PETITION FOR DETERMINATION OF TARIFF

FOR

NCTPS St-II

(From 01.04.2024 to 31.03.2029)

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 **National Capital Thermal Power Station Stage-II (NCTPS-II) (980 MW) for the period from 01.04.2024 to 31.03.2029**.

INDEX

Summary of Issues:

Tariff determination petition (2024-29) of (NCTPS-II) (980 MW)

(In compliance with CERC notice dated 07.06.2024)

The major highlights of the tariff determination petition of National Capital Thermal Power Station Stage-II (980 MW) (hereinafter referred to as NCTPS-II) for tariff period 2024-29 are as follows:-

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(2) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 for determination of Tariff of (NCTPS-II) (980 MW) for the period from 01.04.2019 to 31.03.2024.

NCTPS-II is located in the State of Uttar Pradesh (UP) and comprises of two unit of 490 MW. The COD of station is 31.07.2010. The power generated from NCTPS-II is being supplied to various discoms as per MoP allocation and respective PPAs including Uttar Pradesh Power Corp. Ltd. (UPPCL), BSES Rajdhani Power Ltd. (BRPL), BSES Yamuna Power Ltd. (BYPL), Tata Power Delhi Distribution Ltd. (TPDDL).

Generating Station

The tariff for NCTPS-II for the period from 01.04.2019 to 31.3.2024 was determined by the Hon'ble Commission vide order dated 01.06.2022 in Petition No. 2/GT/2021 . The capital cost allowed for tariff determination included the projected additional capital expenditure admitted by the Hon'ble Commission after prudence check. The petitioner had 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.

Dadri-Loni Road transmission line

In compliance with the 2014 Tariff Regulations, NTPC filed Petition No. 377/TT/2014 to determine the tariff for the 400 KV D/C Dadri-Loni Road transmission line. The Hon'ble Commission, in its order dated 20.04.2015, directed that the line be considered part of the NCTPS Stage-II generating station. Accordingly, In compli

to above directions of Hon'ble Commission, the Petitioner revised tariff determination (2014-19) Petition No. 324/GT/2014, by incorporating its claim for tariff of the transmission line (from 2.8.2014 to 31.3.2019). Accordingly, the Commission vide its order dated 2.5.2017 in Petition No. 324/GT/2014 approved the capital cost and annual fixed charges of the generating station and the transmission line for the 2014-19 tariff period. Further, NTPC has filed Petition No. 89/GT/2023 for truing up the 2014-19 tariff and determining the 2019-24 tariff in line with directive from commission, with the order reserved by Hon'ble commission vide ROP dated 11.07.2024.

Supplementary Tariff

Further, the petitioner has submitted a supplementary tariff petition (348/GT/2022) for the determination of supplementary tariff concerning the implementation of the FGD system. Additionally, Hon'ble Commission, in its Record of Proceedings dated 08.08.2024 in Petition No. 348/GT/2022 has reserved the order.

The Petitioner in the instant petition has considered the opening capital cost for generating station as of 01.04.2024 by adjusting the admitted capital cost as on 31.03.2024, accounting for the difference between the admitted expenditure for the period 2019-24 and the actual expenditure as per true-up petition. Further it is submitted that petitioner has considered opening capital cost for Dadri-Loni transmission line and Dadri-II ECS system on the basis of above true up petition filled.

The projected additional Capital Expenditure generating station for the FY 2024-25, 2025-26, 2026-27, 2027-28 and 2028-29 are Rs 6.09 Cr, Rs 37.80 Cr, Rs 23.89 Cr, Nil and Nil respectively amounting to total of Rs 67.79 Crores during the 2024-29 period. Further it is submitted that the projected additional Capital Expenditure transmission asset is nil and ECS system is 10.35 Cr (pertaining to year 2026-27) during the period of 2024-29. The same has been depicted year wise in Form 9A of the Appendix- I,IA and IB along with applicable regulations and justification for the claims. It is humbly requested to approve the projected Additional Capital expenditure during the period of 2024-29.

The Hon'ble Commission is requested to allow the claims for water charges, security expenses, and ash transportation expenses for the instant station as estimated by the Petitioner in Form 3A of Appendix-I. These claims shall be subject to retrospective adjustment based on actual expenditures during the truing-up process.
Furthermore, the consumption of capital spares shall be claimed at the time of truing up based on the actual consumption of spares during the period 2024–29.

It is prayed that the Gross Station Heat Rate be allowed based on the guaranteed turbine cycle heat rate of 1936 kcal/kWh and the actual boiler efficiency of 85.35%, instead of the stipulated 1935 kcal/kWh and 86%, with a 4.5% operating margin from the guaranteed design value as the station envisioned in 2013 was based on the boiler efficiency and turbine heat rate as per the Tariff Regulations at that time and as equipments ordered through competitive bidding accordingly resulting in lower capital costs that have already benefited the beneficiaries and as the more stringent efficiency parameters in the 2024-29 Tariff Regulations could not be specified at that time.

Further, in order to avoid interest liabilities for beneficiaries until the 2024-29 tariff order is finalized, the petitioner requests permission to recover ash transportation charges monthly subject to true-up at the end of the 2024-29 period.

The petitioner seeks permission to approach the Commission to recover the impact of wage revisions effective from 1.1.2027, as allowed under Tariff Regulations 2024, during the tariff true-up based on actual payments made.

The petitioner requests the Commission's approval to recover the filing and publication fees directly from the beneficiaries, as permitted under Regulation 94(1) of the Tariff Regulations 2024.

In the light of above submission and as per the Petition being filed by the Petitioner for determination of tariff of National Capital Thermal Power Station Stage-II (980 MW) (hereinafter referred to as NCTPS-II) ,the Hon'ble Commission may please approve tariff for the tariff period 2024-29 as per provision of Regulation 9(2) 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 **National Capital Thermal Power Station Stage-II (NCTPS-II)** (980 MW) **for the period from 01.04.2024 to 31.03.2029**.

AND

IN THE MATTER OF

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

Respondents

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

2. BSES Rajdhani Power Ltd. (BRPL)
BSES Bhawan, Nehru Place
New Delhi – 110019

3. BSES Yamuna Power Ltd. (BYPL)
Shakti Kiran Building
Karkardooma
Delhi- 110092

4. Tata Power Delhi Distribution Ltd. (TPDDL)
Grid Substation, Hudson Road
Kingsway Camp
Delhi – 110009

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. National Capital Thermal Power Station Stage-II (980 MW) (hereinafter referred to as NCTPS-II) is one such station located in the State of Uttar Pradesh (UP).The power generated from NCTPS-II is being supplied to the respondents herein mentioned 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 NCTPS-II for the period from 01.04.2024 to 31.03.2029 as per the Tariff Regulations 2024.

6) The tariff of the NCTPS-II for the tariff period 1.4.2019 to 31.3.2024 was determined by the Hon'ble Commission vide order dated 01.06.2022 in Petition No. 2/GT/2021 in accordance with the CERC (Terms & Conditions of Tariff) Regulations 2019.

Dadri-Loni Transmission Line

7) It is submitted that in terms of the Tariff Regulations, 2014, NTPC had filed a petition no 377/TT/2014 for determination of tariff for 400 KV D/C Dadri-Loni Road transmission line for supplying power from Dadri Station to Delhi Discoms viz, BSES Rajdhani Power Limited (BRPL), BSES Yamuna Power Limited (BYPL) and Tata Power Delhi Distribution Limited (TPDDL). Hon'ble Commission vide its order dated 20.04.2015 in Petition No 377/TT/2014 had directed that transmission line of NCTPS Stage-II, Dadri to Delhi being a dedicated transmission line is a part of the generating station of Dadri and its tariff should be determined as part of generation tariff of NCTPS Stage-II, Dadri. In compliance to above directions of Hon'ble Commission, the Petitioner revised Petition No. 324/GT/2014, by incorporating its claim for tariff of the transmi

line (from 2.8.2014 to 31.3.2019). Accordingly, the Commission vide its order dated 2.5.2017 in Petition No. 324/GT/2014 approved the capital cost and annual fixed charges of the generating station and the transmission line for the 2014-19 tariff period.

8) Thereafter, in Petition No.190/GT/2020 filed by the Petitioner for truing-up of tariff of the generating station and Dadri-Loni transmission line for the 2014-19 tariff period, the Commission vide its order dated 21.5.2022, while truing-up the tariff of the generating station for the 2014-19 tariff period, granted liberty to the Petitioner to approach the Commission with a separate tariff petition for truing-up of tariff for the 2014-19 tariff period and for determination of tariff for 2019-24 tariff period in respect of the said transmission line, in terms of the relevant tariff regulations.

9) Accordingly, in compliance to the Hon'ble commission's direction, and liberty granted to the petitioner, the petitioner has filed petition no 89/GT/2023 for the revision of tariff of Dadri Loni Transmission Line for the period 2014-19 and determination of Tariff for the period 2019-24. Petition No 89/GT/2023 has been heard by Hon'ble Commission and the order has been reserved vide ROP dated 11.07.2024.

Supplementary Tariff for Emission Control System (ECS)

10) Further, it is submitted that Petition No 348/GT/2022 for determination of supplementary tariff on ODe of Emission Control System implemented in the instant station has been filed on the basis of actual capital expenditure incurred on ODe of both U#1 & U#2 and the projected add-cap from ODe to 31.03.2024.

11) The Petition No 348/GT/2022 for supplementary tariff of ECS has been heard by Hon'ble Commission and the order has been reserved vide ROP dated 08.08.2024.

12) The petitioner vide affidavit dated 21.11.2024 had filed a separate true up petition for the period 01.04.2019 to 31.03.2024 for revision of tariff of Generating station ,Transmission asset and Supplementary tariff in line with the applicable provisions of Tariff Regulations 2019.

13) It is submitted that Hon'ble Commission vide order dated dated 01.06.2022 in Petition No. 2/GT/2021 has allowed a capital cost of Rs 5493.20 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. 5086.35 Cr based on the actual expenditure after truing up exercise for the period 2019-24. Accordingly, the Petitioner has adjusted an amount of Rs. –()406.85 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 5086.35 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. Further it is submitted that petitioner has considered opening capital cost of 112.03 Cr and 632.88 Cr for Dadri-Loni transmission line and Dadri-II ECS system respectively on the basis of above true up petition filled.

14) 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 and Regulation 24, 25 and 26 of the Tariff Regulations, 2024.

15) 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, water consumption, rate of water charges as applicable for 2023-24 have been furnished below for reference. Water charges claimed is escalated @5.25% year on year and same may be allowed in tariff based on the same for the 2024-29. In accordance with provision of the Regulations, the petitioner shall be furnishing the details of actual for the relevant year at the time of truing up and the same shall be subject to retrospective adjustment.

Description	**Remarks**
Type of Plant	Coal based station

Type of cooling water system	Closed Cycle
Rate of Water Charges	Rs 12.48 per 1000 cubic feet
Rate of Royalty	Rs 6 Lakh per cusec per year
Total Water Charges(2023-24)	150.8 lacs

*Escalated @5.25% from 2023-24 onwards

16) Similarly, the Petitioner is claiming the security & ash transportation expenses based on the estimated expenses for the period 2024-29, 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.

17) It is further submitted that no ash transportation charges are being incurred by the instant station for transportation of ash at present. However, in coming years, the transportation of ash to NHAI and other agencies is expected, wherein transportation shall be the responsibility of the generator. Accordingly, though the estimated ash transportation charges has been shown nil in Form-3A on the basis of the present circumstances, the same shall be claimed at the time of truing up based on actual ash transportation expenses.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.

18) 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 fuel 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 fuel also as per Form 15 of the Tariff Regulations, 2019.

19) However, in so far as the present Petition is concerned, the Petitioner has prepared & submitted the data of fuel 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 fuel 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 fuel for its existing plants month wise for the preceding 12 months i.e. for FY 2023-24 for computation of Interest on Working Capital.

20) 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 fuel as per the new format of Form-15.

21) 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.

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

23) The Petitioner further respectfully submits that the wage/ salary revision of the employees of the Petitioner will be due with effect from 1.1.2027. As per Regulation 36(1)(8) of the Tariff Regulations 2024, the impact on account of implementation of wage/ pay revision shall be allowed at the time of truing up of tariff. The Petitioner therefore craves liberty to approach the Hon'ble Commission for allowing the impact on account of implementation of wage/ pay revision of the employees of the Petitioner with effect from 1.1.2027, based on the actual payments whenever paid by it.

24) The petitioner has accordingly calculated the tariff for 2024-29 period based on the above and the same is enclosed as **Appendix-I, Appendix-IA, Appendix-IB** for generating station , Transmission asset and ECS system respectively to this petition.

25) 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 2004-09 and equipments including SG and TG specifications for tendering / award was stipulated considering the boiler efficiency and the turbine heat rate prescribed by the Hon'ble Commission in the Tariff Regulations at that time. Based on the same the equipments were ordered through 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 85.34 %, the unit heat rate would be worked out to be 2351.25 kcal/kwh and the operating margin available over the design heat rate would be 3.65 % 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 may be allowed based on guaranteed turbine cycle heat rate of 1936 and actual boiler efficiency of 85.34% 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%.

26) It is submitted the Petitioner has served the copy of the Petition on to the Respondents mentioned herein above and has posted the Petition on the company website i.e. www.ntpc.co.in/notices.

27) In accordance with the 'Conduct of Business Regulations 2023' of the Hon'ble Commission, the Petitioner shall 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 along with the prayer for recovery of Publication Expenses as per Regulation-94 of CERC Tariff Regulations 2024.

28) 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. 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.

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

Prayers

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

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

ii) Approve tariff of Dadri Loni Transmission Line as separate stream from the tariff of generating station for the tariff period 01.04.2024 to 31.03.2029.

iii) Approve supplementary tariff of NCTPS-II ECS system for the tariff period 01.04.2024 to 31.03.2029.

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

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

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

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

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

Petitioner

Noida

23-11-2024

Signature Not Verified

Digitally signed by PARIMAL PIYUSH
Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

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 National Capital Thermal Power Station Stage-II (NCTPS-II) (980 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

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

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

And

Others

AFFIDAVIT

I, Parimal Piyush, Son of Late Bharat Mishra, aged about 49 years, resident of IN1-2004, Inspire, Eldeco Aamantran, Sector-119, Noida (UP), 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.

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

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

परिमल पीयूष/PARIMAL PIYUSH
अपर महाप्रबन्धक (वाणिज्यिक)
Addl. General Manager (Commercial)
एन टी पी सी लिमिटेड/NTPC LIMITED
EOC, A-8A, Sector-24, Noida-201 301 (UP)

Signature Not Verified
Digitally signed by PARIMAL PIYUSH
Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

instruction and the contents of the same are true and correct to the best of my knowledge and belief.

3. That the contents of Para No.....1..... to.....29..... as mentioned in the Petition are true and correct based on 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.

परिमल पीयूष/PARIMAL PIYUSH
अपर महाप्रबन्धक (वाणिज्यिक)
Addl. General Manager (Commercial)
एन टी पी सी लिमिटेड/NTPC LIMITED
EOC, A-8A, Sector-24, Noida-201301 (U.P.)

(Deponent)

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)

परिमल पीयूष/PARIMAL PIYUSH
अपर महाप्रबन्धक (वाणिज्यिक)
Addl. General Manager (Commercial)
एन टी पी सी लिमिटेड/NTPC LIMITED
EOC, A-8A, Sector-24, Noida-201301 (U.P.)

