing at card level (higher scalability, faster response time to Alarms).
  - Data to the software shall be directly sent from XMV16/ XIO 16T Cards compared to over previous version cards CMC16 where data was sent from CPU card to software.
  - Much faster data acquisition and storage rates available.
  - Addition of the plots like Spider Table, Co-orbit, Spectrogram, Full Spectrum etc. for better understanding and analysis of the machine behaviour.
- Improved User friend interface with powerful high-resolution plots.

Please contact our Meggitt region sales representative or technical team for detailed information.

Yours Sincerely,

Meggitt India Private Limited Bangalore

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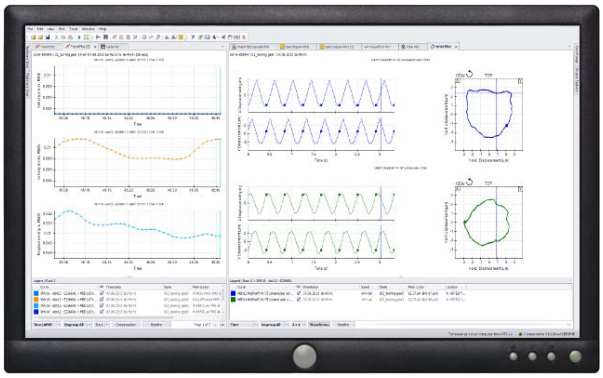
jatin.jain@meggitt.com

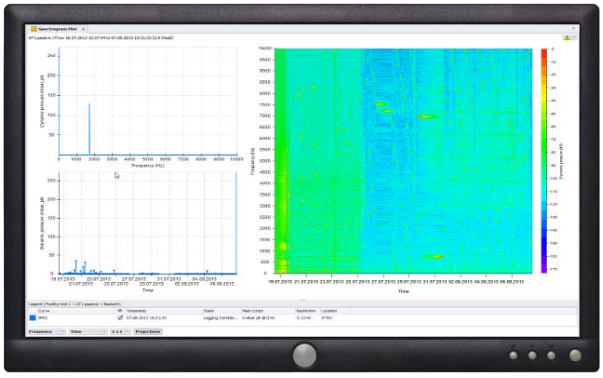
DATA SHEET

vibro-meter®

VibroSight® machinery monitoring system software

VibroSight
Machinery Protection & Condition Monitoring Software





KEY FEATURES AND BENEFITS

- From the vibro-meter® product line
- Compatible with VM600^{Mk2}, VM600 and VibroSmart® machinery monitoring systems
- Supports VM600^{Mk2} machinery protection and condition monitoring systems: MPC4^{Mk2} + IOC4^{Mk2}, RLC16^{Mk2} and CPUM^{Mk2} + IOCN^{Mk2}
- Supports VM600 condition monitoring systems: XMV16 / XIO16T, XMVS16 / XIO16T, XMC16 / XIO16T and CPURx / IOCRx
- Supports VibroSmart® distributed monitoring system (DMS) modules and devices: VSV30x + VSB300, VSI010 + VSB010 and VSN010
- Automatic data acquisition and storage
- Alarm limit checking and event logging
- Online and offline data visualisation and analysis
- Fast and powerful, user-friendly software modules with a graphical user interface
- Machinery analysis project management
- Runs on Windows® operating systems: Windows 10, Windows 8.1, Windows Server 2016 and Windows Server 2012

KEY BENEFITS AND FEATURES *(continued)*

- Proprietary VibroSight databases with optimised data handling for the fastest data retrieval and display
- Tightly-integrated data management

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APPLICATIONS

- Machinery vibration monitoring and analysis
- Rolling-element bearing analysis
- Hydro air-gap and magnetic-flux monitoring and analysis
- Dynamic combustion monitoring and analysis

DESCRIPTION

VibroSight® machinery monitoring system software

The VibroSight® machinery monitoring system software, from Meggitt's vibro-meter® product line, is a highly-integrated software suite that supports the effective monitoring of all rotating machinery.

Designed for operation with VM600^{Mk2} / VM600 rack-based systems and VibroSmart® distributed monitoring systems (DMSs), the VibroSight® software is an essential part of these machinery monitoring systems. The software is used for the configuration, operation and management of these systems and enables the predictive methodologies which can be used to optimise the operational efficiency of industrial machinery.

In particular, a VibroSight machinery monitoring system solution can be used to:

- Minimise downtime through the planning and scheduling of maintenance activities.
- Maximise component life by avoiding known critical operating conditions.
- Improve equipment reliability through the effective prediction of equipment failures.
- Use condition monitoring techniques to maximise equipment performance.

When used by technicians, operators and engineers, VibroSight enables them to identify a problem rapidly, evaluate the situation and determine the appropriate action to take in order to protect machinery and reduce operating costs.

Machinery monitoring system operation

The VibroSight® software is designed to be easy to use: from the configuration of the measurements and parameters for the machinery being monitored (using VibroSight Configurator), to automated data acquisition and signal processing, and the display of data to assist in the advanced analysis and diagnosis of industrial machinery (using VibroSight Vision).

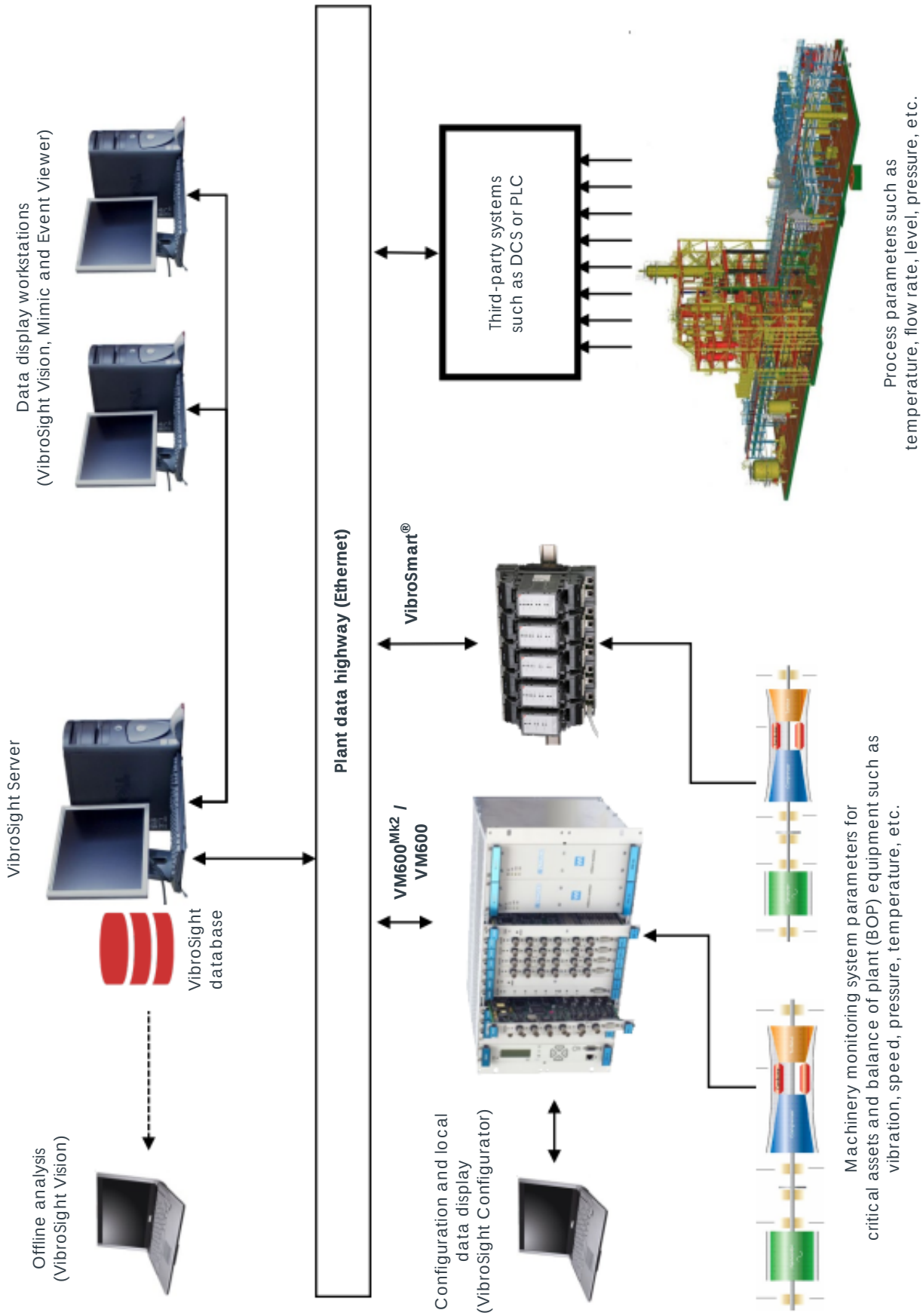
The configuration of parameters depends on the machinery monitoring system hardware used and the particular machinery monitoring application. For example, with VM600^{Mk2} MPC4^{Mk2} modules and VM600 XMx16 card pairs, data acquisition is continuous, there is extended alarm (severity state) handling with multiple alarms per output, and extended processing capabilities.

Further, with VM600 XMx16 card pairs, the principal data acquisition mode captures measurement data continuously (typically every 100 ms) and is suitable for normal operation of the machinery being monitored, such as increasing vibration levels and the capture of transients. An auxiliary mode is also available, which is typically used to capture more detailed data at slower update rates. In addition, a VibroSight machinery monitoring system has the ability to adapt automatically to the criticality of the machinery being monitored by applying specific data logging scenarios, depending on machine operating conditions (machine states).

The VibroSight software takes advantage of industry standard platforms and runs on Windows 10, Windows 8.1, Windows Server 2016 and Windows Server 2012 operating systems. It uses a proprietary, highly-optimised system of VibroSight databases to ensure performance and enable tightly-integrated data management (compared to an off-the-shelf database). And it has an intuitive, fully graphical interface for ease of use.

An example application of a VibroSight® system solution software is shown overleaf.

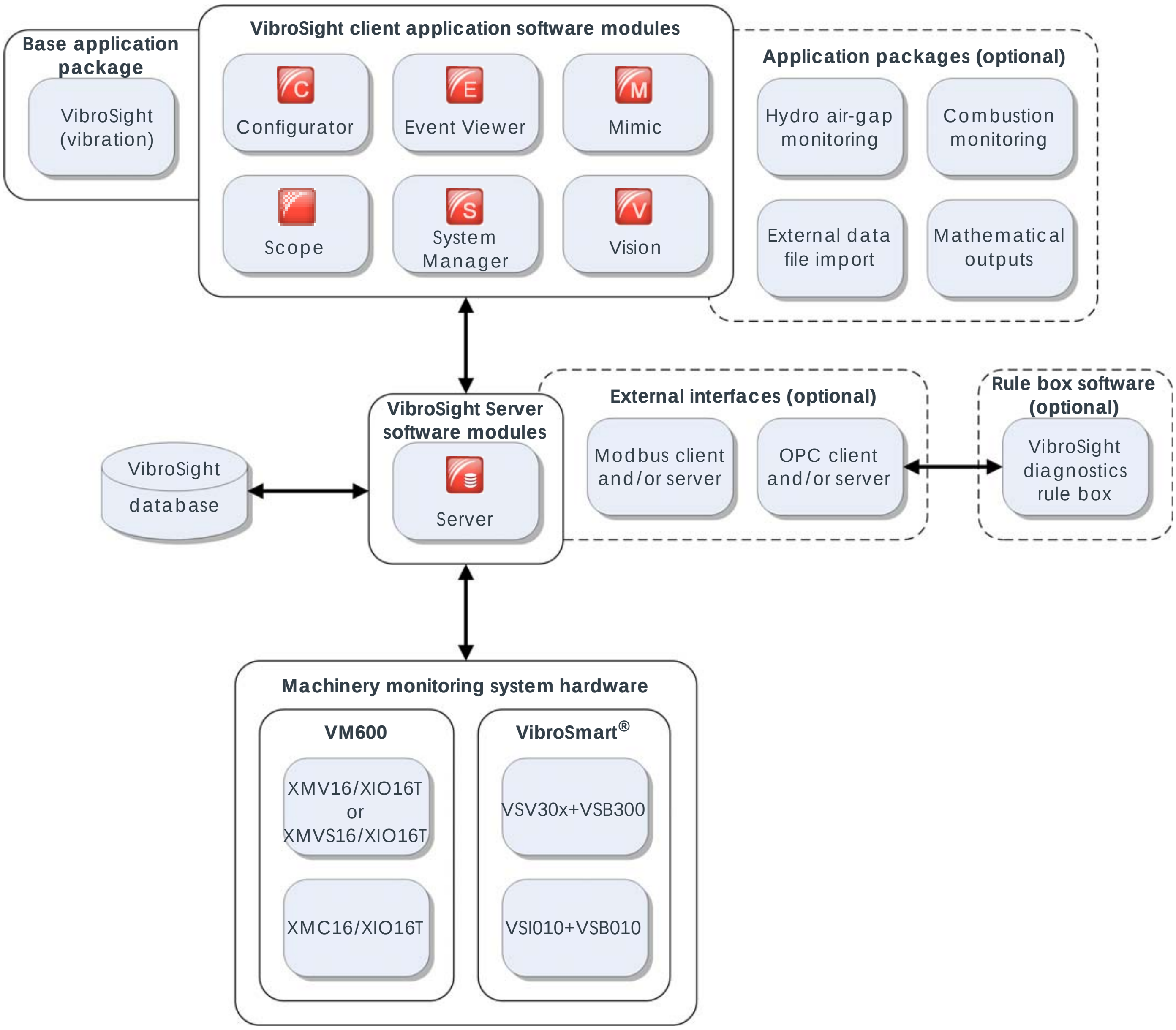
EXAMPLE APPLICATION



DESCRIPTION *(continued)*

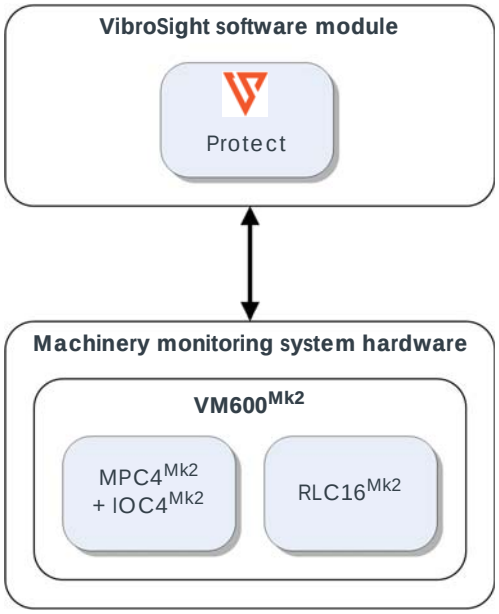
VibroSight software architecture

The VibroSight® software uses a truly modular design that adapts to different machinery monitoring applications. As shown below, the software uses a predominantly client-server architecture to distribute the functional requirements and workload across several software modules.



DESCRIPTION *(continued)*

As shown below, the VibroSight® software uses a completely separate software module for the configuration and operation of VM600^{Mk2} systems (that is, the second generation of VM600 rack-based systems). This helps ensure complete separation ("segregation") of machinery protection system (MPS) and condition monitoring system (CMS) functionality in a single VM600^{Mk2} / VM600 rack.



Due to its modular client-server architecture, the VibroSight® software can run on a single host computer or be distributed across a number of computers connected to the machinery monitoring system hardware (VM600^{Mk2} / VM600 racks and/or VibroSmart® systems) by an Ethernet network. This allows configuration, acquisition, data visualisation and analysis, and troubleshooting tasks to be performed from a single location or distributed between several workstations.

Advantages of distributed configurations include allowing specific functions to be performed on dedicated computers by the appropriate personnel. Distributed configurations also enable remote data collection and analysis, allowing configuration and troubleshooting tasks to be performed via remote access if necessary.

For integration in industrial environments, VibroSight supports external interfaces that enable the exchange of data with third-party systems using industry standard protocols. For example, this enables the correlation of vibration data with other parameters that are already available from separate field devices, so that there is no need to remeasure.

VibroSight software modules, base and application specific packages

VibroSight's software architecture consists of several software modules for use with VM600^{Mk2} modules, VM600 cards and VibroSmart® modules and devices. This flexibility also allows base and application specific packages to be provided for different machinery monitoring applications.

The base/standard VibroSight® (that is, the base application package) provides full support for vibration analysis, including a complete catalogue of plots and the functionality required for the display and analysis of absolute vibration, relative vibration, position, displacement, eccentricity expansion and so on.

DESCRIPTION *(continued)*

If required, the base/standard VibroSight® can be expanded to include one or more of the application specific packages available:

- Hydro air-gap monitoring – for the monitoring and analysis of hydroelectric generators.
- Combustion monitoring – for the monitoring and analysis of combustion chamber dynamic-pressure data.
- External data file import – for the import of external data into VibroSight Servers (`*.vshdf`) using CSV and/or VibroSight historical data archive (`*.vshda`) files.
- Mathematical outputs – to enable math post-processing on the data in VibroSight Servers (`*.vshdf`) in order to calculate and create new data and information.

VibroSight external interfaces

VibroSight's external interfaces include industry-standard interfaces such as Modbus and OPC to enable data sharing between a VibroSight Server (`*.vshdf`) and third-party systems through the import and/or export of data.

For VM600^{Mk2} / VM600 systems containing a CPUM^{Mk2} + IOCN^{Mk2} module or CPUx / IOCx card pair, data can equally be exported via industry standard fieldbuses such as Modbus or PROFIBUS.

Similarly for VibroSmart® systems containing a VSI010 + VSB010 module, data can equally be exported via Modbus, PROFIBUS or the IEC 61850 GOOSE protocol.

Hardware compatibility

For VM600^{Mk2} / VM600 condition monitoring applications, the VibroSight® software is designed to take advantage of the extended processing capabilities and high data throughput of the VM600 XMx16 extended condition monitoring card pairs:

- XMV16 / XIO16T for vibration monitoring
- XMVS16 / XIO16T for vibration monitoring
- XMC16 / XIO16T for combustion monitoring.

VibroSight® is also used for the configuration of any CPUx / IOCRx rack controller and communications interface card pairs, if used.

For VM600^{Mk2} machinery protection applications, the VibroSight® software includes VibroSight Protect, which is designed specifically for operation with VM600^{Mk2} systems (that is, the second generation of VM600 rack-based systems) and modules:

- MPC4^{Mk2} + IOC4^{Mk2} machinery protection and condition monitoring module
- RLC16^{Mk2} relay module.

VibroSight® is also used for the configuration of a CPUM^{Mk2} + IOCN^{Mk2} rack controller and communications interface module, if used.