NOTARY
YOGENDRA SINGH
AREA NOIDA
G.B. NAGAR
REGN. NO. 567/08
GOVT. OF INDIA

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

23 NOV 2024

Signature Not Verified
Digitally signed by PARIMAL PIYUSH
Date: 2024.11.23 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

TARIFF FILING FORMS (THERMAL)

FOR DETERMINATION OF TARIFF

FOR

NCTPS St-II

(From 01.04.2024 to 31.03.2029)

PART-I

APPENDIX-I

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

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

Provided yearwise

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

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

Form No.	Title of Tariff Filing Forms (Thermal)	Tick
FORM-A	Abstract of Capital Cost Estimates	**NA**
FORM-B	Break-up of Capital Cost for Coal/Lignite based projects	**NA**
FORM-C	Break-up of Capital Cost for Gas/Liquid fuel based Projects	**NA**
FORM-D	Break-up of Construction/Supply/Service packages	**NA**
FORM-E	Details of variables , parameters , optional package etc. for New Project	**NA**
FORM-F	Details of cost over run	**NA**
FORM-G	Details of time over run	**NA**
FORM –H	Statement of Additional Capitalisation during end of the useful life	**NA**
FORM –I	Details of Assets De-capitalised during the period	***
FORM –J	Reconciliation of Capitalisation claimed vis-à-vis books of accounts	***
FORM –K	Statement showing details of items/assets/works claimed under Exclusions	***
FORM-L	Statement of Capital cost	✓
FORM-M	Statement of Capital Woks in Progress	✓
FORM-N	Calculation of Interest on Normative Loan	✓
FORM-O	Calculation of Interest on Working Capital	✓
FORM-P	Incidental Expenditure up to SCOD and up to Actual COD	**NA**
FORM-Q	Expenditure under different packages up to SCOD and up to Actual COD	**NA**
FORM-R	Actual cash expenditure	**NA**
FORM-S	Statement of Liability flow	***
FORM-T	Summary of issues involved in the petition	✓
***** Shall be provided at the time of true 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.	NA
	B. Station wise and Corporate audited Balance Sheet and Profit & Loss Accounts with all the Schedules & annexures for the existing station for relevant years.	***
3	Copies of relevant loan Agreements	NA
4	Copies of the approval of Competent Authority for the Capital Cost and Financial package.	NA
5	Copies of the Equity participation agreements and necessary approval for the foreign equity.	NA
6	Copies of the BPSA/PPA with the beneficiaries, if any	NA
7	Detailed note giving reasons of cost and time over run, if applicable.	NA
	List of supporting documents to be submitted:	
	a. Detailed Project Report	
	b. CPM Analysis	
	c. PERT Chart and Bar Chart	
	d. Justification for cost and time Overrun	
8	Generating Company shall submit copy of Cost Audit Report along with cost accounting records, cost details, statements, schedules etc. for the Generating Unit wise /stage wise/Station wise/ and subsequently consolidated at Company level as submitted to the Govt. of India for first two years i.e. 2019-20 and 2020-21 at the time of mid-term true-up in 2021-22 and for balance period of tariff period 2019-24 at the time of final true-up in 2024-25. In case of initial tariff filing the latest available Cost Audit Report should be furnished.	***
9	Any other relevant information, (Please specify)	NA
10	Reconciliation with Balance sheet of any actual additional capitalization and amongst stages of a generating station	***
11	BBMB is maintaining the records as per the relevant applicable Acts. Formats specified herein may not be suitable to the available information with BBMB. BBMB may modify the formats suitably as per available information to them for submission of required information for tariff purpose.	NA
***** Shall be provided at the time of true up**		

PART-I
FORM- 1

Summary of Tariff

	Name of the Petitioner:	**NTPC Limited**
	Name of the Generating Station:	**NCTPS St-II**
	Place (Region/District/State):	**Northern Region /Gautam Budh Nagar / UP**

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	11,159.02	11,425.10	11,621.07	11,926.83	12,059.88	12,059.88
1.2	Interest on Loan	Rs Lakh	2,520.43	1,785.15	1,152.82	569.38	69.41	-
1.3	Return on Equity	Rs Lakh	28,448.03	28,642.04	28,744.90	28,887.07	28,939.82	28,939.82
1.4	Interest on Working Capital	Rs Lakh	11,920.88	11,950.70	12,019.69	12,095.25	12,168.93	12,257.13
1.5	O&M Expenses	Rs Lakh	28,726.29	28614.87	30120.65	31700.52	33364.55	35113.05
1.6	Special Allowance (If applicable)	Rs Lakh	0.00					
	Total	Rs Lakh	**82774.65**	**82417.85**	**83659.14**	**85179.05**	**86602.60**	**88369.89**
2	Primary Fuel							
2.1	Landed Fuel Cost (coal/gas/RLNG/ liquid) as per FSA approved by beneficiaries	Rs/Ton	5501.470	5228.133				
	(%) of Fuel Quantity	(%)	87.6%	71.8%				
2.2	Landed Fuel Cost (coal from Integrated mine) as per FSA, if any, approved by beneficiaries or as per allocation of coal quantity	Rs/Ton	NA					
	(%) of Fuel Quantity	(%)						
2.3	Landed Fuel Cost Imported Coal as per FSA approved by beneficiaries	Rs/Ton						
	(%) of Fuel Quantity	(%)						
2.4	Landed Fuel Cost (coal/gas /RLNG/liquid) other than FSA	Rs/Ton	NA	4925.869				
	(%) of Fuel Quantity	(%)		13.0%				
2.5	Landed Fuel Cost Imported Coal other than FSA.	Rs/Ton	19484.940	13698.950				
	(%) of Fuel Quantity	(%)	12.5%	15.2%				
3	Secondary Fuel							
	Secondary Fuel	Rs./kL	79799.96	81336.33				
	Energy Charge Rate ex-bus (Paise/kWh) - Coal	Rs/Unit	4.48	4.52				
	Energy Charge Rate ex-bus (Paise/kWh) -Oil	Rs/Unit	0.04	0.04				
	Energy Charge Rate ex-bus (Paise/kWh) - Total	Rs/Unit	4.52	4.56				

Signature Not Verified

Digitally signed by PARIMAL PIYUSH
Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

(Petitioner)

PART-I
FORM- 1(I)

	Name of the Petitioner:	**NTPC Limited**
	Name of the Generating Station:	**NCTPS St-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	5,08,635.51	5,09,244.90	5,13,025.44	5,15,414.44	5,15,414.44
2	Add: Addition during the year/period	609.39	3,780.54	2,389.00	-	-
3	Less: De-capitalisation during the year/period	-	-	-	-	-
4	Less: Reversal during the year / period	-	-	-	-	-
5	Add: Discharges during the year/ period	-	-	-	-	-
6	Closing Capital Cost	5,09,244.90	5,13,025.44	5,15,414.44	5,15,414.44	5,15,414.44
7	**Average Capital Cost**	**5,08,940.21**	**5,11,135.17**	**5,14,219.94**	**5,15,414.44**	**5,15,414.44**

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	506090.51	506090.51	507062.66	507062.66	507062.66
2	Add: Addition during the year / period	0.00	972.15	0.00	0.00	0.00
3	Less: De-capitalisation during the year / period					
4	Less: Reversal during the year / period					
5	Add: Discharges during the year / period					
6	Closing Capital Cost	506090.51	507062.66	507062.66	507062.66	507062.66
7	**Average Capital Cost**	**506090.51**	**506576.58**	**507062.66**	**507062.66**	**507062.66**

Statement showing claimed capital cost eligible for RoE at one year MCLR + 350 bps

S. No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7
1	Opening Capital Cost	2545.00	3154.39	5962.78	8351.78	8351.78
2	Add: Addition during the year / period	609.39	2808.39	2389.00	0.00	0.00
3	Less: De-capitalisation during the year / period					
4	Less: Reversal during the year / period					
5	Add: Discharges during the year / period					
6	Closing Capital Cost	3154.39	5962.78	8351.78	8351.78	8351.78
7	**Average Capital Cost**	**2849.70**	**4558.59**	**7157.28**	**8351.78**	**8351.78**

(Petitioner)

PART-I
FORM- 1(IIA)

	Name of the Petitioner:	**NTPC Limited**
	Name of the Generating Station:	**NCTPS St-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					
1	Gross Opening Equity (Normal)	1,51,827.15	1,51,827.15	1,52,118.80	1,52,118.80	1,52,118.80
2	Less: Adjustment in Opening Equity	-	-	-	-	-
3	Adjustment during the year					
4	Net Opening Equity (Normal)	1,51,827.15	1,51,827.15	1,52,118.80	1,52,118.80	1,52,118.80
5	Add: Increase in equity due to addition during the year / period	0.00	291.65	0.00	0.00	0.00
7	Less: Decrease due to De-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
8	Less: Decrease due to reversal during the year / period	0.00	0.00	0.00	0.00	0.00
9	Add: Increase due to discharges during the year / period	0.00	0.00	0.00	0.00	0.00
10	Net closing Equity (Normal)	1,51,827.15	1,52,118.80	1,52,118.80	1,52,118.80	1,52,118.80
11	Average Equity (Normal)	1,51,827.15	1,51,972.98	1,52,118.80	1,52,118.80	1,52,118.80
12	Rate of ROE (%)	18.782	18.782	18.782	18.782	18.782
13	Total ROE	**28,516.18**	**28,543.56**	**28,570.95**	**28,570.95**	**28,570.95**

(Petitioner)

PART-I
FORM- 1(IIB)

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

Statement showing Return on Equity linked to SBI MCLR+ 350 basis points

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 linked to SBI MCLR+ 350 basis points					
1	Gross Opening Equity (Normal)	763.50	946.32	1788.83	2505.53	2505.53
2	Less: Adjustment in Opening Equity	0.00	0.00	0.00	0.00	0.00
3	Adjustment during the year					
4	Net Opening Equity (Normal)	763.50	946.32	1788.83	2505.53	2505.53
5	Add: Increase in equity due to addition during the year / period	182.82	842.52	716.70	0.00	0.00
7	Less: Decrease due to De-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
8	Less: Decrease due to reversal during the year / period	0.00	0.00	0.00	0.00	0.00
9	Add: Increase due to discharges during the year / period	0.00	0.00	0.00	0.00	0.00
10	Net closing Equity (Normal)	946.32	1788.83	2505.53	2505.53	2505.53
11	Average Equity (Normal)	854.91	1367.57	2147.18	2505.53	2505.53
12A	Rate of ROE- Base Rate(%)	12.15	12.15	12.15	12.15	12.15
12B	Effective Tax Rate (%)	17.47	17.47	17.47	17.47	17.47
12C	Rate of ROE(Grossed Up) (%)	14.722	14.722	14.722	14.722	14.722
13	Total ROE	**125.86**	**201.34**	**316.11**	**368.87**	**368.87**

(Petitioner)

Signature Not Verified

Digitally signed by PARIMAL PIYUSH
Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

PART-I
FORM-2

Plant Characteristics

Name of the Petitioner	**NTPC Ltd.**	
Name of the Generating Station	**NCTPS St-II**	
	Unit-I	**Unit-II**
Unit(s)/Block(s)/Parameters		
Installed Capacity (MW)	490	490
Schedule COD as per Investment Approval	31.01.2010	31.07.2010
Actual COD /Date of Taken Over (as applicable)	31.01.2010	31.07.2010
Pit Head or Non Pit Head or Integrated Mine	Non Pit Head	
Name of the Boiler Manufacture	BHEL	
Name of Turbine Generator Manufacture	BHEL	
Main Steams Pressure at Turbine inlet (kg/Cm^2) abs[1].	170	170
Main Steam Temperature at Turbine inlet (^{o}C) [1]	537	537
Reheat Steam Pressure at Turbine inlet (kg/Cm[2)] [1]	39.73	39.73
Reheat Steam Temperature at Turbine inlet (^{o}C) [1]	565	565
Main Steam flow at Turbine inlet under MCR condition (tons /hr)[2]	1428.40	1428.40
Main Steam flow at Turbine inlet under VWO condition (tons /hr)[2]	1544.92	1544.92
Unit Gross electrical output under MCR /Rated condition (MW)[2]	490	490
Unit Gross electrical output under VWO condition (MW)[2]	525.06	525.06
Guaranteed Design Gross Turbine Cycle Heat Rate (kCal/kWh)3	1936	1936
Conditions on which design turbine cycle heat rate guaranteed		
% MCR	90.4	90.4
% Makeup Water Consumption	0	0
Design Capacity of Make up Water System		
Design Capacity of Inlet Cooling System	2900 m3/hr	
Design Cooling Water Temperature (^{0}C)	33	33
Back Pressure	77 mm/Hg (a)	77 mm/Hg (a)
Steam flow at super heater outlet under BMCR condition (tons/hr)	1625	1625
Steam Pressure at super heater outlet under BMCR condition) (kg/Cm2)	178	178
Steam Temperature at super heater outlet under BMCR condition (0C)	540	540
Steam Temperature at Reheater outlet at BMCR condition (^{0}C)	568	568
Design / Guaranteed Boiler Efficiency (%) at 490 MW for Unit-5 & 6	85.34	85.34
Design Fuel with and without Blending of domestic/imported coal	Coal CV 3500	
Type of Cooling Tower	Natural Draft	
Type of cooling system[5]	Closed circuit, natural draft	
Type of Boiler Feed Pump[6]	Steam Turbine Driven	
Type of Boiler (Wall Fired/Tangential Fired)	Tangential Fired	
Fuel Details[7]		
-Primary Fuel	Coal	
-Secondary Fuel	LDO	
-Alternate Fuels	NA	
Special Features/Site Specific Features[8]	Make up water from upper Ganga canal	
Special Technological Features[9]		
Environmental Regulation related features[10]	Electrostatic Precipitators	
Any other special features	FGD/ De Nox system is under Operation.	

Petitioner

PART-I
FORM- 3

Normative parameters considered for tariff computations

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

(Year Ending March)

Particulars	**Unit**	**Existing 2023-24**	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Base Rate of Return on Equity	%	15.50	15.50	15.50	15.50	15.50	15.50
Rate of Return on Add - cap beyond the original scope of work including additional capitalization due to Change in Law, Force Majeure	%	7.099	12.150	12.150	12.150	12.150	12.150
Effective Tax Rate	%	17.4720	17.4720	17.4720	17.4720	17.4720	17.4720
Target Availability	%	85.00	85.00	85.00	85.00	85.00	85.00
Peak Hours	%	85.00	85.00	85.00	85.00	85.00	85.00
Off-Peak Hours	%	85.00	85.00	85.00	85.00	85.00	85.00
ß- Average Monthly Frequency Response Per	0-1	NA	Will be provided at the time of truing up				
Auxiliary Energy Consumption for Station Excluding FGD system	%	5.75	5.25	5.25	5.25	5.25	5.25
Additional Auxiliary Energy Consumption for FGD System	%	1.00	1.00	1.00	1.00	1.00	1.00
Auxiliary Energy Consumption for Station Including FGD system	%	6.75	6.25	6.25	6.25	6.25	6.25
Gross Station Heat Rate	kCal/kWh	2362.50	2370.66	2370.66	2370.66	2370.66	2370.66
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	50	50	50	50	50
Cost of Main Secondary Fuel Oil for WC1	in Months	2	2	2	2	2	2
Fuel Cost for WC2	in Months	NA	NA	NA	NA	NA	NA
Liquid Fuel Stock for WC2	in Months	NA	NA	NA	NA	NA	NA
O&M Expenses	Rs lakh/MW	25.84	27.17	28.6	30.1	31.68	33.34
Maintenance Spares for WC	% of O&M	20.00	20.00	20.00	20.00	20.00	20.00
Receivables for WC	in Days	45	45	45	45	45	45
Storage capacity of Primary fuel#	Lakh MT	7.03	7.03	7.03	7.03	7.03	7.03
SBI 1 Year MCLR plus 325 basis point3	%	12.00	11.90	11.90	11.90	11.90	11.90
Blending ratio of domestic coal/imported coal		NA	NA	NA	NA	NA	NA
Norms for consumption of reagent		NA	NA	NA	NA	NA	NA
Specific Limestone consumption for Wet Limestone FGD*		7.77	8.68	8.68	8.68	8.68	8.68
Specific Limestone consumption for Lime Spray Dryer or Semi-dry FGD		NA	NA	NA	NA	NA	NA
Specific consumption of sodium bicarbonate		NA	NA	NA	NA	NA	NA
Specific Limestone consumption for CFBC based generating station		NA	NA	NA	NA	NA	NA
Specific urea consumption of the SNCR		NA	NA	NA	NA	NA	NA
Specific ammonia consumption of the SCR		NA	NA	NA	NA	NA	NA
Transit and Handling Losses of coal or lignite, as applicable	%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%

** As per ECS Petition filed (348/GT/2022) for 2023-24 and supplementary tariff Form(Appendix-IB) in the instant petition for 2024-29
# For Combined Dadri-I (840MW) and Dadri-II(980 MW)

Petitioner

Part-I
FORM-3A
ADDITIONAL FORM

Calculation of O&M Expenses

Name of the Company :	**NTPC Limited**
Name of the Power Station :	**NCTPS St-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)**					
1a	Normative	26626.60	28028.00	29498.00	31046.40	32673.20
2	**O&M expenses under Reg.36(1)(6)**					
2a	Water Charges	158.72	167.05	175.82	185.05	194.77
2b	Security expenses	1829.55	1925.60	2026.69	2133.10	2245.08
2c	Capital Spares	Shall be provided at the time of truing up				
3	O&M expenses-Ash Transportation	0.00	0.00	0.00	0.00	0.00
	Total O&M Expenses	**28614.87**	**30120.65**	**31700.52**	**33364.55**	**35113.05**

Petitioner

Form-4

DETAILS OF FOREIGN LOANS

(Details only in respect of loans applicable to the project under petition)

Name of the company **NTPC LIMITED**

Name of the Power Station

Exchange Rate as on	31-03-2019	USD = Rs.	69.77	EUR = Rs.	78.84	JPY = Rs.	0.6343
Exchange Rate as on	31-03-2020	USD = Rs.	76.06	EUR = Rs.	84.43	JPY = Rs.	0.7069
Exchange Rate as on	31-03-2021	USD = Rs.	74.06	EUR = Rs.	87.28	JPY = Rs.	0.6730
Exchange Rate as on	31-03-2022	USD = Rs.	76.33	EUR = Rs.	85.76	JPY = Rs.	0.6280
Exchange Rate as on	31-03-2023	USD = Rs.	82.74	EUR = Rs.	90.87	JPY = Rs.	0.6263
Exchange Rate as on	31-03-2024	USD = Rs.	83.95	EUR = Rs.	91.51	JPY = Rs.	0.5576

27.28% (Amount in Lacs)

Financial Year (Starting from COD)	**2019-20 (01.04.2019 to 31.03.2020)**			
1	**1**	**2**	**3**	**4**
NIB	Date	Amount (FC)	Ex. Rate	Amount (INR)
Currency 1 EURO	20-01-2019			
At the date of drawl	01-04-2019	187.04	78.84	14,746.22
Loan repayment upto previous period		166.26	78.84	13,107.75
Net loan at the Beginning of the period	01-04-2019	20.78	78.84	1,638.47
Schedule repayment date of principal	20-07-2019	2.83	76.85	217.86
Scheduled payment date of interest	20-07-2019	0.01	77.29	0.91
Witholding tax including surcharge on interest	20-07-2019		77.29	-
Schedule repayment date of principal	20-01-2020	2.83	77.45	219.54
Scheduled payment date of interest	20-01-2020	0.01	78.95	0.59
Witholding tax including surcharge on interest	20-01-2020		76.85	-
ERV	31-03-2020			-1,201.07
At the end of Financial year	31-03-2020	**15.11**	**0.00**	**-**
In Case of Hedging :				
At the date of hedging	04-02-2015 (@ Rs 70.80/ EUR)			
Period of Hedging	20.07.2015 to 20.01.2020(10 Million POS and Settlement 1 Million half yearly ba			
Cost of Hedging	6.8345% per annuam			

PART 1
FORM- 5

Abstract of Admitted Capital Cost for the existing Projects

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

Last date of order of Commission for the project	**Date (DD-MM-YYYY)**	01-06-2022
Reference of petition no. in which the above order was passed	**Petition no.**	2/GT/2021

Following details (whether admitted and /or considered) as on the last date of the period **i.e. 31.03.2024** for which tariff is approved, in the above order by the Commission:

Capital cost	**(Rs. in lakh)**	549320.7
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)		6,742.48
Gross Normative Debt		384524.49
Cumulative Repayment		3,29,217.47
Net Normative Debt		55,307.02
Gross Notional Equity		164796.21
Adjustment to equity in terms of 1st proviso to Regulation 18(3)		0
Normative Equity		164796.21
Cumulative Depreciation		329503.83
Freehold land		7941.18

(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 :	**NCTPS St-II**

Reference of Final True-up Tariff Petition	**Affidavit dated**	20-11-2024
Capital Cost as on 31.03.2024/01.04.2024 as per Hon'ble Commission's Order dated 22.09.2022 in 489/GT/2020	**Rs. Lakhs**	5,49,320.70
Adjustment as per this petition		-40685.19
Following details as considered by the Petitioner as **on the First date of the period i.e. 01.04.2024** for which tariff is claimed:		
Capital cost as on 01.04.2024	**(Rs. in lakh)***	508635.51
Amount of un-discharged liabilities included in above (& forming part of admitted capital cost)		0
Amount of un-discharged liabilities corresponding to above admitted capital cost (but not forming part of admitted capital cost being allowed on cash basis)		2126.33
Gross Normative Debt		3,56,044.86
Cumulative Repayment		3,24,165.94
Net Normative Debt		31,878.92
Normative Equity		1,51,827.15
Cumulative Depreciation		3,24,452.30
Freehold land		7,941.18

(Petitioner)

Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5050000711 **T00001** **D00001**

Unsecured Loan From Punjab National Bank-IV		
Source of Loan :	**Punjab National Bank-IV**	
Currency :	INR	
Amount of Loan :	20,00,00,00,000	
Total Drawn amount :	20,00,00,00,000	
Date of Drawl	01.01.2019	
Interest Type :	Floating	
Fixed Interest Rate :		
Base Rate, If Floating Interest	8.60%	
Margin, If Floating Interest :	0.00%	
Are there any Caps/ Floor :	Y/N	
Frequency of Intt. Payment	MONTHLY	
If Above is yes, specify Caps/ Floor :		
Moratorium Period :	3 Years	
Moratorium effective from :	01.01.2019	
Repayment Period (Inc Moratorium) :	12 Years	
Repayment Frequency :	9 Yearly Instalment	
Repayment Type :	AVG	
First Repayment Date :	14.02.2023	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	Project Name	Amount
	UNCHAHAR STPP IV	65,00,00,000.00
	TANDA-II	85,00,00,000.00
	NCTPP-II	36,43,00,000.00
	DADRI GAS R&M	56,00,00,000.00
	KORBA-III	15,00,00,000.00
	SIPAT-II	17,14,00,000.00
	FARAKKA-III	8,57,00,000.00
	KAHALGAON-II	17,14,00,000.00
	BARH-I	1,08,57,00,000.00
	BARH-II	8,00,00,000.00
	NORTH KARANPURA	1,09,00,00,000.00
	KOLDAM	6,43,00,000.00
	TAPOVAN VISHNUGAD	28,57,00,000.00
	PAKRI BARWADIH	1,42,00,00,000.00
	CHATTI BARIATU	10,00,00,000.00
	BONGAIGAON	36,43,00,000.00
	KUDGI	60,00,00,000.00
	LARA	1,23,00,00,000.00
	GADARWARA	2,27,72,00,000.00
	DARLIPALLI	2,73,00,00,000.00
	KHARGONE	50,00,00,000.00
	ANANTPUR SOLAR	17,00,00,000.00
	TALAIPALI COAL MINE	5,00,00,00,000.00
Total Allocated Amount		**20,00,00,00,000.00**

Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5050000442 **T00001** **D00024**

Unsecured Loan From SBI-VIII		
Source of Loan :	**SBI-VIII**	
Currency :	INR	
Amount of Loan :	1,00,00,00,00,000	
Total Drawn amount :	11,50,00,00,000	
Date of Drawl	14.02.2017	
Interest Type :	Floating	
Fixed Interest Rate :	----------	
Base Rate, If Floating Interest	D00024- 8.25%	
Margin, If Floating Interest :	0.00%	
Are there any Caps/ Floor :	Y/N	
Frequency of Intt. Payment	Monthly	
If Above is yes, specify Caps/ Floor :		
Moratorium Period :	6 Years	
Moratorium effective from :	14.02.2017	
Repayment Period (Inc Moratorium) :	15 Years	
Repayment Frequency :	9 Yearly Installments	
Repayment Type :	AVG	
First Repayment Date :	31.01.2022	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate :	N.A.	
Project Code	**Project Name**	**Amount**
	BARH-I	3,00,00,00,000
	BONGAIGAON	34,28,57,142
	FARAKKA III	14,28,57,141
	GADARWARA	2,50,00,00,000
	KOLDAM	92,85,71,427
	KORBA-III	2,85,71,428
	KUDGI	1,00,00,00,000
	MOUDA-I	40,71,42,856
	NCTPP-II	15,71,42,855
	NORTH KARANPURA	1,00,00,00,000
	RIHAND-III	32,14,28,570
	SIMHADRI-II	53,28,57,141
	SIPAT-I	21,42,85,711
	SIPAT-II	5,71,42,856
	TAPOVAN VISHNUGAD	50,00,00,000
	VINDHYACHAL IV	32,42,85,714
	PAKRI BARWADIH	4,28,57,159
Total Allocated Amount		**11,50,00,00,000**

Statement Giving Details of Project Financed through a Combination of loan

Form 8

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

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

Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

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

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	
Rate of Interest as on 01.04.2019	8.25%	
Base Rate, If Floating Interest	-	
Loan Refinancing spread	0.1333%	
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- Domestic Bonds- Details of Allocation of corporate loans to various projects												
Particulars	***XXII 8.1771%***	***XXIV 8.6077%***	***XXVII 11.25%***	***XXX 7.89%***	***XXXIII 8.73%***	***XXXIV 8.71%***	***XXXV 8.785%***	***XXXVIII 9.17%***	***54***	***57***	***67***	***72***
Series	**22**	**24**	**27**	**30**	**33**	**34**	**35**	**38**	**54**	**57**	**67**	**72**
Source of Loan1	BONDS	BONDS	BONDS	BONDS	BONDS	BONDS	BONDS	BONDS	BONDS	BONDS	BONDS	BONDS
Currency2	INR	INR	INR	INR	INR	INR	INR	INR	INR	INR	INR	INR
Amount of Loan sanctioned	**50000**	**50000**	**35000**	**70000**	**19500**	**15000**	**12000**	**7500**	**1030683**	**50000**	**400000**	**400000**
Interest Type6	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
Fixed Interest Rate, if applicat	8.1771%	8.6077%	11.250%	7.890%	8.73%	8.71%	8.785%	9.17%	8.49%	8.19%	8.30%	5.45%
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	N/A	N/A
Margin, if Floating Interest8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Are there any Caps/Floor9	No	No	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
Moratorium Period10	4.5 yrs *	4.5 yrs *	11 yrs	10 yrs	10 yrs	6 yrs	6 yrs	6 yrs	8	10	10	5
Moratorium effective from #	02.01.07	09.03.2007	06.11.2008	05.05.09	31.03.10	10.06.2010	15.09.10	22.03.11	25-03-2015	15-12-2015	15-01-2019	15-10-2020
Repayment Period11	9.5 yrs	9.5 yrs	5 yrs	Bullet Repayment	Bullet Repayment	14 yrs	14 yrs	14 yrs	Installments Due on 25/03/2023, 25/03/2024 & 25/03/2025	Bullet Repayment	Bullet Repayment	Bullet Repayment
Repayment effective from	02.07.11	09.09.11	06.11.19	05.05.19	31.03.20	10.06.16	15.09.16	22.03.2017	25-03-2023	15-12-2025	15-01-2029	15-10-2025
Repayment Frequency12	Half Yearly	Half Yearly	Yearly	Bullet Repayment	Bullet Repayment	Yearly	Yearly	Yearly	Installments Due on 25/03/2023, 25/03/2024 & 25/03/2025	Bullet Repayment	Bullet Repayment	Bullet Repayment
Repayment Instalment13,14	2500	2500	7000	70000	19500	1000	800	500	Installments 1st - 206,136.61 2nd - 412,273.22 3rd - 412,273.22	50000	400000	400000
Base Exchange Rate16									N/A	N/A	N/A	N/A
Door to Door Maturity	14 yrs	14 yrs	15 yrs	10 yrs	10 yrs	20 yrs	20 yrs	20 yrs	10	10	10	5

Form 8- Domestic Bonds- Details of Allocation of corporate loans to various projects												
Name of the Projects												
NCTPP II	500	4,000	22,500	20,000	1,700	500	1,500	3,300	11,000	500	1,601	31733.33332

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 shared
Prepayment of Loans in 2016-17								
1	Oriental Bank of Commerce-I	8.60%	14-Feb-17	SBI VIII	8.00%	57143141.00	0.60%	0.2000%
2	Punjab & Sind Bank-I	9.60%	14-Feb-17	SBI VIII	8.00%	475714000.00	1.60%	0.5333%
3	Bank of Maharashtra - III	8.70%	28-Mar-17	Karnataka Bank Limi	7.70%	271428570.00	1.00%	0.3333%
4	Bank of Maharastra-V	8.70%	28-Mar-17	J&K bank Iv	7.85%	468750000.00	0.85%	0.2833%
Prepayment of Loans during 2018-19								
1	ICICI	8.60%	11-Jan-19	Corporation Bank	8.20%	232142855.00	0.40%	0.133%
2	ICICI	8.60%	15-Jan-19	Bonds 67th series	7.40%	480400000.00	1.20%	0.400%
3	IDFC Bank I to IV	8.65%	18-Feb-19	SBI-XII	8.35%	210000000.00	0.30%	0.100%
						922542855.00		

NCTPP-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 in 2020-2021								
1	PFC-V	7.44%	15-Oct-20	BOND-72	5.45%	1,927	1.99%	1.00%
2	PFC-V	7.68%	15-Oct-20	BOND-72	5.45%	1,927	2.23%	1.12%
3	PFC-V	8.25%	15-Oct-20	BOND-72	5.45%	5,729	2.80%	1.40%
					Total	9,583		

	Bank Loan	Interest Rate	Applicable from	Applicable upto	Number of Days	Product	Weighted Average Rate of Interest
1	**State Bank of India - VIII**	8.00%	01-Apr-23	13-May-23	43.00	3.44	
		8.10%	14-May-23	13-Aug-23	92.00	7.45	
		8.15%	14-Aug-23	13-Feb-24	184.00	15.00	
		8.20%	14-Feb-24	31-Mar-24	47.00	3.85	
					366.00	**29.74**	**8.13%**
2	**State Bank of India - XII**	8.00%	01-Apr-23	10-Apr-23	10.00	0.80	
		8.10%	11-Apr-23	10-Oct-23	183.00	14.82	
		8.15%	11-Oct-23	10-Jan-24	92.00	7.50	
		8.20%	11-Jan-24	31-Mar-24	81.00	6.64	
					366.00	**29.76**	**8.13%**
3	**Punjab National Bank IV**	7.90%	01-Apr-23	31-Mar-24	366.00	28.91	
					366.00	**28.91**	**7.90%**
4	**Corporation Bank-IV**	7.90%	01-Apr-23	10-Jan-24	285.00	22.52	
		8.10%	11-Jan-24	31-Mar-24	81.00	6.56	
					366.00	**29.08**	**7.94%**

PART-I
FORM- 9A
Additional Form

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	**NTPC Limited**
Name of the Generating Station	**NCTPS St-II**
COD	**31-07-2010**
For Financial Year	**2024-29 (Summary)**

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed (Actual / Projected)					Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		2024-25	2025-26	2026-27	2027-28	2028-29			
1	2	3	4	5	6	7		8	9
A.	**Works eligble for RoE at Normal Rate**								
							Please refer respective year Form 9		
1	Stage II HMI Upgradation		972.15						
	Total (A)	**-**	**972.15**	**-**	**-**	**-**			
B.	**Works eligble for Return on Equity linked to SBI MCLR+ 350 basis points:**								
1	Integrated Security System Project	523.64	113.75				Please refer respective year Form 9		
	Biomass Handling Infrastructure	85.75	505.14	2,389.00					
	ClO2 Package		2189.50						
	Total (B)	**609.39**	**2808.39**	**2389.00**	**0.00**	**0.00**			
Total Add. Cap. Claimed (A+B)		**609.39**	**3,780.54**	**2,389.00**	**-**	**-**			

(Petitioner)

PART-I
FORM- 9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	**NTPC Limited**
Name of the Generating Station	**NCTPS St-II**
COD	**31-07-2010**
For Financial Year	**2024-25**

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed (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**
A.	**Works under Original scope, Change in Law etc. eligble for RoE at Normal Rate**							
						NIL		
	Total (A)	**-**	**-**	**-**	**-**			
B.	**Works eligble for Return on Equity linked to SBI MCLR+ 350 basis points:**							
1	Integrated Security System Project	523.64	-	523.64		26-1(d)	It is respectfully submitted that, in view of the prevailing security situation in the region, the Government of India (GoI), through the Ministry of Power, has recommeded NTPC to enhance the security of vital installations and critical infrastructure (**GoI Letter attached as Annexure-A1**). In response, it was decided to implement an "Integrated Security System" across various NTPC stations, including NCTPS Dadri. The Hon'ble Commission has already approved this expenditure in the 2019-24 main petition (2/GT/2021) as per the order dated 1st June 2022.The projected expenditure pertains to balance capitalisation pertaining to already approved work. In light of the above, the Hon'ble Commission is kindly requested to allow the expenditure under Regulation 26(1)(d) of the 2024 Tariff Regulations.	
2	Biomass Handling Infrastructure	85.75	-	85.75		26-1(b),26-1(g)	The Ministry of Power (MoP) through its revised Biomass Policy dated 8th October 2021(**attached as annexure-A2**), has mandated the co-firing of biomass pellets in coal-based generating stations at a blending ratio of 5%.F.Further,The MOEFCC, through itsEnvironment (Utilisation of Crop residue by Thermal Power Plants) Rules, 2023 dated 12th July 2023, has mandated that all coal-based thermal power plants located in NCR shall annually use a minimum of 5% blend of biomass pellets or briquettes along with coal (**attached as annexure-A3**). It is submitted that to effectively handle the increased volume of biomass pellets on a daily basis, adequate infrastructure and storage facilities are necessary at the power stations. It is further submitted that CERC regulations 2024 acknowledge this requirement and provides for the capitalization of works undertaken to establish biomass handling systems under regulation 26(1)(g). In view of the above, it is respectfully submitted that the Hon'ble Commission may allow the proposed expenditure under Section 26(1)(b) and 26(1)(g).	
	Total (B)	**609.39**	**-**	**609.39**	**-**			
Total Add. Cap. Claimed (A+B)		**609.39**	**-**	**609.39**	**-**			

(Petitioner)

Signature Not Verified

Digitally signed by PARIMAL PIYUSH
Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

PART-I
FORM- 9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	**NTPC Limited**
Name of the Generating Station	**NCTPS St-II**
COD	**31-07-2010**
For Financial Year	**2025-26**

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed (Actual / Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	**2**	**3**	**4**	**5= (3-4)**	**6**	**7**	**8**	**9**
A.	**Works under Original scope, Change in Law etc. eligble for RoE at Normal Rate**							
1	Stage II HMI Upgradation	972.15	-	972.15		25(2)(c),25(2)(b)	It is submitted that the HMI(part of C&I system) at NTPC Dadri - Stage 1 operates on the MaxDNA platform with a Windows XP operating system. Microsoft has officially ended support for Windows XP on April 8, 2014 (**attached as Annexure A4**). With the cessation of support, no further maintenance patches, security updates, or antivirus support are available, exposing the existing system to significant security risks. It is further submitted that , the CEA Guidelines (2021) for Cyber Security in the Power Sector (**attached as Annexure A5**) mandates (i) Phasing out legacy systems, (ii) Hardening existing systems with additional security controls in consultation with the OEM, and (iii) Maintaining system logs for a minimum of six months. In light of these mandates, it has become essential to upgrade the existing MaxDNA system. It is submitted that the proposed upgradation involves upgradation of existing HMI System and implementing a cybersecurity suite to strengthen system hardening as mandated in the CEA guideline. In view of the above, it is respectfully submitted that the Hon'ble Commission may allow the proposed expenditure under Section 25(2)(c),25(2)(b).	
	Total (A)	**972.15**	**-**	**972.15**				