For VibroSmart® machinery protection and/or condition monitoring applications with lower channel counts, the VibroSight® software supports the following VibroSmart® modules and devices:

- VSV30x + VSB300 monitoring modules
- VSI010 + VSB010 communications interface module
- VSN010 real-time Ethernet switch.

Applications information

As part of a VM600^{Mk2} / VM600 and/or VibroSmart® solution, the VibroSight machinery monitoring software is ideal for the monitoring and protection of critical assets such as gas, steam and/or hydro turbines, other high-value rotating machines, as well as balance of plant (BOP) equipment such as compressors, gearboxes, motors, pumps and fans.

The VibroSight® software is fast and powerful: so fast, that it has to be seen to be believed. Even higher channel count applications monitoring a large numbers of assets from a single database pose no problem. In practice, this makes VibroSight® easier to use and results in quicker data analysis.

For further information, contact your local Meggitt representative.

PRODUCT HIGHLIGHTS

The VibroSight® software incorporates the following main product features and benefits:

VibroSight databases	VibroSight uses VibroSight databases – a specialised system of files designed and optimised for the high-speed storage and retrieval of data generated by high-performance machinery monitoring systems. VibroSight databases use a proprietary database (data repository) system, consisting of VibroSight historical data folders (*.vshdf) for handling and logging of data by a VibroSight Server, and VibroSight historical data archives (*.vshda) for display, analysis and sharing of historical data without a VibroSight Server. Compared to systems using off-the shelf databases, the combination of VibroSight databases and the optimised data handling implemented by VibroSight result in a system that: • Is fully adapted to the data handling needs of high-performance machinery monitoring systems. • Is much faster than a standard database. • Is very responsive when analysing large quantities of data. • Requires less storage (disk space) and memory to store, work with and share the same quantity of information. • Integrates seamlessly.
Fully-integrated data management	VibroSight includes fully-integrated support for VibroSight database management that simplifies the configuration and operation of the database backup, database purge and management of offline data storage. This extremely easy to use data management configuration means that no external data/database management tools are required.
VibroSight Vision for easy data analysis	VibroSight Vision offers exceptional data handling and visualisation capabilities so that it is effortlessly fast for the display and analysis of data. It includes a complete catalogue of plots with cursor synchronisation that allows all of the information relevant to a particular event or time period to be more easily displayed for even quicker analysis. Data from multiple VibroSight databases (*.vshda) can be worked with at the same time using simple drag and drop operations in order to more easily compare present and historical data across multiple sites and time periods. Rapid, optimised zooming in plots encourages the discovery of additional data/plot features. For example, the Long Waveform plot can be used to display all measurement points in a continuous long-duration waveform – making the analysis of machinery data so much easier. Whenever a plot is updated in VibroSight Vision, VibroSight automatically processes ("filters") the measurement data using super-fast algorithms in order to optimally select the data points required to accurately display the data in the plot.
Transient machine states	VibroSight supports transient machine states that automatically detect the typical machine states associated with the transitory operation of a machine, such as run-ups, run-downs, aborted run-ups and aborted run-downs. These transient machine states help to quickly identify relevant data for the analysis of transient conditions. Transient machine states are in addition to VibroSight's support for (standard) machine states which are used to identify the steady-state operation of machinery.
Corbit plot	VibroSight Vision includes the Corbit (cascaded orbit) plot type which displays multiple orbits on the same 3D plot as a function of time or speed, optionally with their waveforms. A Corbit plot typically consists of many individual orbits or filtered orbits superimposed one on top of another for the selected time range. Corbit plots can be used to quickly see and examine the overall envelope (shape) of an orbit to see how it changes against time or speed, for example, to examine a particular bearing. A Corbit plot can also display multiple orbits for multiple Orbit measurements, for example, in order to allow bearings to be investigated in more detail or compared.

PRODUCT HIGHLIGHTS *(continued)*

Rolling-element bearing analysis	VibroSight includes support for rolling-element bearing analysis as follows: • Demodulation (envelope) signal analysis – a complex and detailed vibration waveform signal analysis that uses a dedicated demodulation spectrum to monitor and analyse frequency-specific measurements which are related to particular rolling-element bearing defects/failures frequencies (such as BPFI, BPFO, BSF and FTF). This technique detects problems in rolling-element bearings at the earliest possible opportunity, thereby allowing maintenance intervals and operational efficiency to be optimised. • Crest factor measurements – a simple indicative vibration waveform signal analysis that calculates the crest factor, a measurement which is related to general deterioration in a rolling-element bearing. This technique indicates problems in rolling-element bearings that have already developed, that is, much later than demodulation (envelope) signal analysis. Note: Rolling-element bearing analysis can be used with VM600 XMV16 cards and/or VibroSmart VSV30x modules.
OPC HDA	VibroSight includes support for OPC HDA (historical data access) such that a VibroSight OPC Server can be used to easily export data from a VibroSight Server (*.vshdf) to any third-party system with an OPC HDA client. In this way, data analytics applications can use tools such as MATLAB® and LabVIEW™ for further in-depth processing and analysis of VibroSight system data.
OPC UA	VibroSight includes support for OPC UA (unified architecture) so that a VibroSight Server can more easily export data from a VibroSight Server (*.vshdf) to third-party systems such as a DCS, PLC or data analysis tools. Advantages of OPC UA include platform independence, improved security, multiple properties per data item (tag), and easier system configuration and operation. Note: Support for OPC UA is in addition to the existing support for OPC Classic (OPC DA and OPC HDA).
CSV data import	VibroSight includes support for importing data from CSV files into a VibroSight Server (*.vshdf) in order to allow data from third-party systems such as other monitoring systems and/or process parameters from control systems (DCS or PLC) to be easily incorporated. This enables a single VibroSight plant-wide database that can take advantage of the speed and power of VibroSight for all machinery monitoring, remote monitoring and diagnostics.
Cybersecure remote monitoring and diagnostics	Remote VibroSight database (*.vshda) files can be imported into a local VibroSight Server (*.vshdf) in order to create a replica/mirror of the remote VibroSight system to support applications such as central diagnostics centres. File generation, importation and synchronisation is performed automatically in quasi real-time. While primarily intended for working with remote monitoring systems installed in cybersecure environments (behind a "data diode" or firewall), this feature is also useful for remote sites that have unreliable network connections.
Enterprise view	VibroSight Vision, VibroSight Event Viewer and VibroSight Mimic support concurrent connections to multiple different VibroSight Servers at the same time in order to support applications such as central diagnostics centres. For example, this allows a single Enterprise level Mimic in a remote diagnostics centre to easily monitor machinery in different locations/sites from a single display.
Agile software development	The VibroSight software is developed using an Agile software development model which ensures the timely and regular (quarterly) delivery of continuously improving software.

SOFTWARE MODULES

The VibroSight software architecture consists of the following software modules:

Configurator	VibroSight Configurator is the client application software module used for the configuration of VM600 rack-based machinery condition monitoring system (CMS) hardware and VibroSmart® distributed monitoring system (DMS) hardware. More specifically, it is used to configure: • VM600 XMx16 / XIO16T card pairs (and any CPUx / IOCx card pairs). • VibroSmart VSV30x + VSB300 modules, VSI010 + VSB010 modules (and VSN010 devices). The configuration determines the required measurements from the machinery being monitored. The configuration of specific parameters for the machinery being monitored is also required, for example, in order to allow data logging and the capture of transients. VibroSight Configurator is also used to configure other system functionality such as external interfaces using industry standard protocols such as Modbus and OPC to third-party devices.
Event Viewer	VibroSight Event Viewer is the client application software module that is used to log and view the events stored in VibroSight databases. Such events may have been created automatically by the machinery monitoring system or defined by users. For example, Event Viewer can provides a comprehensive overview of alarms (severity states), which may have been triggered by factors such as excessive vibration levels in the machinery being monitored.
Mimic	VibroSight Mimic is the client application software module that is used to provide an overview of the machinery being monitored, using live measurement data. Shortcuts in Mimic can also be used to automatically open VibroSight Vision and display a measurement in more detail. Different hierarchical views (Mimics) of the machinery being monitored can be created from a library of predefined objects, then customised and associated with specific measurements, using a simple to use drag-and-drop interface. For example, one object could display the current value of a measurement, while another object could change colour whenever a measurement exceeds a predefined alarm limit.
Scope	VibroSight Scope communicates directly with a VibroSmart® distributed monitoring system, whether it is a single module or a network of multiple measurement blocks. Unlike most of the VibroSight software modules, which use a client-server architecture, Scope is a lite-client application that communicates directly with VibroSmart modules (bypassing VibroSight Server). Scope has a simplified user interface that allows the live static measurement data being streamed from VibroSmart modules to be displayed. It also allows the control and monitoring of DSI inputs such as alarm bypass (AB), alarm reset (AR) and trip multiply (TM).
Server	VibroSight Server is the core server software module that interacts with all other parts of the machinery monitoring system. Server is the only software module to access the VibroSight historical data folder (*.vshdf) used for data storage. All requests for information from a VibroSight Server (*.vshdf), machinery monitoring system hardware and external device interfaces must pass through a Server. Server also manages the connections, data acquisition, alarms, data logging, licenses and verifies system access.
System Manager	VibroSight System Manager is the client application software module that provides the tools to manage the machinery monitoring system hardware. System Manager is used to activate software, upgrade firmware, configure IP addresses and NTP server settings.

SOFTWARE MODULES *(continued)*

Vision	VibroSight Vision is the state-of-the-art client application software module for the effective monitoring of machinery. It allows the live measurement data being streamed from VM600 XMx16 cards and/or VibroSmart® modules and devices, and the measurement data stored in VibroSight databases (*.vshdf and *.vshda) to be displayed. In Vision, a catalogue of plots are available to optimise the visualisation and analysis of measurement data, including waveforms, spectra and orbit plots (see **Plots on page 13**). The plots are fully customisable and navigation tools such as cursors, scaling and zooming facilitate the interpretation of the data.
Protect	VibroSight Protect is the software module used for the configuration and operation of VM600^{Mk2} systems for machinery protection applications (that is, the second generation of VM600 rack-based systems). More specifically, VibroSight Protect is used to configure VM600^{Mk2} systems using: • MPC4^{Mk2} + IOC4^{Mk2} modules, RLC16^{Mk2} modules (and any CPUM^{Mk2} + IOCN^{Mk2} module). Notes: VibroSight Protect is completely separate and distinct to VibroSight Configurator in order to ensure the complete separation (“segregation”) of machinery protection and condition monitoring in a VM600^{Mk2} / VM600 rack. (For reference, VM600 system hardware (that is, the first generation (Mk1) of VM600), namely the MPC4 / IOC4T, AMC8 / IOC8T and RLC16 (and CPUM / IOCN) cards are compatible with the VM600 MPSx software.)

BASE AND APPLICATION SPECIFIC PACKAGES

The base VibroSight software includes all of the features required for typical machinery vibration monitoring and analysis:

Base application package	
VibroSight	Provides full support for vibration analysis in order to monitor rotating machinery in a wide range of standard industrial applications.

In addition, optional packages are available in order to process data optimally and improve data visualisation and analysis for specific industrial applications:

Optional application specific packages	
Hydro air-gap monitoring	Allows the air gap between rotor and stator, and the rotor and stator shapes (geometrical data) to be monitored for hydroelectric generators. Also allows the magnetic flux (magnetic flux density, also known as magnetic field strength) of the air gap to be monitored. Note: The Hydro air-gap monitoring package can be used with VM600 XMV16 cards and/or VibroSmart VSV30x modules.
Combustion monitoring	Allows the combustion chamber with the maximum amplitude and frequency components to be quickly determined, and provides a clear view of the combustion instabilities for individual combustors. Note: The Combustion monitoring package can be used with VM600 XMV16 cards.
External data file import	Allows data import into a VibroSight system from CSV and/or VSDHA files.
Mathematical outputs	Allows existing data in a VibroSight system to be combined in order to generate new data. It includes a basic mathematics library and an expression editor that are used to calculate the new data from existing measurement or system data.

EXTERNAL INTERFACES

VibroSight can import data from external systems using industry standard interfaces. This allows data from third-party systems such as other monitoring and/or control systems (such as a DCS or PLC) to be easily centralised in a single database for ease of data management and/or to take advantage of the speed and power of VibroSight for the display and analysis of plant-wide data.
Equally, VibroSight can export its data using industry standard interfaces in order to share information with third-party systems.

The following interfaces are supported:

Modbus TCP and Modbus RTU	The Modbus interface, a Modicon standard protocol for data exchange between software applications, allows data to be exchanged between the VibroSight and external devices that support the Modbus interface. Both Modbus RTU (serial connection) and Modbus TCP (Ethernet connection) are supported. VibroSight's Modbus interfaces can import data from Modbus data sources into a VibroSight database and/or export online values (current values and status) from a VibroSight database to external Modbus devices. VibroSight can act as a Modbus client and/or server.
OPC Classic and OPC UA	OPC (OLE for Process Control) is a set of specifications that provides a common interface for communications and the exchange of data between different products from different manufacturers over Ethernet networks. OPC uses a client-server architecture and a publisher-subscriber model in order to allow devices and programs to communicate and share data with each other. The original OPC specifications included OPC DA (data access), OPC HDA (historical data access) and OPC AE (alarms and events), which are now collectively referred to as OPC Classic. The more recent OPC UA (Unified Architecture) specifications take advantage of newer technologies and improved security. OPC UA includes all the functionality found in OPC Classic. VibroSight's OPC Classic interfaces can import data from OPC data sources into a VibroSight database and export online or historical values (values and status) from a VibroSight database to external OPC devices. VibroSight's OPC UA interfaces can export online or historical values (values and status) from a VibroSight database to external OPC devices. VibroSight can act as an OPC client and/or server, as follows: VibroSight OPC clients are compatible with OPC DA versions 2.05 and 3.0. VibroSight OPC servers are compatible with OPC DA versions 2.05 and 3.0, OPC HDA versions 1.0, 1.1 and 1.2 and OPC UA.
PROFIBUS DP	PROFIBUS is a standard for industrial field buses defined by PI (PROFIBUS and PROFINET) International, an umbrella organisation responsible for both the PROFIBUS and PROFINET protocols. It allows the exchange of data between the VibroSight and external devices that support PROFIBUS DP (decentralised peripherals). VibroSight's PROFIBUS DP interface requires a VM600 CPUR2 / IOCR2 rack controller and communications interface card pair (in spare slots of the VM600 rack) to support real-time bi-directional data communication in a master-slave (client-server) arrangement. The VM600 rack acts as a PROFIBUS server (slave) device, while internally, Modbus data is exported from a VibroSight database and transmitted to external devices via the CPUR2 / IOCR2 card pair.

EXTERNAL INTERFACES *(continued)*

CSV files	CSV files are comma-separated values file, that is, delimited text files that use commas to separate values. CSV files are typically used to share (import/export) data between programs that store data in tables, such as databases or spreadsheets, including some legacy machinery monitoring systems. VibroSight imports data from CSV files by treating them as an external data source with a dedicated input directory/folder. VibroSight monitors the input folder for CSV files and will automatically parse and add the file's data to a VibroSight Server (`*.vshdf`) in chronological order.

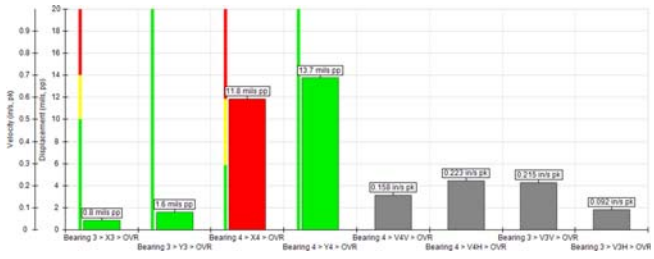
Note: Once imported into VibroSight, data from third-party systems is considered as VibroSight data and is handled and treated in exactly the same way for the purposes of data logging, display and analysis. For example, imported data can be displayed live in VibroSight Vision and/or logged to a VibroSight Server (`*.vshdf`).

PLOTS

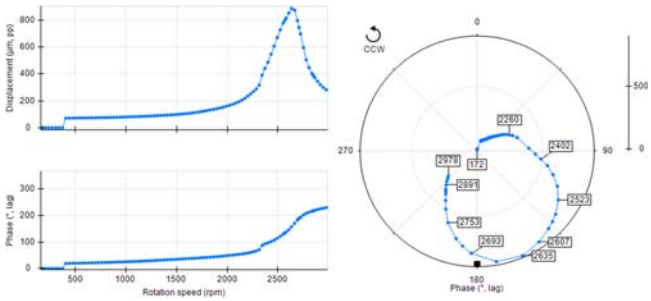
The following types of plot are included as standard in the VibroSight Vision catalogue of plots:

- Static plots: Bar Chart, Bode, Correlation, Polar, Shaft Centerline, Spider, Table and Trend
- Dynamic plots: Corbit (cascaded orbit), Orbit, Polar Waveform, Spectrogram, Spectrum, Full Spectrum, Waterfall/Cascade, Full Waterfall/Cascade, Waveform and Long Waveform

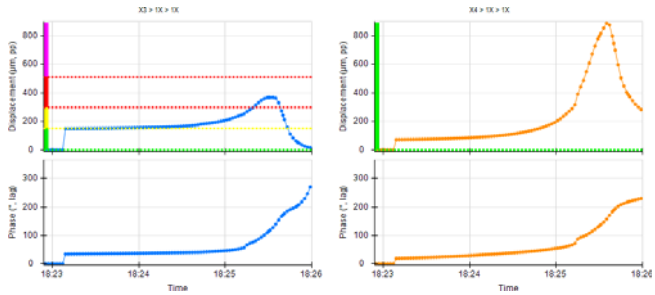
Bar Chart plot



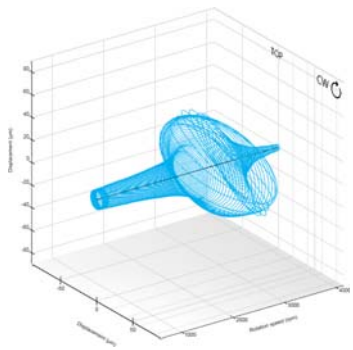
Polar plot



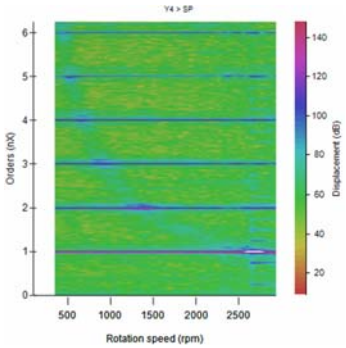
Trend plot



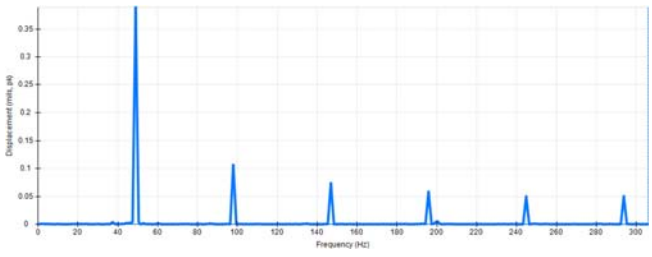
Corbit (cascaded orbit)



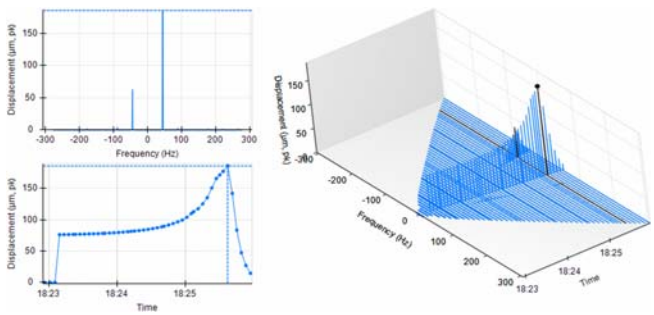
Spectrogram plot



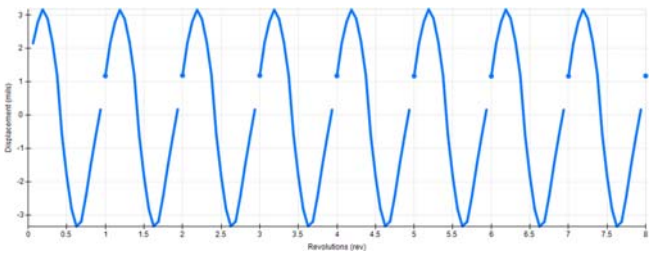
Spectrum plot



Waterfall/Cascade plot



Waveform plot



COMPATIBLE HARDWARE

VM600^{Mk2} rack-based systems for machinery protection and condition monitoring, consisting of:

- MPC4^{Mk2} + IOC4^{Mk2} machinery protection and condition monitoring modules
- RLC16^{Mk2} relay modules
- CPUM^{Mk2} + IOCN^{Mk2} rack controller and communications interface module.