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	**NTPC Limited**
Name of the Generating Station	**NCTPS St-II**
COD	**31-07-2010**
For Financial Year	**2025-26**

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed (Actual / Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	**2**	**3**	**4**	**5= (3-4)**	**6**	**7**	**8**	**9**
B.	**Works eligble for Return on Equity linked to SBI MCLR+ 350 basis points:**							
	ClO2 Package	2,189.50		2,189.50		26(1)(i), 26(1)(b), and 26(1)(d)	Chlorine gas is being dozed directly at various stages of water treatment to maintain water quality and to inhibit organic growth in the water retaining structures. Chlorine gas is very hazardous and may prove fatal in case of leakage; handling and storage of same involves risk to the life of public at large. Installation of ClO2 system by replacing chlorine gas injecting system is being undertaken at all NTPC stations to enhance safety of personnel engaged in power plant operation. Work taken-up in accordance to the various provisions and objectives of the “National Disaster Management Guidelines – Chemical Disasters” which provides that industrial systems shall be continuously improved and upgraded for the prevention and management of chemical accidents. It is also pertinent that the action for insllation of CLO2 system is also in compliance with the duties necessitated for an employer (NTPC) under the clause 6(1)(a) and 6(1)(d) of “The Occupational Safety, Health and Working Conditions Code, 2020” notified by Ministry of Law & Justice, GoI vide Gazette Notification dated 29.09.2020 relevant extracts of which are reproduced below: “DUTIES OF EMPLOYER AND EMPLOYEES, ETC. 6.(1) Every employer shall: (a)ensure that workplace is free from hazards which cause or are likely to cause injury or occupational disease to the employees; … (e)Provide and maintains, as far as is reasonably practicable, a working environment that is safe and without risk to the health of the employees” Some of the major benefits of installation of CLO2 system are as under (a) Avoid possible accidents due to leakage of chlorine while handling (b) Improves safety of personnel and plant & equipment (c) Increases the shelf life of water retaining structures/ equipment such as clarifiers, storage tanks, cooling towers, condenser tubes & piping etc thereby reduces the replacement cost. (d) Helps in complying with statutory direction of some states that have already made it mandatory. In view of the contribution of the said work towards enhancing system reliability, ensuring the successful and efficient operation of the plant, improving safety within the plant and surrounding areas, and ensuring compliance with statutory and legal provisions, the Hon’ble Commission may kindly consider allowing it under Sections 26(1)(i), 26(1)(b), and 26(1)(d).	

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	**NTPC Limited**
Name of the Generating Station	**NCTPS St-II**
COD	**31-07-2010**
For Financial Year	**2025-26**

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed (Actual / Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	**2**	**3**	**4**	**5= (3-4)**	**6**	**7**	**8**	**9**
	Integrated Security System Project	113.75		113.75		26-1(d)	Please refer to Justification provided in Form-9 2024-25 for Same item	
	Biomass Handling Infrastructure	505.14		505.14		26-1(b),26-1(g)	Please refer to Justification provided in Form-9 2024-25 for Same item	
	Total (B)	**2,808.39**	**-**	**2,808.39**				
Total Add. Cap. Claimed (A+B)		**3,780.54**	**-**	**3,780.54**	**-**			

(Petitioner)

Signature Not Verified

Digitally signed by PARIMAL PIYUSH
Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

PART-I
FORM- 9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner				**NTPC Limited**				
Name of the Generating Station				**NCTPS St-II**				
COD				**31-07-2010**				
For Financial Year				**2026-27**				
								Amount in Rs Lakh
Sl. No.	Head of Work /Equipment	ACE Claimed (Actual / Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	**2**	**3**	**4**	**5= (3-4)**	**6**	**7**	**8**	**9**
A.	**Works under Original scope, Change in Law etc. eligble for RoE at Normal Rate**							
	NIL							
	Total (A)	**-**	**-**	**-**				
B.	**Works eligble for Return on Equity linked to SBI MCLR+ 350 basis points:**							
1	Biomass Handling Infrastructure	2,389.00	-	2,389.00		26-1(b),26-1(g)	Please refer to Justification provided in Form-9 2024-25 for Same item	
	Total (B)	**2,389.00**	**-**	**2,389.00**				
Total Add. Cap. Claimed (A+B)		**2,389.00**	**-**	**2,389.00**	**-**	**-**		

(Petitioner)

Signature Not Verified

Digitally signed by PARIMAL PIYUSH
Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

PART-I
FORM- 9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	**NTPC Limited**
Name of the Generating Station	**NCTPS St-II**
COD	**31-07-2010**
For Financial Year	**2027-28**

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed (Actual / Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	**2**	**3**	**4**	**5= (3-4)**	**6**	**7**	**8**	**9**
A.	**Works under Original scope, Change in Law etc. eligble for RoE at Normal Rate**							
	Nil							
	Total (A)	**-**	**-**	**-**				
B.	**Works eligble for Return on Equity linked to SBI MCLR+ 350 basis points:**							
	NIL							
	Total (B)	**-**	**-**	**-**				
Total Add. Cap. Claimed (A+B)		**-**	**-**	**-**	**-**	**-**		

(Petitioner)

Signature Not Verified

Digitally signed by PARIMAL PIYUSH
Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

PART-I
FORM- 9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	**NTPC Limited**
Name of the Generating Station	**NCTPS St-II**
COD	**31-07-2010**
For Financial Year	**2028-29**

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed (Actual / Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	**2**	**3**	**4**	**5= (3-4)**	**6**	**7**	**8**	**9**
A.	**Works under Original scope, Change in Law etc. eligble for RoE at Normal Rate**							
	NIL							
	Total (A)	**-**	**-**	**-**				
B.	**Works eligble for Return on Equity linked to SBI MCLR+ 350 basis points:**							
	NIL							
	Total (B)	**-**	**-**	**-**				
Total Add. Cap. Claimed (A+B)		**-**	**-**	**-**	**-**	**-**		

(Petitioner)

Signature Not Verified

Digitally signed by PARIMAL PIYUSH
Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

PART-I
FORM- 10

Name of the Petitioner			**NTPC Limited**						
Name of the Generating Station			**NCTPS St-II**						
Date of Commercial Operation			**31-07-2010**						
						Amount in Rs Lakh			
Financial Year (Starting from COD)1	Actual				Admitted				
	2024-25	**2025-26**	**2027-28**	**2028-29**	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**
1	2	3	5	6	7	8	9	10	11
Amount capitalised in Work/ Equipment									
Financing Details									
Loan-1	**Add cap is proposed to be finance in Debt:Equity ratio of 70:30**								

Signature Not Verified

Digitally signed by PARIMAL PIYUSH
Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

PART-I
FORM- 12

Statement of Depreciation

Name of the Company : NTPC Limited

Name of the Power Station : NCTPS St-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	5,03,679.25	5,08,635.51	5,09,244.90	5,13,025.44	5,15,414.44	5,15,414.44
2	Closing Capital Cost	5,08,635.51	5,09,244.90	5,13,025.44	5,15,414.44	5,15,414.44	5,15,414.44
3	Average Capital Cost	5,06,157.38	5,08,940.21	5,11,135.17	5,14,219.94	5,15,414.44	5,15,414.44
1a	*Cost of IT Equipments & Software included in (1) above	1,407.15	1,432.33	1,432.33	1,432.33	1,432.33	1,432.33
2a	*Cost of IT Equipments & Software included in (2) above	1,432.33	1,432.33	1,432.33	1,432.33	1,432.33	1,432.33
3a	*Average Cost of IT Equipments & Software	1,419.74	1,432.33	1,432.33	1,432.33	1,432.33	1,432.33
4	Freehold land	7,941.18	7,941.18	7,941.18	7,941.18	7,941.18	7,941.18
8	Rate of depreciation						
6	Depreciable value	4,48,536.55	4,51,042.35	4,53,017.82	4,55,794.11	4,56,869.16	4,56,869.16
9	Balance useful life at the beginning of the period	12.08	11.08	10.08	9.08	8.08	7.08
9	Depreciation (for the period)	11,159.02	11,425.10	11,621.07	11,926.83	12,059.88	12,059.88
10	Depreciation (annualised)	11,159.02	11,425.10	11,621.07	11,926.83	12,059.88	12,059.88
11	Cumulative depreciation at the end of the period	3,24,894.61	3,35,877.39	3,47,498.47	3,59,425.30	3,71,485.18	3,83,545.07
12	Less: Cumulative depreciation adjustment on account of un-discharged liabilities deducted as on 01.04.2009						
13	Add: Cumulative depreciation adjustment on account of liability Discharge						
14	Less: Cumulative depreciation adjustment on account of de-capitalisation	442.31					
15	Net Cumulative depreciation at the end of the period after adjustments	3,24,452.30	3,35,877.39	3,47,498.47	3,59,425.30	3,71,485.18	3,83,545.07

***to be provided at the time of truing up.**

(Petitioner)

Form 13

Name of the Company NTPC LTD (Rs. Lakhs)

Name of the Station NCTPP II

		2024-25	2025-26	2026-27	2027-28	2028-29
1	**Bonds XXXIV**					
	Gross Loan	500.00	500.00	500.00	500.00	500.00
	Cumulative Repayment upto PY	266.67	300.00	333.33	366.67	400.00
	Net loan - Opening	233.33	200.00	166.67	133.33	100.00
	Addition					
	Repayments of Loans during the year	33.33	33.33	33.33	33.33	33.33
	Net loan - Closing	200.00	166.67	133.33	100.00	66.67
	Average Net Loan	216.67	183.33	150.00	116.67	83.33
	Rate of Interest on Loan	8.7400%	8.7400%	8.7400%	8.7400%	8.7400%
	Interest on loan (Annualised)	18.94	16.02	13.11	10.20	7.28
2	**Bonds XXXV**					
	Gross Loan	1500.00	1500.00	1500.00	1500.00	1500.00
	Cumulative Repayment upto PY	800.00	900.00	1000.00	1100.00	1200.00
	Net loan - Opening	700.00	600.00	500.00	400.00	300.00
	Addition					
	Repayments of Loans during the year	100	100	100	100	100
	Net loan - Closing	600.00	500.00	400.00	300.00	200.00
	Average Net Loan	650.00	550.00	450.00	350.00	250.00
	Rate of Interest on Loan	8.8150%	8.8150%	8.8150%	8.8150%	8.8150%
	Interest on loan (Annualised)	57.30	48.48	39.67	30.85	22.04
3	**Bonds XXXVIII**					
	Gross Loan	3300.00	3300.00	3300.00	3300.00	3300.00
	Cumulative Repayment upto PY	1760.00	1980.00	2200.00	2420.00	2640.00
	Net loan - Opening	1540.00	1320.00	1100.00	880.00	660.00
	Addition					
	Repayments of Loans during the year	220.00	220.00	220.00	220.00	220.00
	Net loan - Closing	1320.00	1100.00	880.00	660.00	440.00
	Average Net Loan	1430.00	1210.00	990.00	770.00	550.00
	Rate of Interest on Loan	9.2000%	9.2000%	9.2000%	9.2000%	9.2000%
	Interest on loan (Annualised)	131.56	111.32	91.08	70.84	50.60
4	**Bond 54 (Installment from 25.03.2023 20 % Next 2 Years 40%)**					
	Gross Loan	11000.00	11000.00	11000.00	11000.00	11000.00
	Cumulative Repayment upto PY	6600.00	11000.00	11000.00	11000.00	11000.00
	Net loan - Opening	4400.00	0.00	0.00	0.00	0.00
	Addition					
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Repayments of Loans during the year	4400.00	0.00	0.00	0.00	0.00
	Net loan - Closing	0.00	0.00	0.00	0.00	0.00
	Average Net Loan	2200.00	0.00	0.00	0.00	0.00
	Rate of Interest on Loan	8.5200%	0.0000%	0.0000%	0.0000%	0.0000%
	Interest on loan (Annualised)	187.44	0.00	0.00	0.00	0.00

5	**Bond 57 Series (Bullet Repayment on 15.12.2025)**					
	Gross Loan	500.00	500.00	500.00	500.00	500.00
	Cumulative Repayment upto PY	0.00	0.00	500.00	500.00	500.00
	Net loan - Opening	500.00	500.00	0.00	0.00	0.00
	Addition					
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Repayments of Loans during the year	0.00	500.00	0.00	0.00	0.00
	Net loan - Closing	500.00	0.00	0.00	0.00	0.00
	Average Net Loan	500.00	250.00	0.00	0.00	0.00
	Rate of Interest on Loan	8.2200%	8.2200%	0.0000%	0.0000%	0.0000%
	Interest on loan (Annualised)	41.10	20.55	0.00	0.00	0.00
6	**Bond 67 Series (Bullet Repayment on 15.01.2029) (Refinancing of ICICI VI)**					
	Gross Loan	1601.00	1601.00	1601.00	1601.00	1601.00
	Cumulative Repayment upto PY	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	1601.00	1601.00	1601.00	1601.00	1601.00
	Addition					
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Repayments of Loans during the year	0.00	0.00	0.00	0.00	1601.00
	Net loan - Closing	1601.00	1601.00	1601.00	1601.00	0.00
	Average Net Loan	1601.00	1601.00	1601.00	1601.00	800.50
	Rate of Interest on Loan	8.7300%	8.7300%	8.7300%	8.7300%	8.7300%
	Interest on loan (Annualised)	139.77	139.77	139.77	139.77	69.88
7	**Bond 72 Series OTHERS (Bullet Repayment on 15.10.2025)**					
	Gross Loan	22150.00	22150.00	22150.00	22150.00	22150.00
	Cumulative Repayment upto PY	0.00	0.00	22150.00	22150.00	22150.00
	Net loan - Opening	22150.00	22150.00	0.00	0.00	0.00
	Addition					
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Repayments of Loans during the year	0.00	22150.00	0.00	0.00	0.00
	Net loan - Closing	22150.00	0.00	0.00	0.00	0.00
	Average Net Loan	22150.00	11075.00	0.00	0.00	0.00
	Rate of Interest on Loan	5.4800%	5.4800%	0.0000%	0.0000%	0.0000%
	Interest on loan (Annualised)	1213.82	606.91	0.00	0.00	0.00
8	**Bonds 72 Series (pfc-v D31 refinanced)**					
	Gross Loan	1927.08	1927.08	1927.08	1927.08	1927.08
	Cumulative Repayment upto PY	0.00	0.00	1927.08	1927.08	1927.08
	Net loan - Opening	1927.08	1927.08	0.00	0.00	0.00
	Addition					
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Repayments of Loans during the year	0.00	1927.08	0.00	0.00	0.00
	Net loan - Closing	1927.08	0.00	0.00	0.00	0.00
	Average Net Loan	1927.08	963.54	0.00	0.00	0.00
	Rate of Interest on Loan	6.4750%	6.4750%	0.0000%	0.0000%	0.0000%
	Interest on loan (Annualised)	124.78	62.39	0.00	0.00	0.00
9	**Bonds 72 Series (pfc-v D32 refinanced)**					

	Gross Loan	1927.08	1927.08	1927.08	1927.08	1927.08
	Cumulative Repayment upto PY	0.00	0.00	1927.08	1927.08	1927.08
	Net loan - Opening	1927.08	1927.08	0.00	0.00	0.00
	Addition					
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Repayments of Loans during the year	0.00	1927.08	0.00	0.00	0.00
	Net loan - Closing	1927.08	0.00	0.00	0.00	0.00
	Average Net Loan	1927.08	963.54	0.00	0.00	0.00
	Rate of Interest on Loan	6.5950%	6.5950%	0.0000%	0.0000%	0.0000%
	Interest on loan (Annualised)	127.09	63.55	0.00	0.00	0.00
10	**Bonds 72 Series (pfc-v D37 refinanced)**					
	Gross Loan	5729.17	5729.17	5729.17	5729.17	5729.17
	Cumulative Repayment upto PY	0.00	0.00	5729.17	5729.17	5729.17
	Net loan - Opening	5729.17	5729.17	0.00	0.00	0.00
	Addition					
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Repayments of Loans during the year	0.00	5729.17	0.00	0.00	0.00
	Net loan - Closing	5729.17	0.00	0.00	0.00	0.00
	Average Net Loan	5729.17	2864.58	0.00	0.00	0.00
	Rate of Interest on Loan	6.8800%	6.8800%	0.0000%	0.0000%	0.0000%
	Interest on loan (Annualised)	394.17	197.08	0.00	0.00	0.00
11	**PNB IV D1 9 Yearly Installments from 01.02.2022**					
	Gross Loan	3643.00	3643.00	3643.00	3643.00	3643.00
	Cumulative Repayment upto PY	809.56	1214.33	1619.11	2023.89	2428.67
	Net loan - Opening	2833.44	2428.67	2023.89	1619.11	1214.33
	Addition					
	Repayments of Loans during the year	405	405	405	405	405
	Net loan - Closing	2428.67	2023.89	1619.11	1214.33	809.56
	Average Net Loan	2631.06	2226.28	1821.50	1416.72	1011.94
	Rate of Interest on Loan	7.9000%	7.9000%	7.9000%	7.9000%	7.9000%
	Interest on loan (Annualised)	207.85	175.88	143.90	111.92	79.94
12	**SBI-VIII D24 9 Yearly Installments from 31.01.2022 (OBC-I Prepayment Loan)**					
	Gross Loan	1571.43	1571.43	1571.43	1571.43	1571.43
	Cumulative Repayment upto PY	523.81	698.41	873.02	1047.62	1222.22
	Net loan - Opening	1047.62	873.02	698.41	523.81	349.21
	Addition					
	Repayments of Loans during the year	174.60	174.60	174.60	174.60	174.60
	Net loan - Closing	873.02	698.41	523.81	349.21	174.60
	Average Net Loan	960.32	785.71	611.11	436.51	261.90
	Rate of Interest on Loan	8.4000%	8.4000%	8.4000%	8.4000%	8.4000%
	Interest on loan (Annualised)	80.67	66.00	51.33	36.67	22.00

13	**SBI XII D2 9 Yearly Installments from 31.03.2026 (Refinancing of IDFC I & II)**					
	Gross Loan	6350.00	6350.00	6350.00	6350.00	6350.00
	Cumulative Repayment upto PY	0.00	0.00	705.56	1411.11	2116.67
	Net loan - Opening	6350.00	6350.00	5644.44	4938.89	4233.33
	Addition					
	Repayments of Loans during the year	0.00	706	706	706	706
	Net loan - Closing	6350.00	5644.44	4938.89	4233.33	3527.78
	Average Net Loan	6350.00	5997.22	5291.67	4586.11	3880.56
	Rate of Interest on Loan	8.3000%	8.3000%	8.3000%	8.3000%	8.3000%
	Interest on loan (Annualised)	527.05	497.77	439.21	380.65	322.09
14	**Corporation Bank IV D1 9 Yearly Installments from 11.01.2023 Re financing of ICICI V**					
	Gross Loan	1428.57	1428.57	1428.57	1428.57	1428.57
	Cumulative Repayment upto PY	317.46	476.19	634.92	793.65	952.38
	Net loan - Opening	1111.11	952.38	793.65	634.92	476.19
	Addition					
	Repayments of Loans during the year	159	159	159	159	159
	Net loan - Closing	952.38	793.65	634.92	476.19	317.46
	Average Net Loan	1031.75	873.02	714.29	555.56	396.83
	Rate of Interest on Loan	8.2333%	8.2333%	8.2333%	8.2333%	8.2333%
	Interest on loan (Annualised)	84.95	71.88	58.81	45.74	32.67
	TOTAL					
	Gross Loan	256744.36	256744.36	256744.36	256744.36	256744.36
	Cumulative Repayment upto PY	204694.51	210185.96	244216.29	246013.29	247810.29
	Net loan - Opening	52049.84	46558.40	12528.06	10731.06	8934.06
	Addition	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Repayments of Loans during the year	5491.44	34030.33	1797.00	1797.00	3398.00
	Net loan - Closing	**46558.40**	**12528.06**	**10731.06**	**8934.06**	**5536.06**
	Average Net Loan	49304.12	29543.23	11629.56	9832.56	7235.06
	Rate of Interest on Loan	6.7671%	7.0324%	8.3999%	8.4071%	8.3829%
	Interest on loan (Annualised)	3336.48	2077.60	976.87	826.63	606.51

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-II

Fuel: Coal **Month** Apr-23

S. No.	Particulars	Unit	Domestic Type 1 (M1149100657)	Domestic Type 2 (M1149100648)	Domestic Type 3 (M1149100639)	Domestic Type 3 (M1149100620)	Imported	Bio Mass
A)	**OPENING QUANTITY**							
1	Opening Quantity of Coal/Lignite	MT	35715.61	2766.24	0.00	87522.69	118263.12	0.00
2	Value of Stock	Rs.	255720552.76	10646742.85	0.00	420410368.50	1918474352.20	0.00
B)	**QUANTITY**							
3	Quantity of Coal/Lignite supplied by Coal/Lignite Company	MT	92250.58	388460.53	0.00	78076.83	84650.20	0.00
4	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	MT	0.00	0.00	0.00			
5	Coal supplied by Coal/Lignite (3+4)	MT	92250.58	388460.53	0.00	78076.83	84650.20	0.00
6	Normative Transit & Handling Losses (For coal/Lignite based Projects)	MT	738.01	3107.68	0.00	624.62	169.30	
7	Net coal / Lignite Supplied (5-6)	MT	91512.58	385352.85	0.00	77452.22	84480.90	0.00
C)	**PRICE**							
8	Amount charged by the Coal/Lignite Company	Rs.	343589981.51	790284819.13	0.00	189821142.00	1387236074.11	0.00
9	Adjustment (+/-) in amount charged made 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.	23726467.24	98891112.80	0.00	20081037.80	-163272648.01	0.00
11	Total amount Charged (8+9+10)	Rs.	367316448.75	889175931.93	0.00	209902179.80	1223963426.10	0.00
D)	**TRANSPORTATION**	Rs.						
12	Transportation charges by rail, ship, road transport	Rs.	235975416.14	899510695.86	0.00	181697190.00	0.00	0.00
13	Adjustment (+/-) in amount charged made 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.	235975416.14	899510695.86	0.00	181697190.00	0.00	0.00
17	Total amount Charged for coal/lignite supplied including Transportation (11+16)	Rs.	603291864.89	1788686627.79	0.00	391599369.80	1223963426.10	0.00
E)	**TOTAL COST**							
18	Landed cost of coal/ Lignite (2+17)/(1+7)	Rs / PMT	6751.75	4636.03	0.00	4922.02	15499.53	0.00
19	Blending Ratio (Domestic /Imported)	%	7.00%	61.00%	0.00%	10.00%	22.00%	0.00%
20	Weighted average cost of Coal/ Lignite (Including Biomass)	Rs / PMT	**7202.66**					
20a	Weighted average cost of Coal/ Lignite (Excluding Biomass)	Rs / PMT	**7202.66**					
F)	**QUALITY**							
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	Kcal/Kg	4500	4692	0	4731	5046	0
22	GCV of Domestic Coal supplied as per bill of Coal Company	Kcal/Kg	4488	4361	0	4771	5035	2930
23	GCV of Imported Coal of the opening stock as per bill Coal Company	Kcal/Kg					5046	
24	GCV of Imported Coal supplied as perbill Coal Company	Kcal/Kg					5035	
25	Weighted average GCV of coal/ Lignite as Billed (Including Biomass)	Kcal/Kg	**4560**					
25a	Weighted average GCV of coal/ Lignite as Billed (Excluding Biomass)		**4560**					
26	GCV of Domestic Coal of the opening stock as received at Station	Kcal/Kg	3784	3405	0	3761	5046	0
27	GCV of Domestic Coal supplied as received at Station	Kcal/Kg	3658	3332	0	3671	5035	2930
28	GCV of Imported Coal of opening stock as received at Station	Kcal/Kg					5046	
29	GCV of Imported Coal supplied as received at Station	Kcal/Kg					5035	
30	Weighted average GCV of Coal/ Lignite as Received (Including Biomass)	Kcal/Kg	**3772**					
30a	Weighted average GCV of Coal/ Lignite as Received (Excluding Biomass)	Kcal/Kg	**3772**					

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Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-II

Fuel: Coal **Month** May-23

S. No.	Particulars	Unit	Domestic Type 1 (M1149100657)	Domestic Type 2 (M1149100648)	Domestic Type 3 (M1149100639)	Domestic Type 3 (M1149100620)	Imported	Bio Mass
A)	**OPENING QUANTITY**							
1	Opening Quantity of Coal/Lignite	MT	79366.18	23868.09	0.00	98932.90	74857.02	0.00
2	Value of Stock	Rs.	535860350.60	110653350.11	0.00	486949693.46	1160248873.64	0.00
B)	**QUANTITY**							
3	Quantity of Coal/Lignite supplied by Coal/Lignite Company	MT	117941.54	378649.13	0.00	3908.60	63610.80	0.00
4	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	MT	0.00	0.00	0.00	0.00		
5	Coal supplied by Coal/Lignite (3+4)	MT	117941.54	378649.13	0.00	3908.60	63610.80	0.00
6	Normative Transit & Handling Losses (For coal/Lignite based Projects)	MT	943.53	3029.19	0.00	31.27	127.22	
7	Net coal / Lignite Supplied (5-6)	MT	116998.01	375619.94	0.00	3877.33	63483.58	0.00
C)	**PRICE**							
8	Amount charged by the Coal/Lignite Company	Rs.	453119599.20	771835970.56	0.00	19617067.97	979699434.19	0.00
9	Adjustment (+/-) in amount charged made 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.	621755.15	2001349.86	0.00	20651.99	-115788369.00	0.00
11	Total amount Charged (8+9+10)	Rs.	453741354.35	773837320.42	0.00	19637719.96	863911065.19	0.00
D)	**TRANSPORTATION**	Rs.						
12	Transportation charges by rail, ship, road transport	Rs.	310255250.68	837675752.74	0.00	1319152.50	0.00	0.00
13	Adjustment (+/-) in amount charged made 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.	310255250.68	837675752.74	0.00	1319152.50	0.00	0.00
17	Total amount Charged for coal/lignite supplied including Transportation (11+16)	Rs.	763996605.03	1611513073.16	0.00	20956872.46	863911065.19	0.00
E)	**TOTAL COST**							
18	Landed cost of coal/ Lignite (2+17)/(1+7)	Rs / PMT	6619.62	4310.93	0.00	4940.23	14631.71	0.00
19	Blending Ratio (Domestic /Imported)	%	5.00%	74.98%	0.00%	2.01%	18.01%	0.00%
20	Weighted average cost of Coal/ Lignite (Including Biomass)	Rs / PMT			**6297.45**			
20a	Weighted average cost of Coal/ Lignite (Excluding Biomass)	Rs / PMT			**6297.45**			
F)	**QUALITY**							
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	Kcal/Kg	4542	4214	0	4726	5043	0
22	GCV of Domestic Coal supplied as per bill of Coal Company	Kcal/Kg	4930	4321	0	4604	5024	2930
23	GCV of Imported Coal of the opening stock as per bill Coal Company	Kcal/Kg					5043	
24	GCV of Imported Coal supplied as perbill Coal Company	Kcal/Kg					5024	
25	Weighted average GCV of coal/ Lignite as Billed (Including Biomass)	Kcal/Kg			**4476**			
25a	Weighted average GCV of coal/ Lignite as Billed (Excluding Biomass)				**4476**			
26	GCV of Domestic Coal of the opening stock as received at Station	Kcal/Kg	3698	3389	0	3691	5043	0
27	GCV of Domestic Coal supplied as received at Station	Kcal/Kg	3614	3315	0	3427	5024	290
28	GCV of Imported Coal of opening stock as received at Station	Kcal/Kg					5043	
29	GCV of Imported Coal supplied as received at Station	Kcal/Kg					5024	
30	Weighted average GCV of Coal/ Lignite as Received (Including Biomass)	Kcal/Kg			**3652**			
30a	Weighted average GCV of Coal/ Lignite as Received (Excluding Biomass)	Kcal/Kg			**3652**			

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-II

Fuel: Coal **Month** Jun-23

S. No.	Particulars	Unit	Domestic Type 1 (M1149100657)	Domestic Type 2 (M1149100648)	Domestic Type 3 (M1149100639)	Domestic Type 3 (M1149100620)	Imported	Bio Mass
A)	**OPENING QUANTITY**							
1	Opening Quantity of Coal/Lignite	MT	169963.19	55558.02	0.00	85338.23	53198.60	0.00
2	Value of Stock	Rs.	1125092288.81	239506892.65	0.00	421590797.47	778386630.58	0.00
B)	**QUANTITY**							
3	Quantity of Coal/Lignite supplied by Coal/Lignite Company	MT	152033.72	308830.64	0.00	17090.08	91048.48	58.83
4	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	MT	0.00	0.00	0.00	0.00		
5	Coal supplied by Coal/Lignite (3+4)	MT	152033.72	308830.64	0.00	17090.08	91048.48	58.83
6	Normative Transit & Handling Losses (For coal/Lignite based Projects)	MT	1216.27	2470.65	0.00	136.72	182.10	
7	Net coal / Lignite Supplied (5-6)	MT	150817.45	306360.00	0.00	16953.36	90866.38	58.83
C)	**PRICE**							
8	Amount charged by the Coal/Lignite Company	Rs.	629896968.69	627220479.56	0.00	47631879.98	1438518014.47	320194.45
9	Adjustment (+/-) in amount charged made 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.	69898477.60	141411084.91	0.00	8592334.96	-371868072.74	0.00
11	Total amount Charged (8+9+10)	Rs.	699795446.29	768631564.47	0.00	56224214.94	1066649941.73	320194.45
D)	**TRANSPORTATION**	Rs.						
12	Transportation charges by rail, ship, road transport	Rs.	388404204.18	672555145.20	0.00	38813345.29	0.00	0.00
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.						
14	Demurrage Charges, if any	Rs.	1455035.24	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.	389859239.42	672555145.20	0.00	38813345.29	0.00	0.00
17	Total amount Charged for coal/lignite supplied including Transportation (11+16)	Rs.	1089654685.71	1441186709.67	0.00	95037560.23	1066649941.73	320194.45
E)	**TOTAL COST**							
18	Landed cost of coal/ Lignite (2+17)/(1+7)	Rs / PMT	6904.24	4643.85	0.00	5050.55	12806.97	5442.71
19	Blending Ratio (Domestic /Imported)	%	13.98%	61.00%	0.00%	9.99%	15.03%	0.01%
20	Weighted average cost of Coal/ Lignite (Including Biomass)	Rs / PMT			**6227.31**			
20a	Weighted average cost of Coal/ Lignite (Excluding Biomass)	Rs / PMT			**6227.37**			
F)	**QUALITY**							
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	Kcal/Kg	4777	4276	0	4721	5020	0
22	GCV of Domestic Coal supplied as per bill of Coal Company	Kcal/Kg	5141	4293	0	4268	5047	2823
23	GCV of Imported Coal of the opening stock as per bill Coal Company	Kcal/Kg					5020	
24	GCV of Imported Coal supplied as perbill Coal Company	Kcal/Kg					5047	
25	Weighted average GCV of coal/ Lignite as Billed (Including Biomass)	Kcal/Kg			**4528**			
25a	Weighted average GCV of coal/ Lignite as Billed (Excluding Biomass)				**4529**			
26	GCV of Domestic Coal of the opening stock as received at Station	Kcal/Kg	3646	3284	0	3680	5026	0
27	GCV of Domestic Coal supplied as received at Station	Kcal/Kg	3423	3097	0	3666	5026	2823
28	GCV of Imported Coal of opening stock as received at Station	Kcal/Kg					5026	
29	GCV of Imported Coal supplied as received at Station	Kcal/Kg					5047	
30	Weighted average GCV of Coal/ Lignite as Received (Including Biomass)	Kcal/Kg			**3525**			
30a	Weighted average GCV of Coal/ Lignite as Received (Excluding Biomass)	Kcal/Kg			**3525**			