Note: For reference, VM600 system hardware (that is, the first generation (Mk1) of VM600), namely the MPC4 / IOC4T, AMC8 / IOC8T and RLC16 (and CPUM / IOCN) cards are compatible with the VM600 MPSx software.

VM600 rack-based systems for condition monitoring, consisting of:

- XMV16 / XIO16T condition monitoring card pair for vibration
- XMVS16 / XIO16T condition monitoring card pair for vibration
- XMC16 / XIO16T condition monitoring card pair for combustion
- CPUR2 / IOCR2 and CPUR / IOCR rack controller and communications interface card pairs.

VibroSmart® distributed monitoring systems (DMSs) for machinery protection and/or condition monitoring:

- VSV30x + VSB300 monitoring modules
- VSI010 + VSB010 communications interface module
- VSN010 real-time Ethernet switch.

COMPUTER SYSTEM REQUIREMENTS

Typical computer configuration for standard machinery monitoring applications:

- 2.0 GHz or faster multi-core 64-bit (x64) processor
- 16 GB of system memory (RAM)
- 500 GB or more of available storage (disk space), preferably on a dedicated drive
- DirectX 11 graphics device
- 27" 1280x1024 (SXGA) high-colour (32-bit) display or better
- Gigabit Ethernet network interface adapter (card)
- CD/DVD optical drive, USB port and/or Internet access for software installation
- Optional 100 GB (or larger) backup media
- 64-bit Microsoft® Windows operating systems such as Windows 10, Windows 8.1, Windows Server 2016 or Windows Server 2012 with Microsoft .NET Framework 4.7.2 or later

COMPUTER SYSTEM REQUIREMENTS *(continued)*

Recommended computer configuration for demanding machinery monitoring applications, such as large-scale vibration projects and combustion projects:

- 3.0 GHz or faster multi-core 64-bit (x64) processor
- 32 GB of system memory (RAM)
- 1000 GB or more of available storage (disk space), preferably on a dedicated drive
- DirectX 11 graphics device
- 27" 1280x1024 (SXGA) high-colour (32-bit) display or better
- Gigabit Ethernet network interface adapter (card)
- CD/DVD optical drive, USB port and/or Internet access for software installation
- Optional 250 GB (or larger) backup media
- 64-bit Microsoft® Windows operating systems such as Windows 10, Windows 8.1, Windows Server 2016 or Windows Server 2012 with Microsoft .NET Framework 4.7.2 or later

Acceptable computer configuration for less demanding machinery monitoring applications:

- 2.0 GHz multi-core 32-bit (x86) processor
- 8 GB of system memory (RAM)
- At least 250 GB of available storage (disk space)
- DirectX 11 or higher graphics device
- 24" 1280x1024 (SXGA) high-colour (32-bit) display
- Gigabit Ethernet network interface adapter (card)
- CD/DVD optical drive, USB port and/or Internet access for software installation
- 32-bit Microsoft® Windows operating systems such as Windows 10 or Windows 8.1 with Microsoft .NET Framework 4.7.2 or later

Note: Windows 7 and Windows Server 2008 R2 are no longer recommended as Microsoft® support for these operating systems ended in January 2020.

PRODUCT SUPPORT AND MAINTENANCE

VibroSight uses a perpetual (permanent) license scheme. In other words, there is no expiration date for a license and therefore the software can be used indefinitely.
Product support and maintenance is free for the first year and includes:

- Email and telephone support
- Software updates and upgrades

Notes:
A VibroSight software license includes free software updates and upgrades for the duration of the time period defined by the purchased Updates and support (order option code Dxx) as shown in **Ordering information – VibroSight on page 18**.
Specific application and configuration support as well as upgrade support is excluded but can be provided at an additional charge. Contact your local Meggitt representative for further information.

SOFTWARE EDITIONS

The VibroSight® software is available in different editions that support various combinations of features and functionality, as follows:

		VibroSight edition							
		Live	Trend	Standard	Network client	Offline	MPS tools	VibroSmart free	Site *xxxx* channels
Feature	Handling of static measurement data (variables), alarms (severity states) and events	✓	✓	✓	✓	✓	✓	✓	✓
Feature	Handling of dynamic measurement data	✓		✓	✓	✓		✓	✓
Feature	Live measurement data server VibroSight Server for communication with VM600 XMx16 cards or VibroSmart® modules and devices	✓	✓	✓				✓	✓
Feature	Live measurement data display Display of live measurement data from VM600 XMx16 cards or VibroSmart® modules and devices	✓	✓	✓	✓		✓	✓	✓
Feature	Historical measurement data logging		✓	✓				✓	✓
Feature	Historical measurement data display		✓	✓	✓	✓		✓	✓
Feature	Mimics	✓	✓	✓	✓			✓	✓
Feature	Bar chart plot and Table plot	✓	✓	✓	✓	✓		✓	✓
Feature	Trend plot	✓	✓	✓	✓	✓		✓	✓
Feature	Other plots Bode, Corbit, Correlation, Orbit, Polar, Polar Waveform, Shaft Centreline, Spectrogram, Spectrum, Spider, Full Spectrum, Waterfall/Cascade, Full Waterfall/Cascade, Waveform and Long Waveform	✓		✓	✓	✓		✓	✓

The **Live** edition is a reduced feature edition capable of handling live data for both static and dynamic measurements. All VibroSight modules (VibroSight Server and the client applications) are included and the complete catalogue of plots is available in VibroSight Vision (see **Plots on page 13**).

The **Trend** edition is a reduced feature edition capable of handling live and historical data for static measurement, alarms and events only. No dynamic measurement data such as waveforms, spectra or orbits are available. A VibroSight Server (`*.vshdf`) can be used for data logging. All VibroSight modules (VibroSight Server and the client applications) are included, but only Bar Chart, Table and Trend plots are available in VibroSight Vision.

The **Standard** edition is the fully featured edition with full system capabilities. It is capable of handling live and historical data for both static and dynamic measurements. All VibroSight modules (VibroSight Server and the client applications) are included and the complete catalogue of plots is available in VibroSight Vision (see **Plots on page 13**).

The **Network client** edition is an edition intended for use on a network client computer in order to access a remote host computer that is running a VibroSight Server. This allows the data visualisation tasks (VibroSight Vision) to be off-loaded from the server computer and also allows multiple users to connect to a VibroSight Server from several client computers at the same time. This edition is capable of handling live and historical data for both static and dynamic measurements from remote server computers. Only the VibroSight client applications are included and the complete catalogue of plots is available in VibroSight Vision (see **Plots on page 13**).
Note: VibroSight Server is not included in the Network client edition.

SOFTWARE EDITIONS *(continued)*

The **Offline** edition is an edition intended for use with offline VibroSight databases (*.vshda) in order to visualise and analyse historical data only. This edition is capable of handling historical data for both static and dynamic measurements from local VibroSight databases but it is not possible to connect to a running VibroSight Server. Only VibroSight Server and the VibroSight Event Viewer, System Manager and Vision client applications are included and the complete catalogue of plots is available in VibroSight Vision (see **Plots on page 13**).
Note: The VibroSight Server included in the Offline edition is limited to opening local VibroSight databases.

The **MPS tools** edition is an edition intended for use with VibroSmart® systems configured for machinery protection only. This edition is capable of handling live data for static measurements directly from VibroSmart modules and devices but it is not possible to connect to a VibroSight Server. No dynamic measurement data such as waveforms, spectra or orbits are available and no data logging is possible. Only the VibroSight Configurator, VibroSight Protect, VibroSight Scope and VibroSight System Manager client applications are included.
Note: VibroSight Server is not included in the MPS tools edition.
The MPS tools edition replaces the previously available VibroSmart tools edition.

The **VibroSmart free** edition is an edition intended for use with VibroSmart® systems with up to 4 × dynamic channels (that is, up to 2 × VSV30x + VSB300 modules). This edition is capable of handling live and historical data for both static and dynamic measurements. All VibroSight modules (VibroSight Server and the client applications) are included and the complete catalogue of plots is available in VibroSight Vision.

The **Site *xxxx* channels** editions are intended for use with VM600 and/or VibroSmart® systems on sites with channel counts up to known specific limits of **128**, **256**, **512**, **1024** or **1536** × dynamic channels.

ORDERING INFORMATION – VIBROSIGHT

To order the VibroSight® software please specify:

Type	Designation	Ordering number (PNR)
VibroSight software	Machinery monitoring software Software for the configuration, operation and management of VM600[Mk2] / VM600 and/or VibroSmart® machinery monitoring systems	609-004-000-SSS/Codes

Notes

"SSS" represents the software version, for example, 609-004-000-040 corresponds to VibroSight 4.0.

Use the order option codes below to specify order options in the format 609-004-000-SSS/Axx-Bxx-Cxx-Dxx-Exx-AAxxx-ABxxx-ACxxx-BAxx-BBxx-BCxx-BDxx. For example, a complete ordering number is 609-004-000-xxx/A01-B01-C03-D01-E00-AA032.

Order option codes:

Code	Feature	Value	Description
A	Order type (see note 2 on page 20)	**01**	**New installation, requiring a VibroSight software version (via CD, USB or FTP) and a new license key**
		02	Major or minor level (**x**.**x**.x) software upgrade, requiring a later VibroSight software version (via CD, USB or FTP) and a new license key
		03	Expansion to support additional channels or tags using the existing VibroSight software version, requiring a new license key
		04	Demo
B	Language	**01**	**English**
C	Software edition (see **Software editions on page 16** and note 3 on page 21)	01	Live
		02	Trend
		03	**Standard (server computer installation)**
		04	Network client (client computer installation)
		05	Offline
		06	MPS tools Software edition for machinery protection systems only, that is, it is not possible to connect to a VibroSight Server.
		07	VibroSmart free Software edition for VibroSmart® systems supporting up to 4 dynamic measurement channels, that is, up to two VSV30x modules.
		08	Site 128 channels Software edition for systems supporting up to 128 dynamic measurement channels (VM600 XMx16 and/or VibroSmart VSV30x).

ORDERING INFORMATION – VIBROSIGHT *(continued)*

Code	Feature	Value	Description
C	Software edition (see **Software editions on page 16** and note 3 on page 21)	09	Site 256 channels Software edition for systems supporting up to 256 dynamic measurement channels (VM600 XMx16 and/or VibroSmart VSV30x).
		10	Site 512 channels Software edition for systems supporting up to 512 dynamic measurement channels (VM600 XMx16 and/or VibroSmart VSV30x).
		11	Site 1024 channels Software edition for systems supporting up to 1024 dynamic measurement channels (VM600 XMx16 and/or VibroSmart VSV30x).
		12	Site 1536 channels Software edition for systems supporting up to 1536 dynamic measurement channels (VM600 XMx16 and/or VibroSmart VSV30x).
D	Updates and support (see note 4 on page 21)	**01**	**1 year**
		02	2 years
		03	3 years
		05	5 years
		10	10 years
E	Optional packages (see note 5 on page 21)	00	None
		01	Hydro air-gap monitoring
		02	Combustion monitoring
		03	External data file import
		04	Mathematical outputs
AA	Number of XMV16 and/or XMVS16 channels (see note 6 on page 21)	**000**	**None**
		004	4 channels
		008	8 channels
		016	16 channels
		032	32 channels
		064	64 channels
		128	128 channels
		256	256 channels
AB	Number of XMC16 channels (see note 6 on page 21)	**000**	**None**
		016	16 channels
		032	32 channels
		048	48 channels
		064	64 channels

ORDERING INFORMATION – VIBROSIGHT *(continued)*

Code	Feature	Value	Description
AC	Number of VSV30x channels	**000**	**None**
		002	2 channels
		004	4 channels
		008	8 channels
		016	16 channels
		032	32 channels
		064	64 channels
		128	128 channels
		256	256 channels
BA	Number of Modbus server tags	**00**	**None**
		99	Unlimited
BB	Number of OPC server tags	**00**	**None**
		99	Unlimited
BC	Number of Modbus client tags	**00**	**None**
		01	100 tags
		05	500 tags
		10	1000 tags
		25	2500 tags
		50	5000 tags
		99	Unlimited
BD	Number of OPC client tags	**00**	**None**
		01	100 tags
		05	500 tags
		10	1000 tags
		25	2500 tags
		50	5000 tags
		99	Unlimited

Notes

1. **Bold text** in the above table indicates default order option code values.

2. Order type (Axx)
The different order types are typically used as follows:
- Order type A01 is for a new VibroSight installation.
- Order type A02 is for an existing VibroSight installation that requires a major or minor level (**x**.**x**.x) upgrade to a later version of the VibroSight software. the ability to install and run VibroSight software updates and upgrades depends on the purchased Updates and support (Dxx) package. In general, a new license key file is required for upgrades between major and minor version releases (**x**.**x**.x) and the license key file remains unchanged between update level releases (x.x.**x**).
  Order type A03 is for an existing VibroSight installation that requires an expansion of the currently installed version of the VibroSight software to support an additional number of channels (XMx16 or VSV30x) and/or tags (Modbus and/or OPC).

ORDERING INFORMATION – VIBROSIGHT *(continued)*

Notes (continued)

3. Software edition (Cxx)
The MPS tools software edition (order option code C06) replaces the previously available VibroSmart tools software edition (also order option code C06) which has bee discontinued since VibroSight 4.0.
For the Site xxx/xxxx channels software editions (order option codes C08 to C12):

- The number of licensed dynamic measurement channels can be shared between multiple different VM600 XMx16 cards and/or VibroSmart VSV30x modules and/or multiple different VibroSight Servers as required.
- It is not required to use Number of XMV16 and/or XMVS16 channels (order option code AAxxx), Number of XMC16 channels (order option code ABxxx) and/or Number of VSV30x channels (order option code ACxxx) to specify the number of dynamic measurement channels.

4. Updates and support (Dxx)
Since VibroSight 4.0, VibroSight uses a perpetual (permanent) license scheme such that there is no expiration date for a license and therefore the software can be used indefinitely. Accordingly, a license now include free software updates and upgrades for the duration of the time period defined by the purchased Updates and support.
For example, if a VibroSight software license is purchased with the default Updates and support period of 1 year (order option code D01), then all VibroSight software updates and upgrades are free for 1 year following the date when the VibroSight software license is generated.
Technical support is provided for the duration of the licensed Updates and support period (order option code Dxx) for issues that are demonstrable in the currently supported release(s) of VibroSight in an application that meets the published system requirements. Specific application and configuration support as well as upgrade support is excluded but can be provided at an additional charge. Contact your local Meggitt representative for further information.
After the purchased Updates and support period expires, VibroSight software updates, upgrades and technical support are no longer free and must be purchased by ordering a complete new VibroSight software license or by ordering additional years of Updates and support to extend the coverage of an existing license. In order to extend the Updates and support coverage of an existing VibroSight software license, all previous years counting from the expiration date of the last licensed Updates and support period must be paid.

5. Optional packages (Exx)
The optional External data file import package (order option code E03) supports data import into VibroSight from CSV and/or VSDHA files.

6. Number of XMx16 channels (AAxxx and ABxxx)
The highly configurable nature of VibroSight and the machinery monitoring system hardware (VM600 cards and/or VibroSmart modules and devices), and the wide variation in machinery monitoring applications makes it impossible to define operating limits for VibroSight that are correct under all circumstances. However, as general guidelines, Meggitt Energy & Equipment recommends the following:

- Up to 11 × VM600 XMx16 card pairs per instance of a VibroSight Server in typical vibration monitoring applications using both static and dynamic measurement data.
- Up to 32 × VM600 XMx16 card pairs per instance of a VibroSight Server in applications using static measurement data only.

For applications that exceed these recommendations, please contact your local Meggitt representative to discuss a suitable VibroSight system architecture.
Refer also to VibroSight application note 006 *VM600 cards per VibroSight Server: recommendations for vibration monitoring applications* for more information.

ORDERING INFORMATION – VIBROSIGHT COMPUTERS

VibroSight® is available pre-installed on a range of different computer systems.

To order a computer with the VibroSight® software pre-installed please specify:

Type	Designation	Ordering number (PNR)
VibroSight computer	Computer with VibroSight pre-installed	601-005-000-001/ C*x*

Notes

Details of the different VibroSight computers (C*x*) are given in the table below.
For example, a complete ordering number is 601-005-000-001/ C1.

	VibroSight computer systems			
	C1 "Blackbox"	**C2 "Desktop"**	**C3 "Workstation"**	**C4 "Rackmount"**
Ordering number (PNR)	601-005-000-001/ C1	601-005-000-001/ C2	601-005-000-001/ C3	601-005-000-001/ C4
Brand / family	Kontron / KBox C-102	HP Inc. / HP EliteDesk 800 G3 Tower PC	HP Inc. / HP Z440 Workstation	Hewlett Packard Enterprise (HPE) / HPE ProLiant DL360 Gen10 server
Form factor	Industrial computer platform for control cabinet applications	Tower	Tower	1U rack
Computer	Kontron KBox C-102 – customised	HP 800 G3 – customised	HP Z440 – customised	HPE ProLiant DL360 Gen10 server
Processor	Intel® Core™ i7-6820EQ	Intel® Core™ i7 or i5	Intel® Xeon® E5 2600 or E5 1600	Intel® Xeon®-Silver 4112
System memory (RAM)	32 GB DDR4	Up to 64 GB DDR4 (4 DIMM slots)	Up to 256 GB DDR4 (8 DIMM slots)	16 GB DDR4 (24 DIMM slots)
Storage	1 × 256 MB mSATA SSD internal (operating system). 1 × 512 GB 2.5" SSD. 1 × 1 TB 2.5" HDD.	Up to 2 TB 3.5" SATA. Up to 1 TB SATA SSHD. Up to 512 GB 2.5" SATA SSD. Up to 1 TB 2.5" HDD. Up to 1 TB 3.5" SSHD. Optical disc drive (ODD) – optional. *Note: 1 × 2.5" HDD, 2 × 3.5" HDD and 1 × 5.25" internal drive bays; 1 × slim external (ODD) drive bay.*	Up to 600 GB SAS. Up to 1.2 TB SAS. Up to 4 TB SATA. Up to 500 GB SATA SED. Up to 2 TB SATA SSD. Up to 512 GB SATA SE SSD. Up to 1 TB SATA SSHD. Optical disc drive (ODD): slim SATA DVD-ROM, DVD-Writer or Blu-ray writer. *Note: 2 × 3.5" internal drive bays; 2 × 5.25" and 1 × slim external (ODD) drive bays.*	1 × 240 GB SFF (2.5") SATA SSD. 1 × 480 GB SFF (2.5") SATA SSD. 1 × 2 TB SFF (2.5") SATA SSD. *Note: Smart modular disk controller (8 lanes / 2 GB cache).*

ORDERING INFORMATION – VIBROSIGHT COMPUTERS *(continued)*

	VibroSight computer systems			
	C1 "Blackbox"	**C2 "Desktop"**	**C3 "Workstation"**	**C4 "Rackmount"**
Ordering number (PNR)	601-005-000-001/ C1	601-005-000-001/ C2	601-005-000-001/ C3	601-005-000-001/ C4
Graphics	Intel HD Graphics 530 (integrated)	Intel HD Graphics 630, 610 or 530 (integrated). NVIDIA® GeForce® or AMD Radeon™ graphics card.	NVIDIA® or AMD graphics card (2D or 3D)	---
Interfaces	3 × 10/100/1000 MBit/s Ethernet. 2 × USB 3.0, 2 x USB 2.0. 1 × DisplayPort (DP). 1 × RS-232.	1 × Gigabit Ethernet (GbE). 4 × USB 3.1, 2 × USB 2.0. 2 × DisplayPort (DP). 1 × RS-232 – optional.	1 × Gigabit Ethernet (GbE). 4 × USB 3, 2 × USB 2.0. 1 × RS-232 – optional.	4 × Gigabit Ethernet (GbE).
Operating system	Windows 10 IoT	Windows 10 Pro 64	Windows 10 Pro 64	Windows Server 2016
Mounting	Control cabinet key holes, book size format	N/A	N/A	19" rack
Other	Maintenance-free design without any fans or batteries. +24 V_{DC} power supply.	---	---	Enterprise server. High-performance fans with fan redundancy. 96 W smart storage battery (to backup the write cache content onto flash memory controllers in case of an unplanned server power loss).
Application	Industrial computer for harsh environments	Less powerful computer for standard machinery monitoring applications (smaller systems)	More powerful computer for more demanding machinery monitoring applications (larger systems)	Server computer for the most demanding machinery monitoring applications (larger, data intensive systems)

RELATED PRODUCTS

VibroSight diagnostics rule box	VibroSight diagnostics rule box software	: Refer to corresponding data sheet

Meggitt SA software

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14. SEVERANCE. Should any provision of this Agreement be or become invalid or unenforceable, this shall not affect the legal validity of the other provisions. In this case, the invalid or unenforceable provision shall be replaced where possible by a legitimate provision with an equivalent commercial intent.

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(1) You are granted a non-exclusive, non-transferable right to use the Sybase Embedded Runtime Programs for your own internal business purposes. You may only use the Sybase Embedded Runtime Programs with and as part of Meggitt SA Software Product and you are prohibited from using such Sybase Embedded Runtime Programs for application development purposes.

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(3) Sybase retains title to the intellectual property rights associated with the Sybase Embedded Runtime Programs. You may not copy the Sybase Embedded Runtime Programs, except for inactive backup and archival purposes only.

(4) Meggitt SA and Sybase shall not be responsible for any indirect, incidental, special and consequential damages associated with this Sybase Embedded Run-Time Sub-License.

(5) Only object code versions of the Sybase Embedded Runtime Program are licensed to you and reverse engineering, disassembly or decompilation to derive source code shall is prohibited (except to the extent expressly allowed under applicable law).

(6) You agree to comply with all export and re-export restrictions and regulations (“Export Restrictions”) imposed by the government of the United Sates.

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(8) Upon termination of the license for the Software Program, you shall destroy or return all copies of the Embedded Runtime Program.

I/We declare having read, understood and concluded this Licence Agreement with Meggitt SA.

Meggitt (Meggitt PLC) is a leading international engineering company, headquartered in England, that designs and delivers high-performance components and subsystems for aerospace, defence and selected energy markets. Meggitt comprises four customer-aligned divisions: Airframe Systems, Engine Systems, Energy & Equipment and Services & Support.

The Energy & Equipment division includes the Energy Sensing and Controls product group that specialises in sensing and monitoring solutions for a broad range of energy infrastructure, and control valves for industrial gas turbines, primarily for the Power Generation, Oil & Gas and Services markets. Energy & Equipment is headquartered in Switzerland (Meggitt SA) and incorporates the vibro-meter® product line, which has over 65 years of sensor and systems expertise and is trusted by original equipment manufacturers (OEMs) globally.

In this publication, a dot (.) is used as the decimal separator and thousands are separated by thin spaces. Example: 12345.67890.

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No. 11/86/2017-Th.II
Government of India
Ministry of Power
.....

Shram Shakti Bhawan, Rafi Marg,
New Delhi, dated the 8th October, 2021

To,

1. Principal Secretary/Secretary in charge of Energy/Power Departments, All States/UTs
2. Chairman, CEA
3. CMDs of all CGSs

Subject: Revised Policy for Biomass Utilisation for Power Generation through Co-firing in Coal based Power Plants

Sir/Madam,

The undersigned is directed to refer to this Ministry's "Policy for Biomass Utlisation for Power Generation through Co-firing in Pulverised Coal Fired Boilers" issued in November, 2017

2. In order to further promote use of biomass pellets in coal based thermal power plants, the above Policy is further modified. A copy of "Revised Policy for Biomass Utlisation for Power Generation through Co-firing in Coal based Power Plants" is enclosed for information and necessary action please.

Yours faithfully

Encls: As Above

Kumar Saurabh
Deputy Director(Thermal)
Ministry of Power

Copy to:
(i) PS to Hon'ble Minister,
(ii) PS to Hon'ble MoS for Power,
(iii) Sr. PPS to Secretary(Power),
(iv) PPS to AS(SKGR), PPS to AS&FA, PPS to AS(VKD)
(v) All Joint Secretaries/EA/Chief Engineer, Ministry of Power
(vi) Incharge, NIC, Ministry of Power - with a request to upload this document on the website of MoP.

REVISED POLICY OF MINISTRY OF POWER FOR BIOMASS UTILIZATION FOR POWER GENERATION THROUGH CO-FIRING IN COAL BASED POWER PLANTS

1. The current availability of biomass in India is estimated at about 750 million metric tonnes per year. The estimated surplus biomass availability is at about 230 million metric tonnes per annum covering agricultural residues.

2. Ministry of Power (MoP) vide its policy dated 17-11-2017 on biomass utilization for power generation had advised that all fluidized bed and pulverized coal units (coal based thermal power plants) except those having ball and tube mill, of power generation utilities, public or private, located in India, to use 5-10% blend of biomass pellets made, primarily, of agro residue along with coal after assessing the technical feasibility, viz. safety aspect etc.

3. In order to further promote use of biomass pellets in coal based thermal power plants, the above Policy is further modified. The modifications in the above Policy are as under:

(i). All coal based thermal power plants of power generation utilities with **bowl mill**, shall on annual basis mandatorily use 5 percent blend of biomass pellets made, primarily, of agro residue along with coal with effect from one year of the date of issue of this guideline. The obligation shall increase to 7 percent with effect from two years after the date of issue of this order and thereafter.

(ii). All coal based thermal power plants of power generation utilities with **ball & race mill**, shall on annual basis mandatorily use 5 % blend of biomass pellets (torrefied only) made, primarily, of agro residue along with coal. This is to be complied within one year starting from this order. Two years from the date of issue of this order and thereafter the obligation will increase to 7 percent.

(iii). All coal based thermal power plants of power generation utilities with **ball & tube mills**, shall on annual basis mandatorily use 5 % blend of torrefied biomass pellets with volatile content below 22%, primarily made of agro residue along with coal. This is to be complied within one year.

(iv). Generating Utilities having certain units under Reserve Shutdown or not being despatched due to MOD (Merit Order Despatch) consideration would ensure to increase the percentage of co-firing up to 10 % in their other operating units/ plants (5 % in plants having ball and tube mills).

(v). Any power plants seeking exemptions / relaxation from co-firing may be considered on case to case basis, based on recommendations of CEA. A Committee headed by Chief Engineer (TE&TD), CEA, including representatives from NTPC, BHEL, CPRI, Ministry of Agriculture and Mission

Directorate shall examine the request of power plants for their exemption/relaxation from mandatory co-firing of biomass, as mentioned at para (i) to (iv) above.

(vi). The policy for co-firing of biomass would be in force for 25 years or till the useful life of the thermal power plant whichever is earlier. The minimum percentage of biomass for co-firing will be reviewed from time to time.

(vii) The minimum contract period for procurement of biomass pellets by generating utilities shall be for 7 years so as to avoid delay in awarding contracts by generating companies every year and also to build up long term supply chain. There may be provision of firm price of biomass pellets for the first year of the contract and yearly rate variation from second year onwards where rates can vary as per terms and conditions of the contract. In order to enable its implementation, a model RfP and contract shall be issued by MOP by 15.11.2021 for adhering to by all generating utilities. However, the ongoing process of contracting for biomass co-firing by generating utilities shall not be affected till issue of Model Contract.

(viii). Provisions related to tariff determination and scheduling shall be as given below:

a. For projects set up under Section 62 of the Electricity Act 2003, the increase in cost due to co-firing of biomass pellets shall be pass through in Energy Charge Rate (ECR).
b. For projects set up under Section 63 of the Electricity Act 2003, the increase in ECR due to biomass co-firing can be claimed under Change in Law provisions.
c. Such additional impact on ECR shall not be considered in deciding Merit Order Despatch (MOD) of the power plant.
d. Obligated Entities such as Discoms can meet their Renewable Purchase Obligations (RPO) by buying such generation of co-firing.

*****

Part 1
FORM -15

Details of Sourcewise fuel for computation of Energy Charges

	Company		**NTPC**					
	Name of the generating Station		**MOUDA STAGE II**					
	Month		**APRIL 23**					
SL	**Particulars**	**Unit**	**Domestic Coal-Special arrangement**	**Domestic Coal**	**Domestic Coal (NTPC Mines)**	**E-auction coal**	**Imported coal**	**Bio Mass**
A)	**OPENING QUANTITY**							
1	Opening Stock of coal	(MT)	287,395.30	6,494.34	2,073.23	0.00	24,902.26	0.00
2	Value of Stock	Rs	998,334,615.87	34,015,720.54	9,872,432.53	0.00	360,803,048.15	0.00
B)	**QUANTITY**							
3	Quantity of Coal /Lignite supplied by Coal / Lignite Company	(MT)	450,652.32	387,645.07	23,680.20	0.00	148,108.50	274.07
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	0.00	0.00	0.00	0.00	0.00	0.00
5	Coal supplied by Coal/Lignite Company (3+4)	(MT)	450,652.32	387,645.07	23,680.20	0.00	148,108.50	274.07
6	Normative transit & Handling losses (for Coal /Lignite based projects)	(MT)	3,605.22	3,101.16	189.44	0.00	296.22	0.00
7	Net Coal / Lignite supplied (5 - 6)	(MT)	447,047.10	384,543.91	23,490.76	0.00	147,812.28	274.07
C)	**PRICE**							
8	Amount charged by the Coal / Lignite Company	Rs	985,033,575.06	1,835,287,314.12	106,749,191.00	0.00	2,082,861,656.15	2,404,635.38
9	Adjustment (+ / -) in amount charged by coal / Lignite Company	Rs	0.00	0.00	0.00		0.00	0.00
10	Handling,Sampling and such other Similar charges	Rs	25,110,001.98	2,951,311.35	180,287.68	0.00	-15,956,382.85	0.00
11	**Total Amount charged (8 +9+10)**	Rs	1,010,143,577.04	1,838,238,625.47	106,929,478.68	0.00	2,066,905,273.30	2,404,635.38
D)	**TRANSPORTATION**	Rs						
12	Transportation charges by Rail / Ship / Road Transport							
	By Rail	Rs	522,139,423.76	292,057,655.03	229,376.37	0.00	524,281.98	143,886.75
	By Road	Rs						
	By Ship	Rs						
13	Adjustment (+/-) in amount charged by railways / transport company	Rs						
14	Demurrage charges, if any	Rs	1,595,241.95	1,372,205.69	83,824.37	0.00	524,281.98	0.00
15	Cost of diesel in transporting Coal through MGR system, if applicable	Rs						
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	520,544,181.81	290,685,449.34	145,552.00	0.00	0.00	143,886.75
17	Total amount charged for Coal / Lignite supplied including transportation (11 + 16)	Rs	1,530,687,758.85	2,128,924,074.81	107,075,030.68	0.00	2,066,905,273.30	2,548,522.13
E)	**TOTAL COST**							
18	Landed Cost of Coal/Lignite (2+17) / (1+7)	**Rs/MT**	**3,443.46**	**5,531.27**	**4,574.70**		**14,056.19**	**9,298.80**
19	Blending Ratio (Domestic/Imported)		0.278217	0.590000	0.040023	0.000000	0.091200	0.000583
20	**Weighted average cost of Coal /Lignite (Including biomass)**	**Rs/MT**			**5,691.81**			
20a	Weighted average cost of Coal /Lignite (Excluding biomass)	**Rs/MT**			5,689.71			
F)	**QUALITY**							
21	GCV of Domestic coal of the opening coal stock as per bill of coal company	(Kcal/Kg)	3,933	4,699	4,750	0		
22	GCV of Domestic coal supplied as per bill of coal company	(Kcal/Kg)	3,924	4,687	4,750	0		3,700
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Kg)					5,000	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Kg)					5,000	
25	Weighted average GCV of Coal /Lignite as billed (Including biomass)	(Kcal/Kg)			4,506			
25a	Weighted average GCV of Coal /Lignite as billed (Excluding biomass)	(Kcal/Kg)			4,507			
26	GCV of Domestic coal of the Opening stock as received at station	(Kcal/Kg)	3,385	3,378	3,633	0		
27	GCV of Domestic coal/biomass supplied as received at station	(Kcal/Kg)	3,375	3,369	3,310	0		3,557
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Kg)					5,170	
29	GCV of Imported coal supplied as received at station	(Kcal/Kg)					5,145	
30	**Weighted average GCV of coal/ Lignite as Received (Including biomass)**	**(Kcal/Kg)**			**3,533**			
30a	Weighted average GCV of coal/ Lignite as Received (Excluding biomass)	(Kcal/Kg)			3,533			

Part 1
FORM -15

Details of Sourcewise fuel for computation of Energy Charges

	Company		**NTPC**					
	Name of the generating Station		**MOUDA STAGE II**					
	Month		**MAY 23**					
SL	**Particulars**	**Unit**	**Domestic Coal-Special arrangement**	**Domestic Coal**	**Domestic Coal (NTPC Mines)**	**E-auction coal**	**Imported coal**	**Bio Mass**
A)	**OPENING QUANTITY**							
1	Opening Stock of coal	(MT)	335,718.20	99,599.98	6,755.15	0.00	61,541.98	0.00
2	Value of Stock	Rs	1,156,031,886.26	550,914,810.11	30,902,751.25	0.00	865,045,724.60	0.00
B)	**QUANTITY**							
3	Quantity of Coal /Lignite supplied by Coal / Lignite Company	(MT)	377,247.71	427,014.93	0.00	0.00	159,159.20	348.03
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	0.00	0.00	0.00	0.00	0.00	0.00
5	Coal supplied by Coal/Lignite Company (3+4)	(MT)	377,247.71	427,014.93	0.00	0.00	159,159.20	348.03
6	Normative transit & Handling losses (for Coal /Lignite based projects)	(MT)	3,017.98	3,416.12	0.00	0.00	318.32	0.00
7	Net Coal / Lignite supplied (5 - 6)	(MT)	374,229.73	423,598.81	0.00	0.00	158,840.88	348.03
C)	**PRICE**							
8	Amount charged by the Coal / Lignite Company	Rs	793,069,708.93	1,976,003,607.00	0.00	0.00	2,253,765,169.75	3,059,928.71
9	Adjustment (+ / -) in amount charged by coal / Lignite Company	Rs	0.00	0.00	0.00		0.00	0.00
10	Handling,Sampling and such other Similar charges	Rs	30,262,325.27	-12,130,875.01	0.00	0.00	3,621,272.99	0.00
11	**Total Amount charged (8 +9+10)**	Rs	823,332,034.20	1,963,872,731.99	0.00	0.00	2,257,386,442.74	3,059,928.71
D)	**TRANSPORTATION**	Rs						
12	Transportation charges by Rail / Ship / Road Transport							
	By Rail	Rs	454,201,471.54	323,517,463.00	0.00	0.00	0.00	182,715.75
	By Road	Rs						
	By Ship	Rs						
13	Adjustment (+/-) in amount charged by railways / transport company	Rs						
14	Demurrage charges, if any	Rs	0.00	0.00	0.00	0.00	0.00	0.00
15	Cost of diesel in transporting Coal through MGR system, if applicable	Rs						
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	454,201,471.54	323,517,463.00	0.00	0.00	0.00	182,715.75
17	Total amount charged for Coal / Lignite supplied including transportation (11 + 16)	Rs	1,277,533,505.74	2,287,390,194.99	0.00	0.00	2,257,386,442.74	3,242,644.46
E)	**TOTAL COST**							
18	Landed Cost of Coal/Lignite (2+17) / (1+7)	**Rs/MT**	**3,427.81**	**5,424.91**	**4,574.70**		**14,168.22**	**9,317.14**
19	Blending Ratio (Domestic/Imported)		0.334589	0.570000	0.000000	0.000000	0.095000	0.000411
20	**Weighted average cost of Coal /Lignite (Including biomass)**	**Rs/MT**			**5,588.92**			
20a	Weighted average cost of Coal /Lignite (Excluding biomass)	**Rs/MT**			5,587.38			
F)	**QUALITY**							
21	GCV of Domestic coal of the opening coal stock as per bill of coal company	(Kcal/Kg)	3,928	4,687	4,750	0		
22	GCV of Domestic coal supplied as per bill of coal company	(Kcal/Kg)	3,933	4,653	4,750	0		3,398
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Kg)					5,000	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Kg)					5,088	
25	Weighted average GCV of Coal /Lignite as billed (Including biomass)	(Kcal/Kg)			4,453			
25a	Weighted average GCV of Coal /Lignite as billed (Excluding biomass)	(Kcal/Kg)			4,454			
26	GCV of Domestic coal of the Opening stock as received at station	(Kcal/Kg)	3,379	3,369	3,336	0		
27	GCV of Domestic coal/biomass supplied as received at station	(Kcal/Kg)	3,298	3,256	3,338	0		3,589
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Kg)					5,149	
29	GCV of Imported coal supplied as received at station	(Kcal/Kg)					5,141	
30	**Weighted average GCV of coal/ Lignite as Received (Including biomass)**	**(Kcal/Kg)**			**3,475**			
30a	Weighted average GCV of coal/ Lignite as Received (Excluding biomass)	(Kcal/Kg)			3,475			