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-II

Fuel: Coal **Month** Jul-23

S. No.	Particulars	Unit	Domestic Type 1 (M1149100657)	Domestic Type 2 (M1149100648)	Domestic Type 3 (M1149100639)	Domestic Type 3 (M1149100620)	Imported	Bio Mass
A)	**OPENING QUANTITY**							
1	Opening Quantity of Coal/Lignite	MT	234403.640	5258.019	0.000	42553.594	48710.979	31.770
2	Value of Stock	Rs.	1616252805	24417348	0.000	214918840.750	623840278	172915
B)	**QUANTITY**							
3	Quantity of Coal/Lignite supplied by Coal/Lignite Company	MT	220035.300	322848.470	0.000	46116.070	4128.400	59.490
4	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	MT	0.000	0.000	0.000	0.000		
5	Coal supplied by Coal/Lignite (3+4)	MT	220035.300	322848.470	0.000	46116.070	4128.400	59.490
6	Normative Transit & Handling Losses (For coal/Lignite based Projects)	MT	1760.282	2582.788	0.000	368.929	8.257	
7	Net coal / Lignite Supplied (5-6)	MT	218275.018	320265.682	0.000	45747.141	4120.143	59.490
C)	**PRICE**							
8	Amount charged by the Coal/Lignite Company	Rs.	1001916855	683662189	0.000	162671189.000	63076144	331062
9	Adjustment (+/-) in amount charged made by Coal/Lignite Company	Rs.	0.000	0.000	0.000	0.000	0.000	0.000
10	Handling, Sampling and such other similar charges	Rs.	-5804665.780	-8680701.940	0.000	-1239962.120	-16905.020	0.000
11	Total amount Charged (8+9+10)	Rs.	996112189	674981487	0.000	161431226.880	63059239	331062
D)	**TRANSPORTATION**	Rs.						
12	Transportation charges by rail, ship, road transport	Rs.	479310015	692104586	0.000	60544911.000	0.000	0.000
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.						
14	Demurrage Charges, if any	Rs.	0.000	0.000	0.000	0.000	0.000	0.000
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.						
16	Total Transportation Charges (12+13+14+15)	Rs.	479310015	692104586	0	60544911	0	0
17	Total amount Charged for coal/lignite supplied including Transportation (11+16)	Rs.	1475422204	1367086073	0.000	221976137.880	63059239	331062
E)	**TOTAL COST**							
18	Landed cost of coal/ Lignite (2+17)/(1+7)	Rs / PMT	6829.73	4274.66	0.000	4947.810	13001.8	5522.43
19	Blending Ratio (Domestic /Imported)	%	25.52%	58.00%	0.00%	9.99%	6.50%	0.00%
20	Weighted average cost of Coal/ Lignite (Including Biomass)	Rs / PMT			**5561.11**			
20a	Weighted average cost of Coal/ Lignite (Excluding Biomass)	Rs / PMT			**5561.11**			
F)	**QUALITY**							
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	Kcal/Kg	4962	4033	0	4555	5044	0
22	GCV of Domestic Coal supplied as per bill of Coal Company	Kcal/Kg	5292	4368	0	4841	4966	0
23	GCV of Imported Coal of the opening stock as per bill Coal Company	Kcal/Kg					5044	
24	GCV of Imported Coal supplied as perbill Coal Company	Kcal/Kg					4966	
25	Weighted average GCV of coal/ Lignite as Billed (Including Biomass)	Kcal/Kg			**4629**			
25a	Weighted average GCV of coal/ Lignite as Billed (Excluding Biomass)				**4629**			
26	GCV of Domestic Coal of the opening stock as received at Station	Kcal/Kg	3525	3437	0	3691	5045	0
27	GCV of Domestic Coal supplied as received at Station	Kcal/Kg	3651	3265	0	3381	4966	0
28	GCV of Imported Coal of opening stock as received at Station	Kcal/Kg					5045	
29	GCV of Imported Coal supplied as received at Station	Kcal/Kg					4966	
30	Weighted average GCV of Coal/ Lignite as Received (Including Biomass)	Kcal/Kg			**3492**			
30a	Weighted average GCV of Coal/ Lignite as Received (Excluding Biomass)	Kcal/Kg			**3492**			

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-II

Fuel: Coal **Month** Aug-23

S. No.	Particulars	Unit	Domestic Type 1 (M1149100657)	Domestic Type 2 (M1149100648)	Domestic Type 3 (M1149100639)	Domestic Type 3 (M1149100620)	Imported	Bio Mass
A)	**OPENING QUANTITY**							
1	Opening Quantity of Coal/Lignite	MT	320909.657	0.000	0.000	28280.735	16852.122	91.260
2	Value of Stock	Rs.	2191727790	0	0.000	139927602.490	219107863	503977
B)	**QUANTITY**							
3	Quantity of Coal/Lignite supplied by Coal/Lignite Company	MT	110553.990	376840.890	0.000	61892.650	65.200	29.000
4	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	MT	0.000	0.000	0.000	0.000		
5	Coal supplied by Coal/Lignite (3+4)	MT	110553.990	376840.890	0.000	61892.650	65.200	29.000
6	Normative Transit & Handling Losses (For coal/Lignite based Projects)	MT	884.432	3014.727	0.000	495.141	0.130	
7	Net coal / Lignite Supplied (5-6)	MT	109669.558	373826.163	0.000	61397.509	65.070	29.000
C)	**PRICE**							
8	Amount charged by the Coal/Lignite Company	Rs.	485587380	783068638	0.000	216363425.000	1175457	161385
9	Adjustment (+/-) in amount charged made by Coal/Lignite Company	Rs.	0.000	0.000	0.000	0.000	0.000	0.000
10	Handling, Sampling and such other similar charges	Rs.	21987094.240	74946514.130	0.000	12309275.840	0.000	0.000
11	Total amount Charged (8+9+10)	Rs.	507574474	858015153	0.000	228672700.840	1175457	161385
D)	**TRANSPORTATION**	Rs.						
12	Transportation charges by rail, ship, road transport	Rs.	286159075	820878681	0.000	85161401.000	0.000	0.000
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.						
14	Demurrage Charges, if any	Rs.	1941270.000	6617126.000	0.000	1086802.000	0.000	0.000
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.						
16	Total Transportation Charges (12+13+14+15)	Rs.	284217805	814261555	0	84074599	0	0
17	Total amount Charged for coal/lignite supplied including Transportation (11+16)	Rs.	791792278	1672276708	0.000	312747299.840	1175457	161385
E)	**TOTAL COST**							
18	Landed cost of coal/ Lignite (2+17)/(1+7)	Rs / PMT	6929.09	4473.41	0.000	5047.770	13021.27	5532.69
19	Blending Ratio (Domestic /Imported)	%	47.61%	33.60%	0.00%	15.41%	3.35%	0.03%
20	Weighted average cost of Coal/ Lignite (Including Biomass)	Rs / PMT			**6017.99**			
20a	Weighted average cost of Coal/ Lignite (Excluding Biomass)	Rs / PMT			**6018.13**			
F)	**QUALITY**							
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	Kcal/Kg	4893	4582	0	4796	5039	2326
22	GCV of Domestic Coal supplied as per bill of Coal Company	Kcal/Kg	5723	4304	0	4688	0	2326
23	GCV of Imported Coal of the opening stock as per bill Coal Company	Kcal/Kg					5039	
24	GCV of Imported Coal supplied as perbill Coal Company	Kcal/Kg					0	
25	Weighted average GCV of coal/ Lignite as Billed (Including Biomass)	Kcal/Kg			**4775**			
25a	Weighted average GCV of coal/ Lignite as Billed (Excluding Biomass)				**4775**			
26	GCV of Domestic Coal of the opening stock as received at Station	Kcal/Kg	3612	3957	0	3413	5039	2326
27	GCV of Domestic Coal supplied as received at Station	Kcal/Kg	3918	3407	0	3312	0	2326
28	GCV of Imported Coal of opening stock as received at Station	Kcal/Kg					5039	
29	GCV of Imported Coal supplied as received at Station	Kcal/Kg					0	
30	Weighted average GCV of Coal/ Lignite as Received (Including Biomass)	Kcal/Kg			**3589**			
30a	Weighted average GCV of Coal/ Lignite as Received (Excluding Biomass)	Kcal/Kg			**3590**			

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Sanjay Kumar Chaudhary

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Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-II

Fuel: Coal **Month** Sep-23

S. No.	Particulars	Unit	Domestic Type 1 (M1149100657)	Domestic Type 2 (M1149100648)	Domestic Type 3 (M1149100639)	Domestic Type 3 (M1149100620)	Imported	Bio Mass
A)	**OPENING QUANTITY**							
1	Opening Quantity of Coal/Lignite	MT	125655.215	142979.163	0.000	10764.244	0.000	0.000
2	Value of Stock	Rs.	870676296	639604122	0.000	54335417.290	0	0
B)	**QUANTITY**							
3	Quantity of Coal/Lignite supplied by Coal/Lignite Company	MT	119515.880	341946.930	0.000	19640.140	0.000	0.000
4	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	MT	0.000	0.000	0.000	0.000		
5	Coal supplied by Coal/Lignite (3+4)	MT	119515.880	341946.930	0.000	19640.140	0.000	0.000
6	Normative Transit & Handling Losses (For coal/Lignite based Projects)	MT	956.127	2735.575	0.000	157.121	0.000	
7	Net coal / Lignite Supplied (5-6)	MT	118559.753	339211.355	0.000	19483.019	0.000	0.000
C)	**PRICE**							
8	Amount charged by the Coal/Lignite Company	Rs.	479284725	736190278	0.000	99185940.000	0	0
9	Adjustment (+/-) in amount charged made by Coal/Lignite Company	Rs.	0.000	0.000	0.000	0.000	0.000	0.000
10	Handling, Sampling and such other similar charges	Rs.	55085933.720	102080890.180	0.000	6656135.940	0.000	0.000
11	Total amount Charged (8+9+10)	Rs.	534370659	838271168	0.000	105842075.940	0	0
D)	**TRANSPORTATION**	Rs.						
12	Transportation charges by rail, ship, road transport	Rs.	312965690	746572944	0.000	1796068.730	0.000	0.000
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.						
14	Demurrage Charges, if any	Rs.	3566002.000	10202693.000	0.000	586003.730	0.000	0.000
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.						
16	Total Transportation Charges (12+13+14+15)	Rs.	309399688	736370251	0	1210065	0	0
17	Total amount Charged for coal/lignite supplied including Transportation (11+16)	Rs.	843770347	1574641420	0.000	107052140.940	0	0
E)	**TOTAL COST**							
18	Landed cost of coal/ Lignite (2+17)/(1+7)	Rs / PMT	7020.24	4592.06	0.000	5335.610	0	0
19	Blending Ratio (Domestic /Imported)	%	29.60%	70.40%	0.00%	0.00%	0.00%	0.00%
20	Weighted average cost of Coal/ Lignite (Including Biomass)	Rs / PMT			**5310.70**			
20a	Weighted average cost of Coal/ Lignite (Excluding Biomass)	Rs / PMT			**5310.70**			
F)	**QUALITY**							
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	Kcal/Kg	5320	4250	0	4818	5038	0
22	GCV of Domestic Coal supplied as per bill of Coal Company	Kcal/Kg	5017	4381	0	4914	0	2104
23	GCV of Imported Coal of the opening stock as per bill Coal Company	Kcal/Kg					5038	
24	GCV of Imported Coal supplied as perbill Coal Company	Kcal/Kg					0	
25	Weighted average GCV of coal/ Lignite as Billed (Including Biomass)	Kcal/Kg			**4586**			
25a	Weighted average GCV of coal/ Lignite as Billed (Excluding Biomass)				**4586**			
26	GCV of Domestic Coal of the opening stock as received at Station	Kcal/Kg	3743	3456	0	3486	5038	0
27	GCV of Domestic Coal supplied as received at Station	Kcal/Kg	3639	3390	0	4213	0	2104
28	GCV of Imported Coal of opening stock as received at Station	Kcal/Kg					5038	
29	GCV of Imported Coal supplied as received at Station	Kcal/Kg					0	
30	Weighted average GCV of Coal/ Lignite as Received (Including Biomass)	Kcal/Kg			**3493**			
30a	Weighted average GCV of Coal/ Lignite as Received (Excluding Biomass)	Kcal/Kg			**3494**			

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-II

Fuel: Coal **Month** Oct-23

S. No.	Particulars	Unit	Domestic Type 1 (M1149100657)	Domestic Type 2 (M1149100648)	Domestic Type 3 (M1149100639)	Domestic Type 4 (M1149100620)	Imported	Bio Mass
A)	**OPENING QUANTITY**							
1	Opening Quantity of Coal/Lignite	MT	54675.968	9910.517	0.000	30247.263	0.000	0.000
2	Value of Stock	Rs.	383838132	45509806	0.000	161387558.230	0	0
B)	**QUANTITY**							
3	Quantity of Coal/Lignite supplied by Coal/Lignite Company	MT	77439.290	482844.750	0.000	78690.840	38253.600	161.540
4	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	MT	0.000	0.000	0.000	0.000		
5	Coal supplied by Coal/Lignite (3+4)	MT	77439.290	482844.750	0.000	78690.840	38253.600	161.540
6	Normative Transit & Handling Losses (For coal/Lignite based Projects)	MT	619.514	3862.758	0.000	629.527	76.507	
7	Net coal / Lignite Supplied (5-6)	MT	76819.776	478981.992	0.000	78061.313	38177.093	161.540
C)	**PRICE**							
8	Amount charged by the Coal/Lignite Company	Rs.	321756202	1033003017	0.000	206444611.000	483293643	1354669
9	Adjustment (+/-) in amount charged made by Coal/Lignite Company	Rs.	0.000	0.000	0.000	0.000	0.000	0.000
10	Handling, Sampling and such other similar charges	Rs.	1205089.220	7150566.590	0.000	1224565.800	-5728548	0.000
11	Total amount Charged (8+9+10)	Rs.	322961291	1040153584	0.000	207669176.800	477565095	1354669
D)	**TRANSPORTATION**	Rs.						
12	Transportation charges by rail, ship, road transport	Rs.	182120813	1078287750	0.000	173971038.000	0.000	0.000
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.						
14	Demurrage Charges, if any	Rs.	0.000	0.000	0.000	0.000	0.000	0.000
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.						
16	Total Transportation Charges (12+13+14+15)	Rs.	182120813	1078287750	0	173971038	0	0
17	Total amount Charged for coal/lignite supplied including Transportation (11+16)	Rs.	505082103	2118441333	0.000	381640214.800	477565095	1354669
E)	**TOTAL COST**							
18	Landed cost of coal/ Lignite (2+17)/(1+7)	Rs / PMT	6760.07	4426.23	0.000	5013.710	12509.21	8385.97
19	Blending Ratio (Domestic /Imported)	%	23.97%	65.94%	0.00%	3.97%	6.07%	0.04%
20	Weighted average cost of Coal/ Lignite (Including Biomass)	Rs / PMT			**5501.56**			
20a	Weighted average cost of Coal/ Lignite (Excluding Biomass)	Rs / PMT			**5500.34**			
F)	**QUALITY**							
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	Kcal/Kg	4976	3844	0.00	4571.00		0
22	GCV of Domestic Coal supplied as per bill of Coal Company	Kcal/Kg	4132	3990	0.00	4601.00		2459
23	GCV of Imported Coal of the opening stock as per bill Coal Company	Kcal/Kg					5038	
24	GCV of Imported Coal supplied as perbill Coal Company	Kcal/Kg					5120.00	
25	Weighted average GCV of coal/ Lignite as Billed (Including Biomass)	Kcal/Kg			**4198**			
25a	Weighted average GCV of coal/ Lignite as Billed (Excluding Biomass)				**4200**			
26	GCV of Domestic Coal of the opening stock as received at Station	Kcal/Kg	3726	3334	0.00	3863.00		0
27	GCV of Domestic Coal supplied as received at Station	Kcal/Kg	3609	3441	0.00	4055.00		2459
28	GCV of Imported Coal of opening stock as received at Station	Kcal/Kg					5039	
29	GCV of Imported Coal supplied as received at Station	Kcal/Kg					5120	
30	Weighted average GCV of Coal/ Lignite as Received (Including Biomass)	Kcal/Kg			3616			
30a	Weighted average GCV of Coal/ Lignite as Received (Excluding Biomass)	Kcal/Kg			3616			

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-II

Fuel: Coal **Month** Nov-23

S. No.	Particulars	Unit	Domestic Type 1 (M1149100657)	Domestic Type 2 (M1149100648)	Domestic Type 3 (M1149100639)	Domestic Type 4 (M1149100620)	Imported	Bio Mass
A)	**OPENING QUANTITY**							
1	Opening Quantity of Coal/Lignite	MT	20061.744	12021.509	0.000	51483.576	2675.093	21.020
2	Value of Stock	Rs.	135618818	53209936	0.000	258123702.280	33463299	176273
B)	**QUANTITY**							
3	Quantity of Coal/Lignite supplied by Coal/Lignite Company	MT	73046.050	409615.980	0.000	44032.230	52997.400	286.170
4	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	MT	0.000	0.000	0.000	0.000		
5	Coal supplied by Coal/Lignite (3+4)	MT	73046.050	409615.980	0.000	44032.230	52997.400	286.170
6	Normative Transit & Handling Losses (For coal/Lignite based Projects)	MT	584.368	3276.928	0.000	352.258	105.995	
7	Net coal / Lignite Supplied (5-6)	MT	72461.682	406339.052	0.000	43679.972	52891.405	286.170
C)	**PRICE**							
8	Amount charged by the Coal/Lignite Company	Rs.	319018132	887697290	0.000	119823425.450	695593315	2230788
9	Adjustment (+/-) in amount charged made by Coal/Lignite Company	Rs.	0.000	0.000	0.000	0.000	0.000	0.000
10	Handling, Sampling and such other similar charges	Rs.	2446014.680	13716066.950	0.000	1474479.890	-5519.000	0.000
11	Total amount Charged (8+9+10)	Rs.	321464146	901413357	0.000	121297905.340	695587796	2230788
D)	**TRANSPORTATION**	Rs.						
12	Transportation charges by rail, ship, road transport	Rs.	180657748	890542969	0.000	94762045.460	0.000	0.000
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.						
14	Demurrage Charges, if any	Rs.	923087.000	5176340.000	0.000	556438.000	0.000	0.000
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.						
16	Total Transportation Charges (12+13+14+15)	Rs.	179734661	885366629	0	94205607	0	0
17	Total amount Charged for coal/lignite supplied including Transportation (11+16)	Rs.	501198807	1786779986	0.000	215503512.800	695587796	2230788
E)	**TOTAL COST**							
18	Landed cost of coal/ Lignite (2+17)/(1+7)	Rs / PMT	6882.77	4398.10	0.000	4976.980	13120.34	7835.74
19	Blending Ratio (Domestic /Imported)	%	23.95%	54.94%	0.00%	4.00%	16.98%	0.13%
20	Weighted average cost of Coal/ Lignite (Including Biomass)	Rs / PMT			**6502.02**			
20a	Weighted average cost of Coal/ Lignite (Excluding Biomass)	Rs / PMT			**6500.24**			
F)	**QUALITY**							
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	Kcal/Kg	3663	3883	0.00	4596.00	5116	2800
22	GCV of Domestic Coal supplied as per bill of Coal Company	Kcal/Kg	5373	3972	0.00	4601.00	5139	2800
23	GCV of Imported Coal of the opening stock as per bill Coal Company	Kcal/Kg					5116	
24	GCV of Imported Coal supplied as perbill Coal Company	Kcal/Kg					5139	
25	Weighted average GCV of coal/ Lignite as Billed (Including Biomass)	Kcal/Kg			**4444**			
25a	Weighted average GCV of coal/ Lignite as Billed (Excluding Biomass)				**4450**			
26	GCV of Domestic Coal of the opening stock as received at Station	Kcal/Kg	3621	3433	0.00	4032.00	5116	2800
27	GCV of Domestic Coal supplied as received at Station	Kcal/Kg	3186	3516	0.00	4115.00	5148	2800
28	GCV of Imported Coal of opening stock as received at Station	Kcal/Kg					5116	
29	GCV of Imported Coal supplied as received at Station	Kcal/Kg					5148	
30	Weighted average GCV of Coal/ Lignite as Received (Including Biomass)	Kcal/Kg			3754			
30a	Weighted average GCV of Coal/ Lignite as Received (Excluding Biomass)	Kcal/Kg			3755			