Part 1
FORM -15

Details of Sourcewise fuel for computation of Energy Charges

	Company		**NTPC**					
	Name of the generating Station		**MOUDA STAGE II**					
	Month		**JUNE 23**					
SL	**Particulars**	**Unit**	**Domestic Coal-Special arrangement**	**Domestic Coal**	**Domestic Coal (NTPC Mines)**	**E-auction coal**	**Imported coal**	**Bio Mass**
A)	**OPENING QUANTITY**							
1	Opening Stock of coal	(MT)	296,471.38	242,458.88	6,755.15	0.00	107,846.86	0.00
2	Value of Stock	Rs	1,016,247,047.45	1,315,316,982.08	30,902,751.25	0.00	1,527,997,718.89	0.00
B)	**QUANTITY**							
3	Quantity of Coal /Lignite supplied by Coal / Lignite Company	(MT)	306,556.48	274,957.17	18,987.40	0.00	56,628.80	272.94
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	0.00	0.00	0.00	0.00	0.00	0.00
5	Coal supplied by Coal/Lignite Company (3+4)	(MT)	306,556.48	274,957.17	18,987.40	0.00	56,628.80	272.94
6	Normative transit & Handling losses (for Coal /Lignite based projects)	(MT)	2,452.45	2,199.66	151.90	0.00	113.26	0.00
7	Net Coal / Lignite supplied (5 - 6)	(MT)	304,104.03	272,757.51	18,835.50	0.00	56,515.54	272.94
C)	**PRICE**							
8	Amount charged by the Coal / Lignite Company	Rs	626,766,936.08	1,202,436,950.00	83,925,610.00	0.00	813,556,297.10	2,379,907.55
9	Adjustment (+ / -) in amount charged by coal / Lignite Company	Rs	0.00	0.00	0.00		0.00	0.00
10	Handling,Sampling and such other Similar charges	Rs	-199,322,044.06	-173,396,268.18	1,443,942.24	0.00	-17,784,331.02	0.00
11	**Total Amount charged (8 +9+10)**	Rs	427,444,892.02	1,029,040,681.82	85,369,552.24	0.00	795,771,966.08	2,379,907.55
D)	**TRANSPORTATION**	Rs						
12	Transportation charges by Rail / Ship / Road Transport							
	By Rail	Rs	376,214,493.73	208,581,451.62	5,047,218.76	0.00	546,653.88	89,871.36
	By Road	Rs	0.00					
	By Ship	Rs						
13	Adjustment (+/-) in amount charged by railways / transport company	Rs						
14	Demurrage charges, if any	Rs	2,923,547.73	2,654,239.62	183,290.76	0.00	546,653.88	0.00
15	Cost of diesel in transporting Coal through MGR system, if applicable	Rs						
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	373,290,946.00	205,927,212.00	4,863,928.00	0.00	0.00	89,871.36
17	Total amount charged for Coal / Lignite supplied including transportation (11 + 16)	Rs	800,735,838.02	1,234,967,893.82	90,233,480.24	0.00	795,771,966.08	2,469,778.91
E)	**TOTAL COST**							
18	Landed Cost of Coal/Lignite (2+17) / (1+7)	**Rs/MT**	**3,025.40**	**4,949.93**	**4,733.61**		**14,138.09**	**9,048.80**
19	Blending Ratio (Domestic/Imported)		0.403658	0.450000	0.000000	0.000000	0.146000	0.000341
20	**Weighted average cost of Coal /Lignite (Including biomass)**	**Rs/MT**			**5,515.95**			
20a	Weighted average cost of Coal /Lignite (Excluding biomass)	**Rs/MT**			5,514.74			
F)	**QUALITY**							
21	GCV of Domestic coal of the opening coal stock as per bill of coal company	(Kcal/Kg)	3,931	4,659	4,750	0		
22	GCV of Domestic coal supplied as per bill of coal company	(Kcal/Kg)	4,302	4,698	4,750	0		3,382
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Kg)					5,063	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Kg)					5,200	
25	Weighted average GCV of Coal /Lignite as billed (Including biomass)	(Kcal/Kg)			4,516			
25a	Weighted average GCV of Coal /Lignite as billed (Excluding biomass)	(Kcal/Kg)			4,516			
26	GCV of Domestic coal of the Opening stock as received at station	(Kcal/Kg)	3,336	3,278	3,336	0		
27	GCV of Domestic coal/biomass supplied as received at station	(Kcal/Kg)	3,533	3,545	3,388	0		3,382
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Kg)					5,143	
29	GCV of Imported coal supplied as received at station	(Kcal/Kg)					5,164	
30	**Weighted average GCV of coal/ Lignite as Received (Including biomass)**	**(Kcal/Kg)**			**3,679**			
30a	Weighted average GCV of coal/ Lignite as Received (Excluding biomass)	(Kcal/Kg)			3,679			

Part 1
FORM -15

Details of Sourcewise fuel for computation of Energy Charges

	Company		**NTPC**					
	Name of the generating Station		**MOUDA STAGE II**					
	Month		**JULY 23**					
SL	**Particulars**	**Unit**	**Domestic Coal-Special arrangement**	**Domestic Coal**	**Domestic Coal (NTPC Mines)**	**E-auction coal**	**Imported coal**	**Bio Mass**
A)	**OPENING QUANTITY**							
1	Opening Stock of coal	(MT)	184,832.93	279,901.66	25,590.65	0.00	48,177.71	0.00
2	Value of Stock	Rs	559,194,166.90	1,385,493,528.19	121,136,231.49	0.00	681,140,629.24	0.00
B)	**QUANTITY**							
3	Quantity of Coal /Lignite supplied by Coal / Lignite Company	(MT)	413,244.09	267,418.32	0.00	0.00	975.30	277.49
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	0.00	0.00	0.00	0.00	0.00	0.00
5	Coal supplied by Coal/Lignite Company (3+4)	(MT)	413,244.09	267,418.32	0.00	0.00	975.30	277.49
6	Normative transit & Handling losses (for Coal /Lignite based projects)	(MT)	3,305.95	2,139.35	0.00	0.00	1.95	0.00
7	Net Coal / Lignite supplied (5 - 6)	(MT)	409,938.14	265,278.97	0.00	0.00	973.35	277.49
C)	**PRICE**							
8	Amount charged by the Coal / Lignite Company	Rs	891,750,521.50	1,276,665,464.00	0.00	0.00	106,632.45	2,354,467.63
9	Adjustment (+ / -) in amount charged by coal / Lignite Company	Rs	0.00	0.00	0.00		0.00	0.00
10	Handling,Sampling and such other Similar charges	Rs	5,146,294.22	1,813,139.44	0.00	0.00	-21,305,746.83	0.00
11	**Total Amount charged (8 +9+10)**	Rs	896,896,815.72	1,278,478,603.44	0.00	0.00	-21,199,114.38	2,354,467.63
D)	**TRANSPORTATION**	Rs						
12	Transportation charges by Rail / Ship / Road Transport							
	By Rail	Rs	450,130,064.49	200,497,176.00	0.00	0.00	1,142.00	0.00
	By Road	Rs	0.00					
	By Ship	Rs						
13	Adjustment (+/-) in amount charged by railways / transport company	Rs						
14	Demurrage charges, if any	Rs	478,907.00	313,121.00	0.00	0.00	1,142.00	0.00
15	Cost of diesel in transporting Coal through MGR system, if applicable	Rs						
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	449,651,157.49	200,184,055.00	0.00	0.00	0.00	0.00
17	Total amount charged for Coal / Lignite supplied including transportation (11 + 16)	Rs	1,346,547,973.21	1,478,662,658.44	0.00	0.00	-21,199,114.38	2,354,467.63
E)	**TOTAL COST**							
18	Landed Cost of Coal/Lignite (2+17) / (1+7)	**Rs/MT**	**3,204.16**	**5,253.59**	**4,733.61**		**13,426.80**	**8,484.87**
19	Blending Ratio (Domestic/Imported)		0.179733	0.801951	#DIV/0!	0.000000	0.017999	0.000317
20	**Weighted average cost of Coal /Lignite (Including biomass)**	**Rs/MT**	**5,033.37**					
20a	Weighted average cost of Coal /Lignite (Excluding biomass)	**Rs/MT**	5,032.28					
F)	**QUALITY**							
21	GCV of Domestic coal of the opening coal stock as per bill of coal company	(Kcal/Kg)	4,119	4,680	4,750	0		
22	GCV of Domestic coal supplied as per bill of coal company	(Kcal/Kg)	4,243	4,722	0	0		3,277
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Kg)					5,110	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Kg)					5,000	
25	Weighted average GCV of Coal /Lignite as billed (Including biomass)	(Kcal/Kg)	4,618					
25a	Weighted average GCV of Coal /Lignite as billed (Excluding biomass)	(Kcal/Kg)	4,619					
26	GCV of Domestic coal of the Opening stock as received at station	(Kcal/Kg)	3,436	3,419	3,374	0		
27	GCV of Domestic coal/biomass supplied as received at station	(Kcal/Kg)	3,186	3,257	0	0		3,277
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Kg)					5,150	
29	GCV of Imported coal supplied as received at station	(Kcal/Kg)					5,155	
30	**Weighted average GCV of coal/ Lignite as Received (Including biomass)**	**(Kcal/Kg)**	**3,359**					
30a	Weighted average GCV of coal/ Lignite as Received (Excluding biomass)	(Kcal/Kg)	3,359					

Part 1
FORM -15

Details of Sourcewise fuel for computation of Energy Charges

	Company		**NTPC**					
	Name of the generating Station		**MOUDA STAGE II**					
	Month		**AUGUST 23**					
SL	**Particulars**	**Unit**	**Domestic Coal-Special arrangement**	**Domestic Coal**	**Domestic Coal (NTPC Mines)**	**E-auction coal**	**Imported coal**	**Bio Mass**
A)	**OPENING QUANTITY**							
1	Opening Stock of coal	(MT)	294,619.50	35,395.38	25,590.65	0.00	9,161.48	0.00
2	Value of Stock	Rs	944,008,271.12	185,952,838.69	121,136,231.49	0.00	123,009,408.45	0.00
B)	**QUANTITY**							
3	Quantity of Coal /Lignite supplied by Coal / Lignite Company	(MT)	604,150.36	171,995.60	35,965.89	0.00	571.20	492.27
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	0.00	0.00	0.00	0.00	0.00	0.00
5	Coal supplied by Coal/Lignite Company (3+4)	(MT)	604,150.36	171,995.60	35,965.89	0.00	571.20	492.27
6	Normative transit & Handling losses (for Coal /Lignite based projects)	(MT)	4,833.20	1,375.97	287.73	0.00	1.14	
7	Net Coal / Lignite supplied (5 - 6)	(MT)	599,317.16	170,619.64	35,678.16	0.00	570.06	492.27
C)	**PRICE**							
8	Amount charged by the Coal / Lignite Company	Rs	1,188,693,628.83	980,846,668.61	161,203,843.00	0.00	8,556,689.75	3,985,716.44
9	Adjustment (+ / -) in amount charged by coal / Lignite Company	Rs	0.00	0.00	0.00		0.00	0.00
10	Handling,Sampling and such other Similar charges	Rs	19,316,305.47	4,354,362.27	910,537.92	0.00	13,250.62	0.00
11	**Total Amount charged (8 +9+10)**	Rs	1,208,009,934.30	985,201,030.88	162,114,380.92	0.00	8,569,940.37	3,985,716.44
D)	**TRANSPORTATION**	Rs						
12	Transportation charges by Rail / Ship / Road Transport							
	By Rail	Rs	758,985,590.40	127,939,202.68	40,010.00	0.00	635.00	0.00
	By Road	Rs	0.00					
	By Ship	Rs						
13	Adjustment (+/-) in amount charged by railways / transport company	Rs						
14	Demurrage charges, if any	Rs	672,073.00	191,332.00	40,010.00	0.00	635.00	0.00
15	Cost of diesel in transporting Coal through MGR system, if applicable	Rs						
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	758,313,517.40	127,747,870.68	0.00	0.00	0.00	0.00
17	Total amount charged for Coal / Lignite supplied including transportation (11 + 16)	Rs	1,966,323,451.70	1,112,948,901.56	162,114,380.92	0.00	8,569,940.37	3,985,716.44
E)	**TOTAL COST**							
18	Landed Cost of Coal/Lignite (2+17) / (1+7)	**Rs/MT**	**3,255.64**	**6,304.89**	**4,623.08**		**13,520.92**	**8,096.61**
19	Blending Ratio (Domestic/Imported)		0.667556	0.260005	0.071969	0.000000	0.000000	0.000470
20	**Weighted average cost of Coal /Lignite (Including biomass)**	**Rs/MT**			**4,149.14**			
20a	Weighted average cost of Coal /Lignite (Excluding biomass)	**Rs/MT**			4,147.29			
F)	**QUALITY**							
21	GCV of Domestic coal of the opening coal stock as per bill of coal company	(Kcal/Kg)	4,204	4,700	4,750	0		
22	GCV of Domestic coal supplied as per bill of coal company	(Kcal/Kg)	4,119	4,720	4,750	0		3,217
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Kg)					5,108	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Kg)					5,000	
25	Weighted average GCV of Coal /Lignite as billed (Including biomass)	(Kcal/Kg)			4,338			
25a	Weighted average GCV of Coal /Lignite as billed (Excluding biomass)	(Kcal/Kg)			4,339			
26	GCV of Domestic coal of the Opening stock as received at station	(Kcal/Kg)	3,264	3,340	3,374	0		
27	GCV of Domestic coal/biomass supplied as received at station	(Kcal/Kg)	3,334	3,447	3,251	0		3,217
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Kg)					5,150	
29	GCV of Imported coal supplied as received at station	(Kcal/Kg)					5,253	
30	**Weighted average GCV of coal/ Lignite as Received (Including biomass)**	**(Kcal/Kg)**			**3,341**			
30a	Weighted average GCV of coal/ Lignite as Received (Excluding biomass)	(Kcal/Kg)			3,341			

Part 1
FORM -15

Details of Sourcewise fuel for computation of Energy Charges

	Company		**NTPC**					
	Name of the generating Station		**MOUDA STAGE II**					
	Month		**SEPTEMBER 23**					
SL	**Particulars**	**Unit**	**Domestic Coal-Special arrangement**	**Domestic Coal**	**Domestic Coal (NTPC Mines)**	**E-auction coal**	**Imported coal**	**Bio Mass**
A)	**OPENING QUANTITY**							
1	Opening Stock of coal	(MT)	151,950.98	1,686.03	5,058.55	0.00	0.00	0.00
2	Value of Stock	Rs	494,696,972.43	10,630,242.01	23,386,097.64	0.00	0.00	0.00
B)	**QUANTITY**							
3	Quantity of Coal /Lignite supplied by Coal / Lignite Company	(MT)	729,309.58	115,668.57	22,286.47	0.00	65,486.58	680.34
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	0.00	0.00	0.00	0.00	0.00	0.00
5	Coal supplied by Coal/Lignite Company (3+4)	(MT)	729,309.58	115,668.57	22,286.47	0.00	65,486.58	680.34
6	Normative transit & Handling losses (for Coal /Lignite based projects)	(MT)	5,834.48	925.35	178.29	0.00	130.97	
7	Net Coal / Lignite supplied (5 - 6)	(MT)	723,475.10	114,743.22	22,108.18	0.00	65,355.61	680.34
C)	**PRICE**							
8	Amount charged by the Coal / Lignite Company	Rs	1,594,493,859.00	526,560,842.00	59,436,062.73	0.00	731,861,657.12	5,658,718.10
9	Adjustment (+ / -) in amount charged by coal / Lignite Company	Rs	0.00	0.00	0.00		0.00	0.00
10	Handling,Sampling and such other Similar charges	Rs	50,143,978.34	7,952,839.81	1,532,315.31	0.00	920,791.35	0.00
11	**Total Amount charged (8 +9+10)**	Rs	1,644,637,837.34	534,513,681.81	60,968,378.04	0.00	732,782,448.47	5,658,718.10
D)	**TRANSPORTATION**	Rs						
12	Transportation charges by Rail / Ship / Road Transport							
	By Rail	Rs	945,427,243.97	84,469,725.00	36,828,403.00	0.00	655,629.00	0.00
	By Road	Rs	0.00					
	By Ship	Rs						
13	Adjustment (+/-) in amount charged by railways / transport company	Rs						
14	Demurrage charges, if any	Rs	7,301,591.00	1,158,033.00	223,124.00	0.00	655,629.00	0.00
15	Cost of diesel in transporting Coal through MGR system, if applicable	Rs						
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	938,125,652.97	83,311,692.00	36,605,279.00	0.00	0.00	0.00
17	Total amount charged for Coal / Lignite supplied including transportation (11 + 16)	Rs	2,582,763,490.31	617,825,373.81	97,573,657.04	0.00	732,782,448.47	5,658,718.10
E)	**TOTAL COST**							
18	Landed Cost of Coal/Lignite (2+17) / (1+7)	**Rs/MT**	**3,515.39**	**5,397.75**	**4,452.50**		**11,212.24**	**8,317.49**
19	Blending Ratio (Domestic/Imported)		0.765344	0.209990	0.021985	0.000000	0.002000	0.000681
20	**Weighted average cost of Coal /Lignite (Including biomass)**	**Rs/MT**			**3,949.93**			
20a	Weighted average cost of Coal /Lignite (Excluding biomass)	**Rs/MT**			3,946.95			
F)	**QUALITY**							
21	GCV of Domestic coal of the opening coal stock as per bill of coal company	(Kcal/Kg)	4,147	4,717	4,750	0		
22	GCV of Domestic coal supplied as per bill of coal company	(Kcal/Kg)	3,996	4,775	4,407	0		3,397
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Kg)					5,102	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Kg)					5,000	
25	Weighted average GCV of Coal /Lignite as billed (Including biomass)	(Kcal/Kg)			4,191			
25a	Weighted average GCV of Coal /Lignite as billed (Excluding biomass)	(Kcal/Kg)			4,192			
26	GCV of Domestic coal of the Opening stock as received at station	(Kcal/Kg)	3,311	3,429	3,302	0		
27	GCV of Domestic coal/biomass supplied as received at station	(Kcal/Kg)	3,250	3,375	3,460	0		3,397
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Kg)					5,156	
29	GCV of Imported coal supplied as received at station	(Kcal/Kg)					5,083	
30	**Weighted average GCV of coal/ Lignite as Received (Including biomass)**	**(Kcal/Kg)**			**3,293**			
30a	Weighted average GCV of coal/ Lignite as Received (Excluding biomass)	(Kcal/Kg)			3,293			

Part 1
FORM -15

Details of Sourcewise fuel for computation of Energy Charges

	Company		**NTPC**					
	Name of the generating Station		**MOUDA STAGE II**					
	Month		**OCTOBER 23**					
SL	**Particulars**	**Unit**	**Domestic Coal-Special arrangement**	**Domestic Coal**	**Domestic Coal (NTPC Mines)**	**E-auction coal**	**Imported coal**	**Bio Mass**
A)	**OPENING QUANTITY**							
1	Opening Stock of coal	(MT)	94,971.23	5,283.01	15,530.31	0.00	50,470.28	0.00
2	Value of Stock	Rs	333,860,530.79	28,516,364.12	69,148,645.46	0.00	565,884,624.94	0.00
B)	**QUANTITY**							
3	Quantity of Coal /Lignite supplied by Coal / Lignite Company	(MT)	621,826.76	92,789.55	0.00	0.00	35,041.30	1,410.19
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	0.00	0.00	0.00	0.00	0.00	0.00
5	Coal supplied by Coal/Lignite Company (3+4)	(MT)	621,826.76	92,789.55	0.00	0.00	35,041.30	1,410.19
6	Normative transit & Handling losses (for Coal /Lignite based projects)	(MT)	4,974.61	742.32	0.00	0.00	70.08	
7	Net Coal / Lignite supplied (5 - 6)	(MT)	616,852.15	92,047.23	0.00	0.00	34,971.22	1,410.19
C)	**PRICE**							
8	Amount charged by the Coal / Lignite Company	Rs	1,089,759,155.00	394,334,722.00	0.00	0.00	399,757,830.83	12,362,970.52
9	Adjustment (+ / -) in amount charged by coal / Lignite Company	Rs	0.00	0.00	0.00		0.00	0.00
10	Handling,Sampling and such other Similar charges	Rs	10,658,001.60	-4,618,247.43	0.00	0.00	635,670.79	2,487,348.40
11	**Total Amount charged (8 +9+10)**	Rs	1,100,417,156.60	389,716,474.57	0.00	0.00	400,393,501.62	14,850,318.92
D)	**TRANSPORTATION**	Rs						
12	Transportation charges by Rail / Ship / Road Transport							
	By Rail	Rs	780,184,186.00	70,185,690.00	0.00	0.00	95,821.00	345,876.56
	By Road	Rs	0.00					
	By Ship	Rs						
13	Adjustment (+/-) in amount charged by railways / transport company	Rs						
14	Demurrage charges, if any	Rs	1,700,402.00	253,736.00	0.00	0.00	95,821.00	0.00
15	Cost of diesel in transporting Coal through MGR system, if applicable	Rs						
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	778,483,784.00	69,931,954.00	0.00	0.00	0.00	345,876.56
17	Total amount charged for Coal / Lignite supplied including transportation (11 + 16)	Rs	1,878,900,940.60	459,648,428.57	0.00	0.00	400,393,501.62	15,196,195.48
E)	**TOTAL COST**							
18	Landed Cost of Coal/Lignite (2+17) / (1+7)	**Rs/MT**	**3,108.58**	**5,015.55**	**4,452.50**		**11,309.24**	**10,775.99**
19	Blending Ratio (Domestic/Imported)		0.678690	0.249992	0.000000	0.000000	0.069998	0.001320
20	**Weighted average cost of Coal /Lignite (Including biomass)**	**Rs/MT**			**4,169.46**			
20a	Weighted average cost of Coal /Lignite (Excluding biomass)	**Rs/MT**			4,160.73			
F)	**QUALITY**							
21	GCV of Domestic coal of the opening coal stock as per bill of coal company	(Kcal/Kg)	4,022	4,774	4,471	0		
22	GCV of Domestic coal supplied as per bill of coal company	(Kcal/Kg)	4,014	4,648	0	0		3,597
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Kg)					5,000	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Kg)					5,000	
25	Weighted average GCV of Coal /Lignite as billed (Including biomass)	(Kcal/Kg)			4,243			
25a	Weighted average GCV of Coal /Lignite as billed (Excluding biomass)	(Kcal/Kg)			4,244			
26	GCV of Domestic coal of the Opening stock as received at station	(Kcal/Kg)	3,261	3,376	3,431	0		
27	GCV of Domestic coal/biomass supplied as received at station	(Kcal/Kg)	3,247	3,575	0	0		3,597
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Kg)					5,083	
29	GCV of Imported coal supplied as received at station	(Kcal/Kg)					5,174	
30	**Weighted average GCV of coal/ Lignite as Received (Including biomass)**	**(Kcal/Kg)**			**3,459**			
30a	Weighted average GCV of coal/ Lignite as Received (Excluding biomass)	(Kcal/Kg)			3,459			

Part 1
FORM -15

Details of Sourcewise fuel for computation of Energy Charges

	Company		**NTPC**					
	Name of the generating Station		**MOUDA STAGE II**					
	Month		**NOVEMBER 23**					
SL	**Particulars**	**Unit**	**Domestic Coal-Special arrangement**	**Domestic Coal**	**Domestic Coal (NTPC Mines)**	**E-auction coal**	**Imported coal**	**Bio Mass**
A)	**OPENING QUANTITY**							
1	Opening Stock of coal	(MT)	88,870.38	17,380.91	305.32	0.00	16,221.46	613.39
2	Value of Stock	Rs	276,260,878.57	87,174,819.54	1,359,443.98	0.00	183,452,384.90	6,609,885.44
B)	**QUANTITY**							
3	Quantity of Coal /Lignite supplied by Coal / Lignite Company	(MT)	667,613.30	221,991.67	0.00	0.00	36,039.40	0.00
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	0.00	0.00	0.00	0.00	0.00	0.00
5	Coal supplied by Coal/Lignite Company (3+4)	(MT)	667,613.30	221,991.67	0.00	0.00	36,039.40	0.00
6	Normative transit & Handling losses (for Coal /Lignite based projects)	(MT)	5,340.91	1,775.93	0.00	0.00	72.08	
7	Net Coal / Lignite supplied (5 - 6)	(MT)	662,272.39	220,215.74	0.00	0.00	35,967.32	0.00
C)	**PRICE**							
8	Amount charged by the Coal / Lignite Company	Rs	1,355,595,163.11	1,156,912,512.56	0.00	0.00	433,279,378.53	0.00
9	Adjustment (+ / -) in amount charged by coal / Lignite Company	Rs	0.00	0.00	0.00		0.00	0.00
10	Handling,Sampling and such other Similar charges	Rs	4,684,965.09	1,557,822.77	0.00	0.00	11,213,178.07	0.00
11	**Total Amount charged (8 +9+10)**	Rs	1,360,280,128.20	1,158,470,335.33	0.00	0.00	444,492,556.60	0.00
D)	**TRANSPORTATION**	Rs						
12	Transportation charges by Rail / Ship / Road Transport							
	By Rail	Rs	787,094,649.18	168,650,993.85	0.00	0.00	73,711.00	0.00
	By Road	Rs	0.00					
	By Ship	Rs						
13	Adjustment (+/-) in amount charged by railways / transport company	Rs						
14	Demurrage charges, if any	Rs	1,365,460.00	454,037.00	0.00	0.00	73,711.00	0.00
15	Cost of diesel in transporting Coal through MGR system, if applicable	Rs						
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	785,729,189.18	168,196,956.85	0.00	0.00	0.00	0.00
17	Total amount charged for Coal / Lignite supplied including transportation (11 + 16)	Rs	2,146,009,317.38	1,326,667,292.18	0.00	0.00	444,492,556.60	0.00
E)	**TOTAL COST**							
18	Landed Cost of Coal/Lignite (2+17) / (1+7)	**Rs/MT**	**3,224.78**	**5,950.60**	**4,452.50**		**12,032.18**	**10,775.99**
19	Blending Ratio (Domestic/Imported)		0.809027	0.169999	0.000000	0.000000	0.020000	0.000975
20	**Weighted average cost of Coal /Lignite (Including biomass)**	**Rs/MT**			**3,871.67**			
20a	Weighted average cost of Coal /Lignite (Excluding biomass)	**Rs/MT**			3,864.94			
F)	**QUALITY**							
21	GCV of Domestic coal of the opening coal stock as per bill of coal company	(Kcal/Kg)	4,015	4,655	4,471	0		3,597
22	GCV of Domestic coal supplied as per bill of coal company	(Kcal/Kg)	4,125	4,491	0	0		0
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Kg)					5,000	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Kg)					5,000	
25	Weighted average GCV of Coal /Lignite as billed (Including biomass)	(Kcal/Kg)			4,196			
25a	Weighted average GCV of Coal /Lignite as billed (Excluding biomass)	(Kcal/Kg)			4,196			
26	GCV of Domestic coal of the Opening stock as received at station	(Kcal/Kg)	3,249	3,564	3,431	0		3,597
27	GCV of Domestic coal/biomass supplied as received at station	(Kcal/Kg)	3,015	3,435	0	0		0
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Kg)					5,120	
29	GCV of Imported coal supplied as received at station	(Kcal/Kg)					5,233	
30	**Weighted average GCV of coal/ Lignite as Received (Including biomass)**	**(Kcal/Kg)**			**3,151**			
30a	Weighted average GCV of coal/ Lignite as Received (Excluding biomass)	(Kcal/Kg)			3,154			

Part 1
FORM -15

Details of Sourcewise fuel for computation of Energy Charges

	Company		NTPC					
	Name of the generating Station		MOUDA STAGE II					
	Month		DECEMBER 23					
SL	Particulars	Unit	Domestic Coal-Special arrangement	Domestic Coal	Domestic Coal (NTPC Mines)	E-auction coal	Imported coal	Bio Mass
A)	**OPENING QUANTITY**							
1	Opening Stock of coal	(MT)	88,700.85	181,753.32	305.32	0.00	24,075.42	47.39
2	Value of Stock	Rs	286,040,739.42	1,081,540,963.59	1,359,443.98	0.00	289,679,766.71	510,674.24
B)	**QUANTITY**							
3	Quantity of Coal /Lignite supplied by Coal / Lignite Company	(MT)	640,053.40	288,838.79	0.00	0.00	49,379.20	0.00
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	0.00	0.00	0.00	0.00	0.00	0.00
5	Coal supplied by Coal/Lignite Company (3+4)	(MT)	640,053.40	288,838.79	0.00	0.00	49,379.20	0.00
6	Normative transit & Handling losses (for Coal /Lignite based projects)	(MT)	5,120.43	2,310.71	0.00	0.00	98.76	
7	Net Coal / Lignite supplied (5 - 6)	(MT)	634,932.97	286,528.08	0.00	0.00	49,280.44	0.00
C)	**PRICE**							
8	Amount charged by the Coal / Lignite Company	Rs	1,299,624,149.68	1,479,851,294.74	0.00	0.00	591,512,532.00	0.00
9	Adjustment (+ / -) in amount charged by coal / Lignite Company	Rs	0.00	0.00	0.00		0.00	0.00
10	Handling,Sampling and such other Similar charges	Rs	88,277,042.49	-76,807,387.65	0.00	0.00	732,732.17	0.00
11	**Total Amount charged (8 +9+10)**	Rs	1,387,901,192.17	1,403,043,907.09	0.00	0.00	592,245,264.17	0.00
D)	**TRANSPORTATION**	Rs						
12	Transportation charges by Rail / Ship / Road Transport							
	By Rail	Rs	766,883,390.95	247,639,748.47	0.00	0.00	357,263.00	0.00
	By Road	Rs	0.00					
	By Ship	Rs						
13	Adjustment (+/-) in amount charged by railways / transport company	Rs						
14	Demurrage charges, if any	Rs	4,630,841.00	2,089,774.00	0.00	0.00	357,263.00	0.00
15	Cost of diesel in transporting Coal through MGR system, if applicable	Rs						
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	762,252,549.95	245,549,974.47	0.00	0.00	0.00	0.00
17	Total amount charged for Coal / Lignite supplied including transportation (11 + 16)	Rs	2,150,153,742.12	1,648,593,881.56	0.00	0.00	592,245,264.17	0.00
E)	**TOTAL COST**							
18	Landed Cost of Coal/Lignite (2+17) / (1+7)	**Rs/MT**	**3,366.61**	**5,830.12**	**4,452.50**		**12,022.56**	**10,775.99**
19	Blending Ratio (Domestic/Imported)		0.804940	0.180000	0.000000	0.000000	0.015000	0.000060
20	**Weighted average cost of Coal /Lignite (Including biomass)**	**Rs/MT**			**3,940.32**			
20a	Weighted average cost of Coal /Lignite (Excluding biomass)	**Rs/MT**			3,939.92			
F)	**QUALITY**							
21	GCV of Domestic coal of the opening coal stock as per bill of coal company	(Kcal/Kg)	4,112	4,503	4,471	0		3,597
22	GCV of Domestic coal supplied as per bill of coal company	(Kcal/Kg)	4,018	4,509	0	0		0
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Kg)					5,000	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Kg)					5,000	
25	Weighted average GCV of Coal /Lignite as billed (Including biomass)	(Kcal/Kg)			4,130			
25a	Weighted average GCV of Coal /Lignite as billed (Excluding biomass)	(Kcal/Kg)			4,130			
26	GCV of Domestic coal of the Opening stock as received at station	(Kcal/Kg)	3,043	3,444	3,431	0		3,597
27	GCV of Domestic coal/biomass supplied as received at station	(Kcal/Kg)	3,218	3,328	0	0		0
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Kg)					5,198	
29	GCV of Imported coal supplied as received at station	(Kcal/Kg)					5,305	
30	**Weighted average GCV of coal/ Lignite as Received (Including biomass)**	**(Kcal/Kg)**			**3,260**			
30a	Weighted average GCV of coal/ Lignite as Received (Excluding biomass)	(Kcal/Kg)			3,260			

Part 1
FORM -15

Details of Sourcewise fuel for computation of Energy Charges

	Company		**NTPC**					
	Name of the generating Station		**MOUDA STAGE II**					
	Month		**JANUARY 24**					
SL	**Particulars**	**Unit**	**Domestic Coal-Special arrangement**	**Domestic Coal**	**Domestic Coal (NTPC Mines)**	**E-auction coal**	**Imported coal**	**Bio Mass**
A)	**OPENING QUANTITY**							
1	Opening Stock of coal	(MT)	41,127.36	392,478.64	305.32	0.00	47,428.48	0.00
2	Value of Stock	Rs	138,459,861.71	2,288,195,970.73	1,359,443.98	0.00	570,211,606.18	0.00
B)	**QUANTITY**							
3	Quantity of Coal /Lignite supplied by Coal / Lignite Company	(MT)	675,673.06	265,303.82	0.00	0.00	149,738.10	1,017.97
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	0.00	0.00	0.00	0.00	0.00	0.00
5	Coal supplied by Coal/Lignite Company (3+4)	(MT)	675,673.06	265,303.82	0.00	0.00	149,738.10	1,017.97
6	Normative transit & Handling losses (for Coal /Lignite based projects)	(MT)	5,405.38	2,122.43	0.00	0.00	299.48	
7	Net Coal / Lignite supplied (5 - 6)	(MT)	670,267.68	263,181.39	0.00	0.00	149,438.62	1,017.97
C)	**PRICE**							
8	Amount charged by the Coal / Lignite Company	Rs	1,595,288,694.32	1,237,749,285.00	0.00	0.00	1,800,566,535.56	7,406,227.10
9	Adjustment (+ / -) in amount charged by coal / Lignite Company	Rs	0.00	0.00	0.00		0.00	0.00
10	Handling,Sampling and such other Similar charges	Rs	5,410,327.44	2,124,371.35	0.00	0.00	1,139,361.58	0.00
11	**Total Amount charged (8 +9+10)**	Rs	1,600,699,021.76	1,239,873,656.35	0.00	0.00	1,801,705,897.14	7,406,227.10
D)	**TRANSPORTATION**	Rs						
12	Transportation charges by Rail / Ship / Road Transport							
	By Rail	Rs	644,487,032.43	232,808,119.58	0.00	0.00	664,360.03	0.00
	By Road	Rs	0.00					
	By Ship	Rs						
13	Adjustment (+/-) in amount charged by railways / transport company	Rs						
14	Demurrage charges, if any	Rs	2,997,835.39	1,177,103.58	0.00	0.00	664,360.03	0.00
15	Cost of diesel in transporting Coal through MGR system, if applicable	Rs						
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	641,489,197.04	231,631,016.00	0.00	0.00	0.00	0.00
17	Total amount charged for Coal / Lignite supplied including transportation (11 + 16)	Rs	2,242,188,218.80	1,471,504,672.35	0.00	0.00	1,801,705,897.14	7,406,227.10
E)	**TOTAL COST**							
18	Landed Cost of Coal/Lignite (2+17) / (1+7)	**Rs/MT**	**3,346.45**	**5,734.22**	**4,452.50**		**12,048.32**	**7,275.49**
19	Blending Ratio (Domestic/Imported)		0.624607	0.274810	0.000000	0.000000	0.099831	0.000752
20	**Weighted average cost of Coal /Lignite (Including biomass)**	**Rs/MT**			**4,874.30**			
20a	Weighted average cost of Coal /Lignite (Excluding biomass)	**Rs/MT**			4,872.50			
F)	**QUALITY**							
21	GCV of Domestic coal of the opening coal stock as per bill of coal company	(Kcal/Kg)	4,030	4,507	4,471	0		0
22	GCV of Domestic coal supplied as per bill of coal company	(Kcal/Kg)	3,952	4,426	0	0		3,105
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Kg)					5,000	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Kg)					5,167	
25	Weighted average GCV of Coal /Lignite as billed (Including biomass)	(Kcal/Kg)			4,215			
25a	Weighted average GCV of Coal /Lignite as billed (Excluding biomass)	(Kcal/Kg)			4,216			
26	GCV of Domestic coal of the Opening stock as received at station	(Kcal/Kg)	3,197	3,373	3,431	0		0
27	GCV of Domestic coal/biomass supplied as received at station	(Kcal/Kg)	3,204	3,191	0	0		3,105
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Kg)					5,270	
29	GCV of Imported coal supplied as received at station	(Kcal/Kg)					5,391	
30	**Weighted average GCV of coal/ Lignite as Received (Including biomass)**	**(Kcal/Kg)**			**3,446**			
30a	Weighted average GCV of coal/ Lignite as Received (Excluding biomass)	(Kcal/Kg)			3,446			