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-II

Fuel: Coal **Month** Dec-23

S. No.	Particulars	Unit	Domestic Type 1 (M1149100657)	Domestic Type 2 (M1149100648)	Domestic Type 3 (M1149100639)	Domestic Type 4 (M1149100620)	Imported	Bio Mass
A)	**OPENING QUANTITY**							
1	Opening Quantity of Coal/Lignite	MT	20853.426	93693.562	0.000	86574.548	1208.498	89.350
2	Value of Stock	Rs.	143529355	412073288	0.000	430879925.270	15855925	700123
B)	**QUANTITY**							
3	Quantity of Coal/Lignite supplied by Coal/Lignite Company	MT	197840.070	273198.890	0.000	84493.150	105085.070	2728.310
4	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	MT	0.000	0.000	0.000	0.000		
5	Coal supplied by Coal/Lignite (3+4)	MT	197840.070	273198.890	0.000	84493.150	105085.070	2728.310
6	Normative Transit & Handling Losses (For coal/Lignite based Projects)	MT	1582.721	2185.591	0.000	675.945	210.170	
7	Net coal / Lignite Supplied (5-6)	MT	196257.349	271013.299	0.000	83817.205	104874.900	2728.310
C)	**PRICE**							
8	Amount charged by the Coal/Lignite Company	Rs.	828369989	591003237	0.000	234918528.010	1405164483	22215977
9	Adjustment (+/-) in amount charged made by Coal/Lignite Company	Rs.	0.000	0.000	0.000	0.000	0.000	0.000
10	Handling, Sampling and such other similar charges	Rs.	26960244.150	37226190.990	0.000	12441523.810	-10281448.950	0.000
11	Total amount Charged (8+9+10)	Rs.	855330233	628229428	0.000	247360051.820	1394883034	22215977
D)	**TRANSPORTATION**	Rs.						
12	Transportation charges by rail, ship, road transport	Rs.	496473986	578030926	0.000	183847087.140	0.000	0.000
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.						
14	Demurrage Charges, if any	Rs.	-137936.290	-190639.320	0.000	-63714.380	0.000	0.000
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.						
16	Total Transportation Charges (12+13+14+15)	Rs.	496611922	578221566	0	183910802	0	0
17	Total amount Charged for coal/lignite supplied including Transportation (11+16)	Rs.	1351942156	1206450993	0.000	431270853.340	1394883034	22215977
E)	**TOTAL COST**							
18	Landed cost of coal/ Lignite (2+17)/(1+7)	Rs / PMT	6888.06	4437.88	0.000	5059.820	13298.4	8133.03
19	Blending Ratio (Domestic /Imported)	%	17.78%	53.95%	0.00%	11.84%	15.58%	0.85%
20	Weighted average cost of Coal/ Lignite (Including Biomass)	Rs / PMT			**6359.15**			
20a	Weighted average cost of Coal/ Lignite (Excluding Biomass)	Rs / PMT			**6343.87**			
F)	**QUALITY**							
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	Kcal/Kg	5472	3875	0.00	4597.00	5078	2800
22	GCV of Domestic Coal supplied as per bill of Coal Company	Kcal/Kg	4728	4009	0.00	4497.00	4901	3190
23	GCV of Imported Coal of the opening stock as per bill Coal Company	Kcal/Kg					5078	
24	GCV of Imported Coal supplied as perbill Coal Company	Kcal/Kg					4901	
25	Weighted average GCV of coal/ Lignite as Billed (Including Biomass)	Kcal/Kg			**4261**			
25a	Weighted average GCV of coal/ Lignite as Billed (Excluding Biomass)				**4298**			
26	GCV of Domestic Coal of the opening stock as received at Station	Kcal/Kg	3185	3543	0.00	4074.00	5125	2800
27	GCV of Domestic Coal supplied as received at Station	Kcal/Kg	3632	3239	0.00	3798.00	4899	3190
28	GCV of Imported Coal of opening stock as received at Station	Kcal/Kg					5125	
29	GCV of Imported Coal supplied as received at Station	Kcal/Kg					4899	
30	Weighted average GCV of Coal/ Lignite as Received (Including Biomass)	Kcal/Kg			3686			
30a	Weighted average GCV of Coal/ Lignite as Received (Excluding Biomass)	Kcal/Kg			3689			

Part 1
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Details of Sourcewise fuel for computation of Energy Charges

Company	**NTPC Limited**
Name of the generating Station	**Dadri Thermal Power Project-STAGE 02**
Month	**January-2024**

SL	Particulars	Unit	COAL DOMESTIC (NTPC BASKET MINES)	FUEL-SOLID: SPECIAL ARRANGEMENT COAL	COAL-DOMESTIC	COAL - IMPORTED	FUEL:SOLID:BIOMASS PELLETS
A)	**OPENING QUANTITY**						
1	Opening Stock of coal	MT	98966.753	9049.860	74672.775	25698.398	0.000
2	Value of Stock	Rs.	500753492.23	40162261.33	514350305.60	341747477.04	0.00
B)	**QUANTITY**						
3	Quantity of Coal /Lignite supplied by Coal / Lignite Company	MT	79733.970	191839.870	183692.690	209243.600	5097.730
3.01	-Through MGR/Captive Transportation	MT	0.000	0.000	0.000	209243.600	5097.730
3.02	-Through Rail	MT	79733.970	191839.870	183692.690	0.000	0.000
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	MT	0.000	0.000	0.000	0.000	0.000
5	Coal supplied by Coal/Lignite Company (3+4)	MT	79733.970	191839.870	183692.690	209243.600	5097.730
6	Normative transit & Handling losses (for Coal /Lignite based projects)	MT	637.872	1534.719	1469.542	418.487	0.000
6.01	-Through MGR/Captive Transportation	MT	0.000	0.000	0.000	418.487	0.000
6.02	-Through Rail	MT	637.872	1534.719	1469.542	0.000	0.000
7	Net Coal / Lignite supplied (5 - 6)	MT	79096.098	190305.151	182223.148	208825.113	5097.730
C)	**PRICE**						
8	Amount charged by the Coal / Lignite Company	Rs.	202688234.02	405177252.94	763155845.31	2817679927.32	41856586.24
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.	2442733.79	5877215.27	5627618.35	-0.83	0.00
11	Total Amount charged (8 +9+10)	Rs.	205130967.81	411054468.21	768783463.66	2817679926.49	41856586.24
D)	**TRANSPORTATION**						
12	Transportation charges by Rail / Ship / Road Transport	Rs.	185167081.90	421638824.82	435543791.46	0.00	50667.18
13	Adjustment (+/-) in amount charged by railways / transport company	Rs.	0.00	0.00	0.00	0.00	0.00
14	Demurrage charges, if any	Rs.	1345082.94	3236268.51	3098828.56	0.00	0.00
15	Cost of diesel in transporting Coal through MGR system, if applicable	Rs.	0.00	0.00	0.00	0.00	0.00
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs.	183821998.96	418402556.31	432444962.90	0.00	50667.18
17	Total amount charged for Coal / Lignite supplied including transportation (11 + 16)	Rs.	388952966.77	829457024.52	1201228426.56	2817679926.49	41907253.42
E)	**TOTAL COST**						
18	Landed Cost of Coal/Lignite (2+17) / (1+7)	Rs./MT	4996.59	4362.16	6678.11	13471.69	8220.77
19	Blending Ratio (Domestic/Imported)	%	22.133	27.382	22.988	26.015	1.482
20	Weighted average cost of Coal /Lignite (Including biomass)	Rs./MT			7462.04		
20.10	Weighted average cost of Coal /Lignite (Excluding biomass)	Rs./MT	7450.62	7450.62	7450.62	7450.62	0.00
F)	**QUALITY**						
21	GCV of Domestic coal of the opening coal stock as per bill of coal company	kCal/Kg	4514	3954	4465	0	0
22	GCV of Domestic coal supplied as per bill of coal company *	kCal/Kg	4601	4091	4272	0	3219
23	GCV of Imported coal of the opening coal stock as per bill of coal company	kCal/Kg	0	0	0	4728	0
24	GCV of Imported coal supplied as per bill of coal company	kCal/Kg	0	0	0	4997	0
25	Weighted average GCV of Coal /Lignite as billed (Including biomass)	kCal/Kg			4447		

25.10	Weighted average GCV of Coal /Lignite as billed (Excluding biomass)	kCal/Kg	4466	4466	4466	4466	0
26	GCV of Domestic coal / Integrated Mines / Bio Mass of the Opening stock as received at station	kCal/Kg	3915	3213	3653	0	0
27	GCV of Domestic coal/ Coal from Integrated Mine/ Biomass supplied as received at Station	kCal/Kg	3667	3369	3778	0	3219
28	GCV of Imported coal of the Opening stock as received at station	kCal/Kg	0	0	0	4728	0
29	GCV of Imported coal supplied as received at station **	kCal/Kg	0	0	0	4937	0
30	Weighted average GCV of coal/ Lignite as Received (Including biomass)	kCal/Kg	3950				
30.10	Weighted average GCV of coal/ Lignite as Received (Excluding biomass)	kCal/Kg	3960	3960	3960	3960	0

Submitted On :26.09.2024

Sanjay Kumar Chaudhary

Digitally signed by Sanjay Kumar Chaudhary
Date: 2024.09.27 10:30:03 +05'30'

Signature Not Verified

Digitally signed by PARIMAL PIYUSH
Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

Part 1
Form - 15 version: 3

Details of Sourcewise fuel for computation of Energy Charges

Company	**NTPC Limited**
Name of the generating Station	**Dadri Thermal Power Project-STAGE 02**
Month	**February-2024**

SL	Particulars	Unit	COAL DOMESTIC (NTPC BASKET MINES)	FUEL-SOLID: SPECIAL ARRANGEMENT COAL	COAL-DOMESTIC	COAL - IMPORTED	FUEL:SOLID:BIOMASS PELLETS
A)	**OPENING QUANTITY**						
1	Opening Stock of coal	MT	54557.851	7776.011	56695.923	82789.511	31.730
2	Value of Stock	Rs.	272602981.57	33920268.89	378621510.56	1115314448.27	260842.73
B)	**QUANTITY**						
3	Quantity of Coal /Lignite supplied by Coal / Lignite Company	MT	138120.380	221992.930	209093.100	118376.400	10599.380
3.01	-Through MGR/Captive Transportation	MT	0.000	0.000	0.000	118376.400	10599.380
3.02	-Through Rail	MT	138120.380	221992.930	209093.100	0.000	0.000
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	MT	0.000	0.000	0.000	0.000	0.000
5	Coal supplied by Coal/Lignite Company (3+4)	MT	138120.380	221992.930	209093.100	118376.400	10599.380
6	Normative transit & Handling losses (for Coal /Lignite based projects)	MT	1104.963	1775.943	1672.745	236.753	0.000
6.01	-Through MGR/Captive Transportation	MT	0.000	0.000	0.000	236.753	0.000
6.02	-Through Rail	MT	1104.963	1775.943	1672.745	0.000	0.000
7	Net Coal / Lignite supplied (5 - 6)	MT	137015.417	220216.987	207420.355	118139.647	10599.380
C)	**PRICE**						
8	Amount charged by the Coal / Lignite Company	Rs.	348458733.22	486784350.03	843351484.35	1604760707.24	80060516.68
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.	32525608.64	52276657.75	50028748.17	-0.27	911595.67
11	Total Amount charged (8 +9+10)	Rs.	380984341.86	539061007.78	893380232.52	1604760706.97	80972112.35
D)	**TRANSPORTATION**						
12	Transportation charges by Rail / Ship / Road Transport	Rs.	315612686.19	487377297.79	528206516.16	0.00	328325.06
13	Adjustment (+/-) in amount charged by railways / transport company	Rs.	0.00	0.00	0.00	0.00	0.00
14	Demurrage charges, if any	Rs.	0.00	0.00	0.00	0.00	0.00
15	Cost of diesel in transporting Coal through MGR system, if applicable	Rs.	0.00	0.00	0.00	0.00	0.00
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs.	315612686.19	487377297.79	528206516.16	0.00	328325.06
17	Total amount charged for Coal / Lignite supplied including transportation (11 + 16)	Rs.	696597028.05	1026438305.57	1421586748.68	1604760706.97	81300437.41
E)	**TOTAL COST**						
18	Landed Cost of Coal/Lignite (2+17) / (1+7)	Rs./MT	5059.16	4650.84	6815.97	13537.48	7671.94
19	Blending Ratio (Domestic/Imported)	%	18.073	32.931	20.172	26.200	2.623
20	Weighted average cost of Coal /Lignite (Including biomass)	Rs./MT			7568.98		
20.10	Weighted average cost of Coal /Lignite (Excluding biomass)	Rs./MT	7566.20	7566.20	7566.20	7566.20	0.00
F)	**QUALITY**						
21	GCV of Domestic coal of the opening coal stock as per bill of coal company	kCal/Kg	4578	4290	4327	0	0
22	GCV of Domestic coal supplied as per bill of coal company *	kCal/Kg	4451	4033	4520	0	3506
23	GCV of Imported coal of the opening coal stock as per bill of coal company	kCal/Kg	0	0	0	4924	0
24	GCV of Imported coal supplied as per bill of coal company	kCal/Kg	0	0	0	5020	0
25	Weighted average GCV of Coal /Lignite as billed (Including biomass)	kCal/Kg			4442		

25.10	Weighted average GCV of Coal /Lignite as billed (Excluding biomass)	kCal/Kg	4467	4467	4467	4467	0
26	GCV of Domestic coal / Integrated Mines / Bio Mass of the Opening stock as received at station	kCal/Kg	3722	3391	3756	0	0
27	GCV of Domestic coal/ Coal from Integrated Mine/ Biomass supplied as received at Station	kCal/Kg	3432	2926	3625	0	3506
28	GCV of Imported coal of the Opening stock as received at station	kCal/Kg	0	0	0	4922	0
29	GCV of Imported coal supplied as received at station **	kCal/Kg	0	0	0	5056	0
30	Weighted average GCV of coal/ Lignite as Received (Including biomass)	kCal/Kg	3745				
30.10	Weighted average GCV of coal/ Lignite as Received (Excluding biomass)	kCal/Kg	3749	3749	3749	3749	0

Submitted On :26.09.2024

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Reason: AGM(Commercial)
Location: NTPC Limited

Part 1
Form - 15 version: 3

Details of Sourcewise fuel for computation of Energy Charges

Company	NTPC Limited
Name of the generating Station	Dadri Thermal Power Project-STAGE 02
Month	March-2024