Part 1

Details of Sourcewise fuel for computation of Energy Charges

FORM -15

	Company		**NTPC**					
	Name of the generating Station		**MOUDA STAGE II**					
	Month		**FEBRUARY 24**					
SL	**Particulars**	**Unit**	**Domestic Coal-Special arrangement**	**Domestic Coal**	**Domestic Coal (NTPC Mines)**	**E-auction coal**	**Imported coal**	**Bio Mass**
A)	**OPENING QUANTITY**							
1	Opening Stock of coal	(MT)	0.00	475,564.63	305.32	0.00	79,694.95	228.21
2	Value of Stock	Rs	0.00	2,726,993,506.38	1,359,443.98	0.00	960,190,139.66	1,660,338.80
B)	**QUANTITY**							
3	Quantity of Coal /Lignite supplied by Coal / Lignite Company	(MT)	501,090.13	245,339.59	0.00	0.00	113,662.20	692.36
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	0.00	0.00	0.00	0.00	0.00	0.00
5	Coal supplied by Coal/Lignite Company (3+4)	(MT)	501,090.13	245,339.59	0.00	0.00	113,662.20	692.36
6	Normative transit & Handling losses (for Coal /Lignite based projects)	(MT)	4,008.72	1,962.72	0.00	0.00	227.32	
7	Net Coal / Lignite supplied (5 - 6)	(MT)	497,081.41	243,376.87	0.00	0.00	113,434.88	692.36
C)	**PRICE**							
8	Amount charged by the Coal / Lignite Company	Rs	1,286,297,332.67	1,231,966,056.00	0.00	0.00	1,409,860,322.86	4,665,277.23
9	Adjustment (+ / -) in amount charged by coal / Lignite Company	Rs	0.00	0.00	0.00	0.00	0.00	0.00
10	Handling,Sampling and such other Similar charges	Rs	9,745,148.31	4,771,338.59	0.00	0.00	2,114,731.94	0.00
11	**Total Amount charged (8 +9+10)**	Rs	1,296,042,480.98	1,236,737,394.59	0.00	0.00	1,411,975,054.80	4,665,277.23
D)	**TRANSPORTATION**	Rs						
12	Transportation charges by Rail / Ship / Road Transport							
	By Rail	Rs	461,803,093.00	197,554,982.00	0.00	0.00	1,352,118.00	0.00
	By Road	Rs						
	By Ship	Rs						
13	Adjustment (+/-) in amount charged by railways / transport company	Rs						
14	Demurrage charges, if any	Rs	5,960,934.00	2,918,543.00	0.00	0.00	1,352,118.00	0.00
15	Cost of diesel in transporting Coal through MGR system, if applicable	Rs						
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	455,842,159.00	194,636,439.00	0.00	0.00	0.00	0.00
17	Total amount charged for Coal / Lignite supplied including transportation (11 + 16)	Rs	1,751,884,639.98	1,431,373,833.59	0.00	0.00	1,411,975,054.80	4,665,277.23
E)	**TOTAL COST**							
18	Landed Cost of Coal/Lignite (2+17) / (1+7)	**Rs/MT**	**3,524.34**	**5,784.01**	**4,452.50**		**12,282.75**	**6,871.41**
19	Blending Ratio (Domestic/Imported)		0.489003	0.401011	0.000000	0.000000	0.109003	0.000983
20	**Weighted average cost of Coal /Lignite (Including biomass)**	**Rs/MT**			**5,388.47**			
20a	Weighted average cost of Coal /Lignite (Excluding biomass)	**Rs/MT**			5,387.01			
F)	**QUALITY**							
21	GCV of Domestic coal of the opening coal stock as per bill of coal company	(Kcal/Kg)	0	4,474	4,471	0		3,105
22	GCV of Domestic coal supplied as per bill of coal company	(Kcal/Kg)	3,472	4,673	0	0		3,338
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Kg)					5,127	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Kg)					5,000	
25	Weighted average GCV of Coal /Lignite as billed (Including biomass)	(Kcal/Kg)			4,073			
25a	Weighted average GCV of Coal /Lignite as billed (Excluding biomass)	(Kcal/Kg)			4,073			
26	GCV of Domestic coal of the Opening stock as received at station	(Kcal/Kg)	0	3,300	3,431	0		3,105
27	GCV of Domestic coal/biomass supplied as received at station	(Kcal/Kg)	3,169	3,237	0	0		3,338
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Kg)					5,362	
29	GCV of Imported coal supplied as received at station	(Kcal/Kg)					5,183	
30	**Weighted average GCV of coal/ Lignite as Received (Including biomass)**	**(Kcal/Kg)**			**3,441**			
30a	Weighted average GCV of coal/ Lignite as Received (Excluding biomass)	(Kcal/Kg)			3,441			

Part 1
FORM -15

Details of Sourcewise fuel for computation of Energy Charges

	Company		**NTPC**					
	Name of the generating Station		**MOUDA STAGE II**					
	Month		**MARCH 24**					
SL	**Particulars**	**Unit**	**Domestic Coal-Special arrangement**	**Domestic Coal**	**Domestic Coal (NTPC Mines)**	**E-auction coal**	**Imported coal**	**Bio Mass**
A)	**OPENING QUANTITY**							
1	Opening Stock of coal	(MT)	1,346.81	382,970.78	0.00	0.00	98,487.98	0.00
2	Value of Stock	Rs	4,746,614.85	2,215,108,166.11	0.00	0.00	1,209,703,103.56	0.00
B)	**QUANTITY**							
3	Quantity of Coal /Lignite supplied by Coal / Lignite Company	(MT)	539,639.44	297,624.82	19,623.06	0.00	167,835.80	925.65
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	0.00	0.00	0.00	0.00	0.00	0.00
5	Coal supplied by Coal/Lignite Company (3+4)	(MT)	539,639.44	297,624.82	19,623.06	0.00	167,835.80	925.65
6	Normative transit & Handling losses (for Coal /Lignite based projects)	(MT)	4,317.12	2,381.00	156.98	0.00	335.67	
7	Net Coal / Lignite supplied (5 - 6)	(MT)	535,322.32	295,243.82	19,466.08	0.00	167,500.13	925.65
C)	**PRICE**							
8	Amount charged by the Coal / Lignite Company	Rs	1,308,916,489.33	1,699,037,878.77	91,046,711.00	0.00	2,077,741,235.67	5,971,721.94
9	Adjustment (+ / -) in amount charged by coal / Lignite Company	Rs	0.00	0.00	0.00	0.00	0.00	0.00
10	Handling,Sampling and such other Similar charges	Rs	24,045,218.06	21,187,571.91	574,931.85	0.00	2,764,803.84	210,576.91
11	**Total Amount charged (8 +9+10)**	Rs	1,332,961,707.39	1,720,225,450.68	91,621,642.85	0.00	2,080,506,039.51	6,182,298.85
D)	**TRANSPORTATION**	Rs						
12	Transportation charges by Rail / Ship / Road Transport							
	By Rail	Rs	473,350,298.80	230,408,063.35	198,550.00	0.00	1,698,192.00	-3,312,249.02
	By Road	Rs						
	By Ship	Rs						
13	Adjustment (+/-) in amount charged by railways / transport company	Rs						
14	Demurrage charges, if any	Rs	5,460,167.00	3,011,420.00	198,550.00	0.00	1,698,192.00	0.00
15	Cost of diesel in transporting Coal through MGR system, if applicable	Rs						
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	467,890,131.80	227,396,643.35	0.00	0.00	0.00	-3,312,249.02
17	Total amount charged for Coal / Lignite supplied including transportation (11 + 16)	Rs	1,800,851,839.19	1,947,622,094.03	91,621,642.85	0.00	2,080,506,039.51	2,870,049.83
E)	**TOTAL COST**							
18	Landed Cost of Coal/Lignite (2+17) / (1+7)	**Rs/MT**	**3,364.45**	**6,137.78**	**4,706.73**		**12,369.76**	**3,100.58**
19	Blending Ratio (Domestic/Imported)		0.493551	0.360011	0.038465	0.000000	0.107003	0.000970
20	**Weighted average cost of Coal /Lignite (Including biomass)**	**Rs/MT**	**5,377.85**					
20a	Weighted average cost of Coal /Lignite (Excluding biomass)	**Rs/MT**	5,380.07					
F)	**QUALITY**							
21	GCV of Domestic coal of the opening coal stock as per bill of coal company	(Kcal/Kg)	3,472	4,541	0	0		0
22	GCV of Domestic coal supplied as per bill of coal company	(Kcal/Kg)	3,811	4,542	4,396	0		3,411
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Kg)					5,052	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Kg)					5,200	
25	Weighted average GCV of Coal /Lignite as billed (Including biomass)	(Kcal/Kg)	4,238					
25a	Weighted average GCV of Coal /Lignite as billed (Excluding biomass)	(Kcal/Kg)	4,239					
26	GCV of Domestic coal of the Opening stock as received at station	(Kcal/Kg)	3,169	3,279	0	0		0
27	GCV of Domestic coal/biomass supplied as received at station	(Kcal/Kg)	3,158	3,285	3,472	0		3,411
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Kg)					5,257	
29	GCV of Imported coal supplied as received at station	(Kcal/Kg)					5,186	
30	**Weighted average GCV of coal/ Lignite as Received (Including biomass)**	**(Kcal/Kg)**	**3,435**					
30a	Weighted average GCV of coal/ Lignite as Received (Excluding biomass)	(Kcal/Kg)	3,435					

Details of Sourcewise fuel for computation of Energy Charges **FORM -15**

	Company		**NTPC**
	Name of the generating Station		**MOUDA STAGE II**
	Month		**APRIL 23**
SL	**Particulars**	**Unit**	**LDO**
A)	**OPENING QUANTITY**		
1	Opening Stock of Oil	KL	2,707.30
2	Value of Stock	Rs	208,782,836.27
B)	**QUANTITY**		
3	Quantity of LDO/HFO supplied by Oil Company	KL	3,032.35
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0.00
5	LDO/HFO supplied by Oil Company (3+4)	KL	3,032.35
6	Normative transit & Handling losses	KL	NA
7	Net Oil supplied (5 - 6)	KL	3,032.35
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs	230,594,429.00
9	Adjustment (+ / -) in amount charged by Oil Company	Rs	0.00
10	Handling,Sampling and such other Similar charges	Rs	0.00
11	**Total Amount charged (8 +9+10)**	Rs	230,594,429.00
D)	**TRANSPORTATION**	Rs	
12	Transportation charges by Rail / Ship / Road Transport		
	By Rail	Rs	0.00
	By Road	Rs	0.00
	By Ship	Rs	0.00
13	Adjustment (+/-) in amount charged by railways / transport company	Rs	0.00
14	Demurrage charges, if any	Rs	0.00
15	Cost of diesel in transporting LDO/HFO through MGR system, if applicable	Rs	0
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	0.00
17	Total amount charged for Oil supplied including transportation (11 + 16)	Rs	230,594,429.00
E)	**TOTAL COST**		
18	**Landed Cost of Oil (HFO/LDO) (2+17) / (1+7)**	**Rs/KL**	**76,551.28**
19	Blending Ratio		NA
20	Weighted average cost of Oil		**76,551.28**
F)	**QUALITY**		
21	GCV of Oil of the opening stock as per bill of Oil company	(Kcal/Ltr)	NA
22	GCV of oil supplied as per bill of oil company	(Kcal/Ltr)	NA
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Ltr)	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Ltr)	
25	Weighted average GCV of Oil as billed	(Kcal/Ltr)	NA
26	GCV of Oil of the Opening stock as received at station	(Kcal/Ltr)	9448
27	GCV of Oil supplied (HFO/LDO)	(Kcal/Ltr)	9430
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Ltr)	
29	GCV of Imported coal supplied as received at station	(Kcal/Ltr)	
30	**Weighted average GCV of Oil (HFO/LDO)**	**(Kcal/Ltr)**	**9438**

Details of Sourcewise fuel for computation of Energy Charges **FORM -15**

	Company		**NTPC**
	Name of the generating Station		**MOUDA STAGE II**
	Month		**JUNE 23**
SL	**Particulars**	**Unit**	**LDO**
A)	**OPENING QUANTITY**		
1	Opening Stock of Oil	KL	5,010.65
2	Value of Stock	Rs	383,373,246.62
B)	**QUANTITY**		
3	Quantity of LDO/HFO supplied by Oil Company	KL	0.00
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0.00
5	LDO/HFO supplied by Oil Company (3+4)	KL	0.00
6	Normative transit & Handling losses	KL	NA
7	Net Oil supplied (5 - 6)	KL	0.00
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs	0.00
9	Adjustment (+ / -) in amount charged by Oil Company	Rs	0.00
10	Handling,Sampling and such other Similar charges	Rs	0.00
11	**Total Amount charged (8 +9+10)**	Rs	0.00
D)	**TRANSPORTATION**	Rs	
12	Transportation charges by Rail / Ship / Road Transport		
	By Rail	Rs	0.00
	By Road	Rs	0.00
	By Ship	Rs	0.00
13	Adjustment (+/-) in amount charged by railways / transport company	Rs	0.00
14	Demurrage charges, if any	Rs	0.00
15	Cost of diesel in transporting LDO/HFO through MGR system, if applicable	Rs	0
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	0.00
17	Total amount charged for Oil supplied including transportation (11 + 16)	Rs	0.00
E)	**TOTAL COST**		
18	**Landed Cost of Oil (HFO/LDO) (2+17) / (1+7)**	**Rs/KL**	**76,511.74**
19	Blending Ratio		NA
20	Weighted average cost of Oil		**76,511.74**
F)	**QUALITY**		
21	GCV of Oil of the opening stock as per bill of Oil company	(Kcal/Ltr)	NA
22	GCV of oil supplied as per bill of oil company	(Kcal/Ltr)	NA
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Ltr)	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Ltr)	
25	Weighted average GCV of Oil as billed	(Kcal/Ltr)	NA
26	GCV of Oil of the Opening stock as received at station	(Kcal/Ltr)	9438
27	GCV of Oil supplied (HFO/LDO)	(Kcal/Ltr)	
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Ltr)	
29	GCV of Imported coal supplied as received at station	(Kcal/Ltr)	
30	**Weighted average GCV of Oil (HFO/LDO)**	**(Kcal/Ltr)**	**9438**

Details of Sourcewise fuel for computation of Energy Charges **FORM -15**

	Company		**NTPC**
	Name of the generating Station		**MOUDA STAGE II**
	Month		**JULY 23**
SL	**Particulars**	**Unit**	**LDO**
A)	**OPENING QUANTITY**		
1	Opening Stock of Oil	KL	4,429.65
2	Value of Stock	Rs	338,919,925.38
B)	**QUANTITY**		
3	Quantity of LDO/HFO supplied by Oil Company	KL	0.00
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0.00
5	LDO/HFO supplied by Oil Company (3+4)	KL	0.00
6	Normative transit & Handling losses	KL	NA
7	Net Oil supplied (5 - 6)	KL	0.00
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs	0.00
9	Adjustment (+ / -) in amount charged by Oil Company	Rs	0.00
10	Handling,Sampling and such other Similar charges	Rs	0.00
11	**Total Amount charged (8 +9+10)**	Rs	0.00
D)	**TRANSPORTATION**	Rs	
12	Transportation charges by Rail / Ship / Road Transport		
	By Rail	Rs	0.00
	By Road	Rs	0.00
	By Ship	Rs	0.00
13	Adjustment (+/-) in amount charged by railways / transport company	Rs	0.00
14	Demurrage charges, if any	Rs	0.00
15	Cost of diesel in transporting LDO/HFO through MGR system, if applicable	Rs	0
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	0.00
17	Total amount charged for Oil supplied including transportation (11 + 16)	Rs	0.00
E)	**TOTAL COST**		
18	**Landed Cost of Oil (HFO/LDO) (2+17) / (1+7)**	**Rs/KL**	**76,511.74**
19	Blending Ratio		NA
20	Weighted average cost of Oil		**76,511.74**
F)	**QUALITY**		
21	GCV of Oil of the opening stock as per bill of Oil company	(Kcal/Ltr)	NA
22	GCV of oil supplied as per bill of oil company	(Kcal/Ltr)	NA
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Ltr)	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Ltr)	
25	Weighted average GCV of Oil as billed	(Kcal/Ltr)	NA
26	GCV of Oil of the Opening stock as received at station	(Kcal/Ltr)	9438
27	GCV of Oil supplied (HFO/LDO)	(Kcal/Ltr)	
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Ltr)	
29	GCV of Imported coal supplied as received at station	(Kcal/Ltr)	
30	**Weighted average GCV of Oil (HFO/LDO)**	**(Kcal/Ltr)**	**9438**

Details of Sourcewise fuel for computation of Energy Charges **FORM -15**

	Company		**NTPC**
	Name of the generating Station		**MOUDA STAGE II**
	Month		**AUGUST 23**
SL	**Particulars**	**Unit**	**LDO**
A)	**OPENING QUANTITY**		
1	Opening Stock of Oil	KL	4,069.65
2	Value of Stock	Rs	311,375,698.72
B)	**QUANTITY**		
3	Quantity of LDO/HFO supplied by Oil Company	KL	0.00
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0.00
5	LDO/HFO supplied by Oil Company (3+4)	KL	0.00
6	Normative transit & Handling losses	KL	NA
7	Net Oil supplied (5 - 6)	KL	0.00
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs	0.00
9	Adjustment (+ / -) in amount charged by Oil Company	Rs	0.00
10	Handling,Sampling and such other Similar charges	Rs	0.00
11	**Total Amount charged (8 +9+10)**	Rs	0.00
D)	**TRANSPORTATION**	Rs	
12	Transportation charges by Rail / Ship / Road Transport		
	By Rail	Rs	0.00
	By Road	Rs	0.00
	By Ship	Rs	0.00
13	Adjustment (+/-) in amount charged by railways / transport company	Rs	0.00
14	Demurrage charges, if any	Rs	0.00
15	Cost of diesel in transporting LDO/HFO through MGR system, if applicable	Rs	0
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	0.00
17	Total amount charged for Oil supplied including transportation (11 + 16)	Rs	0.00
E)	**TOTAL COST**		
18	**Landed Cost of Oil (HFO/LDO) (2+17) / (1+7)**	**Rs/KL**	**76,511.74**
19	Blending Ratio		NA
20	Weighted average cost of Oil		**76,511.74**
F)	**QUALITY**		
21	GCV of Oil of the opening stock as per bill of Oil company	(Kcal/Ltr)	NA
22	GCV of oil supplied as per bill of oil company	(Kcal/Ltr)	NA
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Ltr)	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Ltr)	
25	Weighted average GCV of Oil as billed	(Kcal/Ltr)	NA
26	GCV of Oil of the Opening stock as received at station	(Kcal/Ltr)	9438
27	GCV of Oil supplied (HFO/LDO)	(Kcal/Ltr)	
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Ltr)	
29	GCV of Imported coal supplied as received at station	(Kcal/Ltr)	
30	**Weighted average GCV of Oil (HFO/LDO)**	**(Kcal/Ltr)**	**9438**

Details of Sourcewise fuel for computation of Energy Charges **FORM -15**

	Company		**NTPC**
	Name of the generating Station		**MOUDA STAGE II**
	Month		**SEPTEMBER 23**
SL	**Particulars**	**Unit**	**LDO**
A)	**OPENING QUANTITY**		
1	Opening Stock of Oil	KL	3,674.65
2	Value of Stock	Rs	281,153,561.25
B)	**QUANTITY**		
3	Quantity of LDO/HFO supplied by Oil Company	KL	0.00
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0.00
5	LDO/HFO supplied by Oil Company (3+4)	KL	0.00
6	Normative transit & Handling losses	KL	NA
7	Net Oil supplied (5 - 6)	KL	0.00
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs	0.00
9	Adjustment (+ / -) in amount charged by Oil Company	Rs	0.00
10	Handling,Sampling and such other Similar charges	Rs	0.00
11	**Total Amount charged (8 +9+10)**	Rs	0.00
D)	**TRANSPORTATION**	Rs	
12	Transportation charges by Rail / Ship / Road Transport		
	By Rail	Rs	0.00
	By Road	Rs	0.00
	By Ship	Rs	0.00
13	Adjustment (+/-) in amount charged by railways / transport company	Rs	0.00
14	Demurrage charges, if any	Rs	0.00
15	Cost of diesel in transporting LDO/HFO through MGR system, if applicable	Rs	0
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	0.00
17	Total amount charged for Oil supplied including transportation (11 + 16)	Rs	0.00
E)	**TOTAL COST**		
18	**Landed Cost of Oil (HFO/LDO) (2+17) / (1+7)**	**Rs/KL**	**76,511.74**
19	Blending Ratio		NA
20	Weighted average cost of Oil		**76,511.74**
F)	**QUALITY**		
21	GCV of Oil of the opening stock as per bill of Oil company	(Kcal/Ltr)	NA
22	GCV of oil supplied as per bill of oil company	(Kcal/Ltr)	NA
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Ltr)	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Ltr)	
25	Weighted average GCV of Oil as billed	(Kcal/Ltr)	NA
26	GCV of Oil of the Opening stock as received at station	(Kcal/Ltr)	9438
27	GCV of Oil supplied (HFO/LDO)	(Kcal/Ltr)	
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Ltr)	
29	GCV of Imported coal supplied as received at station	(Kcal/Ltr)	
30	**Weighted average GCV of Oil (HFO/LDO)**	**(Kcal/Ltr)**	**9438**

Details of Sourcewise fuel for computation of Energy Charges **FORM -15**

	Company		**NTPC**
	Name of the generating Station		**MOUDA STAGE II**
	Month		**OCTOBER 23**
SL	**Particulars**	**Unit**	**LDO**
A)	**OPENING QUANTITY**		
1	Opening Stock of Oil	KL	2,447.65
2	Value of Stock	Rs	187,273,655.59
B)	**QUANTITY**		
3	Quantity of LDO/HFO supplied by Oil Company	KL	3,091.11
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0.00
5	LDO/HFO supplied by Oil Company (3+4)	KL	3,091.11
6	Normative transit & Handling losses	KL	NA
7	Net Oil supplied (5 - 6)	KL	3,091.11
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs	265,677,062.00
9	Adjustment (+ / -) in amount charged by Oil Company	Rs	0.00
10	Handling,Sampling and such other Similar charges	Rs	0.00
11	**Total Amount charged (8 +9+10)**	Rs	265,677,062.00
D)	**TRANSPORTATION**	Rs	
12	Transportation charges by Rail / Ship / Road Transport		
	By Rail	Rs	0.00
	By Road	Rs	0.00
	By Ship	Rs	0.00
13	Adjustment (+/-) in amount charged by railways / transport company	Rs	0.00
14	Demurrage charges, if any	Rs	0.00
15	Cost of diesel in transporting LDO/HFO through MGR system, if applicable	Rs	0
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	0.00
17	Total amount charged for Oil supplied including transportation (11 + 16)	Rs	265,677,062.00
E)	**TOTAL COST**		
18	**Landed Cost of Oil (HFO/LDO) (2+17) / (1+7)**	**Rs/KL**	**81,778.42**
19	Blending Ratio		NA
20	Weighted average cost of Oil		**81,778.42**
F)	**QUALITY**		
21	GCV of Oil of the opening stock as per bill of Oil company	(Kcal/Ltr)	NA
22	GCV of oil supplied as per bill of oil company	(Kcal/Ltr)	NA
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Ltr)	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Ltr)	
25	Weighted average GCV of Oil as billed	(Kcal/Ltr)	NA
26	GCV of Oil of the Opening stock as received at station	(Kcal/Ltr)	9438
27	GCV of Oil supplied (HFO/LDO)	(Kcal/Ltr)	9438
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Ltr)	
29	GCV of Imported coal supplied as received at station	(Kcal/Ltr)	
30	**Weighted average GCV of Oil (HFO/LDO)**	**(Kcal/Ltr)**	**9438**

Details of Sourcewise fuel for computation of Energy Charges **FORM -15**

	Company		**NTPC**
	Name of the generating Station		**MOUDA STAGE II**
	Month		**NOVEMBER 23**
SL	**Particulars**	**Unit**	**LDO**
A)	**OPENING QUANTITY**		
1	Opening Stock of Oil	KL	5,158.76
2	Value of Stock	Rs	421,524,360.09
B)	**QUANTITY**		
3	Quantity of LDO/HFO supplied by Oil Company	KL	0.00
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0.00
5	LDO/HFO supplied by Oil Company (3+4)	KL	0.00
6	Normative transit & Handling losses	KL	NA
7	Net Oil supplied (5 - 6)	KL	0.00
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs	0.00
9	Adjustment (+ / -) in amount charged by Oil Company	Rs	0.00
10	Handling,Sampling and such other Similar charges	Rs	0.00
11	**Total Amount charged (8 +9+10)**	Rs	0.00
D)	**TRANSPORTATION**	Rs	
12	Transportation charges by Rail / Ship / Road Transport		
	By Rail	Rs	0.00
	By Road	Rs	0.00
	By Ship	Rs	0.00
13	Adjustment (+/-) in amount charged by railways / transport company	Rs	0.00
14	Demurrage charges, if any	Rs	0.00
15	Cost of diesel in transporting LDO/HFO through MGR system, if applicable	Rs	0
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	0.00
17	Total amount charged for Oil supplied including transportation (11 + 16)	Rs	0.00
E)	**TOTAL COST**		
18	**Landed Cost of Oil (HFO/LDO) (2+17) / (1+7)**	**Rs/KL**	**81,710.47**
19	Blending Ratio		NA
20	Weighted average cost of Oil		**81,710.47**
F)	**QUALITY**		
21	GCV of Oil of the opening stock as per bill of Oil company	(Kcal/Ltr)	NA
22	GCV of oil supplied as per bill of oil company	(Kcal/Ltr)	NA
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Ltr)	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Ltr)	
25	Weighted average GCV of Oil as billed	(Kcal/Ltr)	NA
26	GCV of Oil of the Opening stock as received at station	(Kcal/Ltr)	9438
27	GCV of Oil supplied (HFO/LDO)	(Kcal/Ltr)	
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Ltr)	
29	GCV of Imported coal supplied as received at station	(Kcal/Ltr)	
30	**Weighted average GCV of Oil (HFO/LDO)**	**(Kcal/Ltr)**	**9438**

Details of Sourcewise fuel for computation of Energy Charges **FORM -15**

	Company		**NTPC**
	Name of the generating Station		**MOUDA STAGE II**
	Month		**DECEMBER 23**
SL	**Particulars**	**Unit**	**LDO**
A)	**OPENING QUANTITY**		
1	Opening Stock of Oil	KL	4,948.76
2	Value of Stock	Rs	404,365,162.05
B)	**QUANTITY**		
3	Quantity of LDO/HFO supplied by Oil Company	KL	0.00
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0.00
5	LDO/HFO supplied by Oil Company (3+4)	KL	0.00
6	Normative transit & Handling losses	KL	NA
7	Net Oil supplied (5 - 6)	KL	0.00
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs	0.00
9	Adjustment (+ / -) in amount charged by Oil Company	Rs	0.00
10	Handling,Sampling and such other Similar charges	Rs	0.00
11	**Total Amount charged (8 +9+10)**	Rs	0.00
D)	**TRANSPORTATION**	Rs	
12	Transportation charges by Rail / Ship / Road Transport		
	By Rail	Rs	0.00
	By Road	Rs	0.00
	By Ship	Rs	0.00
13	Adjustment (+/-) in amount charged by railways / transport company	Rs	0.00
14	Demurrage charges, if any	Rs	0.00
15	Cost of diesel in transporting LDO/HFO through MGR system, if applicable	Rs	0
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	0.00
17	Total amount charged for Oil supplied including transportation (11 + 16)	Rs	0.00
E)	**TOTAL COST**		
18	**Landed Cost of Oil (HFO/LDO) (2+17) / (1+7)**	**Rs/KL**	**81,710.47**
19	Blending Ratio		NA
20	Weighted average cost of Oil		**81,710.47**
F)	**QUALITY**		
21	GCV of Oil of the opening stock as per bill of Oil company	(Kcal/Ltr)	NA
22	GCV of oil supplied as per bill of oil company	(Kcal/Ltr)	NA
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Ltr)	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Ltr)	
25	Weighted average GCV of Oil as billed	(Kcal/Ltr)	NA
26	GCV of Oil of the Opening stock as received at station	(Kcal/Ltr)	9438
27	GCV of Oil supplied (HFO/LDO)	(Kcal/Ltr)	
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Ltr)	
29	GCV of Imported coal supplied as received at station	(Kcal/Ltr)	
30	**Weighted average GCV of Oil (HFO/LDO)**	**(Kcal/Ltr)**	**9438**

Details of Sourcewise fuel for computation of Energy Charges **FORM -15**

	Company		**NTPC**
	Name of the generating Station		**MOUDA STAGE II**
	Month		**JANUARY 24**
SL	**Particulars**	**Unit**	**LDO**
A)	**OPENING QUANTITY**		
1	Opening Stock of Oil	KL	3,417.76
2	Value of Stock	Rs	279,266,437.62
B)	**QUANTITY**		
3	Quantity of LDO/HFO supplied by Oil Company	KL	0.00
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0.00
5	LDO/HFO supplied by Oil Company (3+4)	KL	0.00
6	Normative transit & Handling losses	KL	NA
7	Net Oil supplied (5 - 6)	KL	0.00
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs	0.00
9	Adjustment (+ / -) in amount charged by Oil Company	Rs	0.00
10	Handling,Sampling and such other Similar charges	Rs	0.00
11	**Total Amount charged (8 +9+10)**	Rs	0.00
D)	**TRANSPORTATION**	Rs	
12	Transportation charges by Rail / Ship / Road Transport		
	By Rail	Rs	0.00
	By Road	Rs	0.00
	By Ship	Rs	0.00
13	Adjustment (+/-) in amount charged by railways / transport company	Rs	0.00
14	Demurrage charges, if any	Rs	0.00
15	Cost of diesel in transporting LDO/HFO through MGR system, if applicable	Rs	0
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	0.00
17	Total amount charged for Oil supplied including transportation (11 + 16)	Rs	0.00
E)	**TOTAL COST**		
18	**Landed Cost of Oil (HFO/LDO) (2+17) / (1+7)**	**Rs/KL**	**81,710.47**
19	Blending Ratio		NA
20	Weighted average cost of Oil		**81,710.47**
F)	**QUALITY**		
21	GCV of Oil of the opening stock as per bill of Oil company	(Kcal/Ltr)	NA
22	GCV of oil supplied as per bill of oil company	(Kcal/Ltr)	NA
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Ltr)	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Ltr)	
25	Weighted average GCV of Oil as billed	(Kcal/Ltr)	NA
26	GCV of Oil of the Opening stock as received at station	(Kcal/Ltr)	9438
27	GCV of Oil supplied (HFO/LDO)	(Kcal/Ltr)	
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Ltr)	
29	GCV of Imported coal supplied as received at station	(Kcal/Ltr)	
30	**Weighted average GCV of Oil (HFO/LDO)**	**(Kcal/Ltr)**	**9438**

Details of Sourcewise fuel for computation of Energy Charges **FORM -15**

	Company		**NTPC**
	Name of the generating Station		**MOUDA STAGE II**
	Month		**FEBRUARY 24**
SL	**Particulars**	**Unit**	**LDO**
A)	**OPENING QUANTITY**		
1	Opening Stock of Oil	KL	3,017.76
2	Value of Stock	Rs	246,582,250.96
B)	**QUANTITY**		
3	Quantity of LDO/HFO supplied by Oil Company	KL	0.00
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0.00
5	LDO/HFO supplied by Oil Company (3+4)	KL	0.00
6	Normative transit & Handling losses	KL	NA
7	Net Oil supplied (5 - 6)	KL	0.00
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs	0.00
9	Adjustment (+ / -) in amount charged by Oil Company	Rs	0.00
10	Handling,Sampling and such other Similar charges	Rs	0.00
11	**Total Amount charged (8 +9+10)**	Rs	0.00
D)	**TRANSPORTATION**	Rs	
12	Transportation charges by Rail / Ship / Road Transport		
	By Rail	Rs	0.00
	By Road	Rs	0.00
	By Ship	Rs	0.00
13	Adjustment (+/-) in amount charged by railways / transport company	Rs	0.00
14	Demurrage charges, if any	Rs	0.00
15	Cost of diesel in transporting LDO/HFO through MGR system, if applicable	Rs	0
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	0.00
17	Total amount charged for Oil supplied including transportation (11 + 16)	Rs	0.00
E)	**TOTAL COST**		
18	**Landed Cost of Oil (HFO/LDO) (2+17) / (1+7)**	**Rs/KL**	**81,710.47**
19	Blending Ratio		NA
20	Weighted average cost of Oil		**81,710.47**
F)	**QUALITY**		
21	GCV of Oil of the opening stock as per bill of Oil company	(Kcal/Ltr)	NA
22	GCV of oil supplied as per bill of oil company	(Kcal/Ltr)	NA
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Ltr)	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Ltr)	
25	Weighted average GCV of Oil as billed	(Kcal/Ltr)	NA
26	GCV of Oil of the Opening stock as received at station	(Kcal/Ltr)	9438
27	GCV of Oil supplied (HFO/LDO)	(Kcal/Ltr)	
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Ltr)	
29	GCV of Imported coal supplied as received at station	(Kcal/Ltr)	
30	**Weighted average GCV of Oil (HFO/LDO)**	**(Kcal/Ltr)**	**9438**

Details of Sourcewise fuel for computation of Energy Charges **FORM -15**

	Company		**NTPC**
	Name of the generating Station		**MOUDA STAGE II**
	Month		**MARCH 24**
SL	**Particulars**	**Unit**	**LDO**
A)	**OPENING QUANTITY**		
1	Opening Stock of Oil	KL	2,884.76
2	Value of Stock	Rs	235,714,758.90
B)	**QUANTITY**		
3	Quantity of LDO/HFO supplied by Oil Company	KL	3,029.83
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0.00
5	LDO/HFO supplied by Oil Company (3+4)	KL	3,029.83
6	Normative transit & Handling losses	KL	NA
7	Net Oil supplied (5 - 6)	KL	3,029.83
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs	205,151,538.80
9	Adjustment (+ / -) in amount charged by Oil Company	Rs	0.00
10	Handling,Sampling and such other Similar charges	Rs	0.00
11	**Total Amount charged (8 +9+10)**	Rs	205,151,538.80
D)	**TRANSPORTATION**	Rs	
12	Transportation charges by Rail / Ship / Road Transport		
	By Rail	Rs	0.00
	By Road	Rs	0.00
	By Ship	Rs	0.00
13	Adjustment (+/-) in amount charged by railways / transport company	Rs	0.00
14	Demurrage charges, if any	Rs	0.00
15	Cost of diesel in transporting LDO/HFO through MGR system, if applicable	Rs	0
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs	0.00
17	Total amount charged for Oil supplied including transportation (11 + 16)	Rs	205,151,538.80
E)	**TOTAL COST**		
18	**Landed Cost of Oil (HFO/LDO) (2+17) / (1+7)**	**Rs/KL**	**74,538.83**
19	Blending Ratio		NA
20	Weighted average cost of Oil		**74,538.83**
F)	**QUALITY**		
21	GCV of Oil of the opening stock as per bill of Oil company	(Kcal/Ltr)	NA
22	GCV of oil supplied as per bill of oil company	(Kcal/Ltr)	NA
23	GCV of Imported coal of the opening coal stock as per bill of coal company	(Kcal/Ltr)	
24	GCV of Imported coal supplied as per bill of coal company	(Kcal/Ltr)	
25	Weighted average GCV of Oil as billed	(Kcal/Ltr)	NA
26	GCV of Oil of the Opening stock as received at station	(Kcal/Ltr)	9438
27	GCV of Oil supplied (HFO/LDO)	(Kcal/Ltr)	9480
28	GCV of Imported coal of the Opening stock as received at station	(Kcal/Ltr)	
29	GCV of Imported coal supplied as received at station	(Kcal/Ltr)	
30	**Weighted average GCV of Oil (HFO/LDO)**	**(Kcal/Ltr)**	**9460**

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