SL	Particulars	Unit	COAL DOMESTIC (NTPC BASKET MINES)	FUEL-SOLID: SPECIAL ARRANGEMENT COAL	COAL-DOMESTIC	COAL - IMPORTED	FUEL:SOLID:BIOMASS PELLETS
A)	**OPENING QUANTITY**						
1	Opening Stock of coal	MT	100386.268	70776.498	127114.778	79463.158	326.110
2	Value of Stock	Rs.	507870295.51	329170102.03	866410282.29	1075731245.16	2501897.22
B)	**QUANTITY**						
3	Quantity of Coal /Lignite supplied by Coal / Lignite Company	MT	114297.360	246374.240	366068.150	51517.400	17694.740
3.01	-Through MGR/Captive Transportation	MT	0.000	0.000	0.000	51517.400	17694.740
3.02	-Through Rail	MT	114297.360	246374.240	366068.150	0.000	0.000
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	MT	-10064.800	0.000	0.000	0.000	0.000
5	Coal supplied by Coal/Lignite Company (3+4)	MT	104232.560	246374.240	366068.150	51517.400	17694.740
6	Normative transit & Handling losses (for Coal /Lignite based projects)	MT	833.860	1970.994	2928.545	103.035	0.000
6.01	-Through MGR/Captive Transportation	MT	0.000	0.000	0.000	103.035	0.000
6.02	-Through Rail	MT	833.860	1970.994	2928.545	0.000	0.000
7	Net Coal / Lignite supplied (5 - 6)	MT	103398.700	244403.246	363139.605	51414.365	17694.740
C)	**PRICE**						
8	Amount charged by the Coal / Lignite Company	Rs.	308757671.70	577184090.75	1496350561.47	703587840.23	139193027.54
9	Adjustment (+ / -) in amount charged by coal / Lignite Company	Rs.	-25105172.95	0.00	0.00	0.00	0.00
10	Handling,Sampling and such other Similar charges	Rs.	8981637.00	19110608.05	27784874.30	0.00	-911595.67
11	Total Amount charged (8 +9+10)	Rs.	292634135.75	596294698.80	1524135435.77	703587840.23	138281431.87
D)	**TRANSPORTATION**						
12	Transportation charges by Rail / Ship / Road Transport	Rs.	250287760.58	528847262.16	914038658.52	0.00	368965.52
13	Adjustment (+/-) in amount charged by railways / transport company	Rs.	0.00	0.00	0.00	0.00	0.00
14	Demurrage charges, if any	Rs.	1816026.71	3864036.77	5617890.53	0.00	0.00
15	Cost of diesel in transporting Coal through MGR system, if applicable	Rs.	0.00	0.00	0.00	0.00	0.00
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs.	248471733.87	524983225.39	908420767.99	0.00	368965.52
17	Total amount charged for Coal / Lignite supplied including transportation (11 + 16)	Rs.	541105869.62	1121277924.19	2432556203.76	703587840.23	138650397.39
E)	**TOTAL COST**						
18	Landed Cost of Coal/Lignite (2+17) / (1+7)	Rs./MT	5147.47	4601.97	6729.09	13595.30	7832.72
19	Blending Ratio (Domestic/Imported)	%	9.922	35.146	23.234	26.761	4.937
20	Weighted average cost of Coal /Lignite (Including biomass)	Rs./MT			7716.53		
20.10	Weighted average cost of Coal /Lignite (Excluding biomass)	Rs./MT	7710.50	7710.50	7710.50	7710.50	0.00
F)	**QUALITY**						
21	GCV of Domestic coal of the opening coal stock as per bill of coal company	kCal/Kg	4404	4014	4575	0	0
22	GCV of Domestic coal supplied as per bill of coal company *	kCal/Kg	4601	4053	4347	0	3457
23	GCV of Imported coal of the opening coal stock as per bill of coal company	kCal/Kg	0	0	0	4984	0
24	GCV of Imported coal supplied as per bill of coal company	kCal/Kg	0	0	0	5200	0
25	Weighted average GCV of Coal /Lignite as billed (Including biomass)	kCal/Kg			4416		

25.10	Weighted average GCV of Coal /Lignite as billed (Excluding biomass)	kCal/Kg	4469	4469	4469	4469	0
26	GCV of Domestic coal / Integrated Mines / Bio Mass of the Opening stock as received at station	kCal/Kg	3459	2855	3582	0	0
27	GCV of Domestic coal/ Coal from Integrated Mine/ Biomass supplied as received at Station	kCal/Kg	3462	2923	3412	0	3457
28	GCV of Imported coal of the Opening stock as received at station	kCal/Kg	0	0	0	5017	0
29	GCV of Imported coal supplied as received at station **	kCal/Kg	0	0	0	5200	0
30	Weighted average GCV of coal/ Lignite as Received (Including biomass)	kCal/Kg	3705				
30.10	Weighted average GCV of coal/ Lignite as Received (Excluding biomass)	kCal/Kg	3713	3713	3713	3713	0

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Location: NTPC Limited

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-I

Fuel: OIL **Month** Apr-23

S. No.	Particulars	Unit	LDO
A)	**OPENING QUANTITY**		
1	Opening Quantity of Oil	KL	3530.485
2	Value of Stock	Rs.	282747188.6
B)	**QUANTITY**		
3	Quantity of Oil supplied by Oil Company	KL	2843.490
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0
5	Oil supplied by Oil (3+4)	KL	2843.490
6	Normative Transit & Handling Losses (For Coal based Projects)	KL	0
7	Net Oil Supplied (5-6)	KL	2843.490
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs.	227727579.5
9	Adjustment (+/-) in amount charged made by Oil Company	Rs.	0.00
10	Handling, Sampling and such other similar charges	Rs.	0
11	Total amount Charged (8+9+10)	Rs.	227727579.45
D)	**TRANSPORTATION**	Rs.	
12	Transportation charges by rail, ship, road transport	Rs.	0
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.	0.00
14	Demurrage Charges, if any	Rs.	0
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.	0.00
16	Total Transportation Charges (12+13+14+15)	Rs.	0.00
17	Total amount Charged for Oil supplied including Transportation (11+16)	Rs.	227727579.45
E)	**TOTAL COST**		
18	Landed cost of Oil (2+17)/(1+7)	Rs / PKL	80087.35
19	Blending Ratio (Domestic /Imported)	%	
20	Weighted average cost of Oil	Rs / PKL	
F)	**QUALITY**		
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	Kcal/KL	9,678
22	GCV of Domestic Oil supplied as per bill of Oil Company	Kcal/KL	0
23	GCV of Imported Oil of the opening stock as per bill Oil Company	Kcal/KL	
24	GCV of Imported Oil supplied as perbill Oil Company	Kcal/KL	
25	Weighted average GCV of Oil/ Lignite as Billed	Kcal/KL	**9,678**
26	GCV of Domestic Oil of the opening stock as received at Station	Kcal/KL	9,678
27	GCV of Domestic Oil supplied as received at Station	Kcal/KL	0
28	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
29	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
30	Weighted average GCV of Oil/ Lignite as Received	Kcal/KL	**9,678**

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Reason: AGM(Commercial)
Location: NTPC Limited

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-II

Fuel: OIL **Month** Apr-23

S. No.	Particulars	Unit	LDO
A)	**OPENING QUANTITY**		
1	Opening Quantity of Oil	KL	3530.485
2	Value of Stock	Rs.	282747188.61
B)	**QUANTITY**		
3	Quantity of Oil supplied by Oil Company	KL	2843.490
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0.000
5	Oil supplied by Oil (3+4)	KL	2843.490
6	Normative Transit & Handling Losses (For Coal based Projects)	KL	0.000
7	Net Oil Supplied (5-6)	KL	2843.490
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs.	227727579.45
9	Adjustment (+/-) in amount charged made by Oil Company	Rs.	0.00
10	Handling, Sampling and such other similar charges	Rs.	
11	Total amount Charged (8+9+10)	Rs.	227727579.45
D)	**TRANSPORTATION**	Rs.	
12	Transportation charges by rail, ship, road transport	Rs.	0.00
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.	0.00
14	Demurrage Charges, if any	Rs.	0.00
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.	
16	Total Transportation Charges (12+13+14+15)	Rs.	0.00
17	Total amount Charged for Oil supplied including Transportation (11+16)	Rs.	227727579.45
E)	**TOTAL COST**		
18	Landed cost of Oil (2+17)/(1+7)	Rs / PKL	80087.35
19	Blending Ratio (Domestic /Imported)	%	
20	Weighted average cost of Oil	Rs / PKL	
F)	**QUALITY**		
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	Kcal/KL	9678
22	GCV of Domestic Oil supplied as per bill of Oil Company	Kcal/KL	0
23	GCV of Imported Oil of the opening stock as per bill Oil Company	Kcal/KL	
24	GCV of Imported Oil supplied as perbill Oil Company	Kcal/KL	
25	Weighted average GCV of Oil/ Lignite as Billed	Kcal/KL	**9678**
26	GCV of Domestic Oil of the opening stock as received at Station	Kcal/KL	9678
27	GCV of Domestic Oil supplied as received at Station	Kcal/KL	0
28	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
29	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
30	Weighted average GCV of Oil/ Lignite as Received	Kcal/KL	**9678**

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Reason: AGM(Commercial)
Location: NTPC Limited

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-I

Fuel: OIL **Month** May-23

S. No.	Particulars	Unit	LDO
A)	**OPENING QUANTITY**		
1	Opening Quantity of Oil	KL	6179.333
2	Value of Stock	Rs.	494886406.08
B)	**QUANTITY**		
3	Quantity of Oil supplied by Oil Company	KL	0.000
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0
5	Oil supplied by Oil (3+4)	KL	0.000
6	Normative Transit & Handling Losses (For Coal based Projects)	KL	0
7	Net Oil Supplied (5-6)	KL	0.000
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs.	0
9	Adjustment (+/-) in amount charged made by Oil Company	Rs.	-2120746.47
10	Handling, Sampling and such other similar charges	Rs.	0
11	Total amount Charged (8+9+10)	Rs.	-2120746.47
D)	**TRANSPORTATION**	Rs.	
12	Transportation charges by rail, ship, road transport	Rs.	0
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.	0.00
14	Demurrage Charges, if any	Rs.	0
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.	0.00
16	Total Transportation Charges (12+13+14+15)	Rs.	0.00
17	Total amount Charged for Oil supplied including Transportation (11+16)	Rs.	-2120746.47
E)	**TOTAL COST**		
18	Landed cost of Oil (2+17)/(1+7)	Rs / PKL	79744.15
19	Blending Ratio (Domestic /Imported)	%	
20	Weighted average cost of Oil	Rs / PKL	
F)	**QUALITY**		
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	Kcal/KL	**9,673**
22	GCV of Domestic Oil supplied as per bill of Oil Company	Kcal/KL	0
23	GCV of Imported Oil of the opening stock as per bill Oil Company	Kcal/KL	
24	GCV of Imported Oil supplied as perbill Oil Company	Kcal/KL	
25	Weighted average GCV of Oil/ Lignite as Billed	Kcal/KL	**9,673**
26	GCV of Domestic Oil of the opening stock as received at Station	Kcal/KL	9,673
27	GCV of Domestic Oil supplied as received at Station	Kcal/KL	0
28	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
29	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
30	Weighted average GCV of Oil/ Lignite as Received	Kcal/KL	**9,673**

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Reason: AGM(Commercial)
Location: NTPC Limited

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-II

Fuel: OIL **Month** May-23

S. No.	Particulars	Unit	LDO
A)	**OPENING QUANTITY**		
1	Opening Quantity of Oil	KL	6179.333
2	Value of Stock	Rs.	494886406.08
B)	**QUANTITY**		
3	Quantity of Oil supplied by Oil Company	KL	0.000
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0.000
5	Oil supplied by Oil (3+4)	KL	0.000
6	Normative Transit & Handling Losses (For Coal based Projects)	KL	0.000
7	Net Oil Supplied (5-6)	KL	0.000
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs.	0.00
9	Adjustment (+/-) in amount charged made by Oil Company	Rs.	-2120746.47
10	Handling, Sampling and such other similar charges	Rs.	
11	Total amount Charged (8+9+10)	Rs.	-2120746.47
D)	**TRANSPORTATION**	Rs.	
12	Transportation charges by rail, ship, road transport	Rs.	0.00
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.	0.00
14	Demurrage Charges, if any	Rs.	0.00
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.	
16	Total Transportation Charges (12+13+14+15)	Rs.	0.00
17	Total amount Charged for Oil supplied including Transportation (11+16)	Rs.	-2120746.47
E)	**TOTAL COST**		
18	Landed cost of Oil (2+17)/(1+7)	Rs / PKL	79744.15
19	Blending Ratio (Domestic /Imported)	%	
20	Weighted average cost of Oil	Rs / PKL	
F)	**QUALITY**		
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	Kcal/KL	9673
22	GCV of Domestic Oil supplied as per bill of Oil Company	Kcal/KL	0
23	GCV of Imported Oil of the opening stock as per bill Oil Company	Kcal/KL	
24	GCV of Imported Oil supplied as perbill Oil Company	Kcal/KL	
25	Weighted average GCV of Oil/ Lignite as Billed	Kcal/KL	**9673**
26	GCV of Domestic Oil of the opening stock as received at Station	Kcal/KL	9673
27	GCV of Domestic Oil supplied as received at Station	Kcal/KL	0
28	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
29	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
30	Weighted average GCV of Oil/ Lignite as Received	Kcal/KL	**9673**

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Reason: AGM(Commercial)
Location: NTPC Limited

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-I

Fuel: OIL **Month** Jun-23

S. No.	Particulars	Unit	LDO
A)	**OPENING QUANTITY**		
1	Opening Quantity of Oil	KL	5397.175
2	Value of Stock	Rs.	430393134.7
B)	**QUANTITY**		
3	Quantity of Oil supplied by Oil Company	KL	0.000
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0
5	Oil supplied by Oil (3+4)	KL	0.000
6	Normative Transit & Handling Losses (For Coal based Projects)	KL	0
7	Net Oil Supplied (5-6)	KL	0.000
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs.	0
9	Adjustment (+/-) in amount charged made by Oil Company	Rs.	0.00
10	Handling, Sampling and such other similar charges	Rs.	0
11	Total amount Charged (8+9+10)	Rs.	0.00
D)	**TRANSPORTATION**	Rs.	
12	Transportation charges by rail, ship, road transport	Rs.	0
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.	0.00
14	Demurrage Charges, if any	Rs.	0
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.	0.00
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 (2+17)/(1+7)	Rs / PKL	79744.15
19	Blending Ratio (Domestic /Imported)	%	
20	Weighted average cost of Oil	Rs / PKL	**79744.15**
F)	**QUALITY**		
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	Kcal/KL	9,669
22	GCV of Domestic Oil supplied as per bill of Oil Company	Kcal/KL	0
23	GCV of Imported Oil of the opening stock as per bill Oil Company	Kcal/KL	
24	GCV of Imported Oil supplied as perbill Oil Company	Kcal/KL	
25	Weighted average GCV of Oil/ Lignite as Billed	Kcal/KL	**9669**
26	GCV of Domestic Oil of the opening stock as received at Station	Kcal/KL	9,669
27	GCV of Domestic Oil supplied as received at Station	Kcal/KL	0
28	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
29	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
30	Weighted average GCV of Oil/ Lignite as Received	Kcal/KL	**9669**

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Reason: AGM(Commercial)
Location: NTPC Limited

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-II

Fuel: OIL **Month** Jun-23

S. No.	Particulars	Unit	LDO
A)	**OPENING QUANTITY**		
1	Opening Quantity of Oil	KL	5397.175
2	Value of Stock	Rs.	430393134.74
B)	**QUANTITY**		
3	Quantity of Oil supplied by Oil Company	KL	0.000
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0.000
5	Oil supplied by Oil (3+4)	KL	0.000
6	Normative Transit & Handling Losses (For Coal based Projects)	KL	0.000
7	Net Oil Supplied (5-6)	KL	0.000
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs.	0.00
9	Adjustment (+/-) in amount charged made by Oil Company	Rs.	0.00
10	Handling, Sampling and such other similar charges	Rs.	
11	Total amount Charged (8+9+10)	Rs.	0.00
D)	**TRANSPORTATION**	Rs.	
12	Transportation charges by rail, ship, road transport	Rs.	0.00
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.	0.00
14	Demurrage Charges, if any	Rs.	0.00
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.	
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 (2+17)/(1+7)	Rs / PKL	79744.15
19	Blending Ratio (Domestic /Imported)	%	
20	Weighted average cost of Oil	Rs / PKL	**79744.15**
F)	**QUALITY**		
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	Kcal/KL	9669
22	GCV of Domestic Oil supplied as per bill of Oil Company	Kcal/KL	0
23	GCV of Imported Oil of the opening stock as per bill Oil Company	Kcal/KL	
24	GCV of Imported Oil supplied as perbill Oil Company	Kcal/KL	
25	Weighted average GCV of Oil/ Lignite as Billed	Kcal/KL	**9669**
26	GCV of Domestic Oil of the opening stock as received at Station	Kcal/KL	9669
27	GCV of Domestic Oil supplied as received at Station	Kcal/KL	0
28	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
29	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
30	Weighted average GCV of Oil/ Lignite as Received	Kcal/KL	**9669**

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Location: NTPC Limited

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-I

Fuel: OIL **Month** Jul-23

S. No.	Particulars	Unit	LDO
A)	**OPENING QUANTITY**		
1	Opening Quantity of Oil	KL	5309.852
2	Value of Stock	Rs.	423429636.3
B)	**QUANTITY**		
3	Quantity of Oil supplied by Oil Company	KL	0.000
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0
5	Oil supplied by Oil (3+4)	KL	0.000
6	Normative Transit & Handling Losses (For Coal based Projects)	KL	0
7	Net Oil Supplied (5-6)	KL	0.000
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs.	0
9	Adjustment (+/-) in amount charged made by Oil Company	Rs.	0.00
10	Handling, Sampling and such other similar charges	Rs.	0
11	Total amount Charged (8+9+10)	Rs.	0.00
D)	**TRANSPORTATION**	Rs.	
12	Transportation charges by rail, ship, road transport	Rs.	0
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.	0.00
14	Demurrage Charges, if any	Rs.	0
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.	0.00
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 (2+17)/(1+7)	Rs / PKL	79744.15
19	Blending Ratio (Domestic /Imported)	%	
20	Weighted average cost of Oil	Rs / PKL	**79744.15**
F)	**QUALITY**		
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	Kcal/KL	9,669
22	GCV of Domestic Oil supplied as per bill of Oil Company	Kcal/KL	0
23	GCV of Imported Oil of the opening stock as per bill Oil Company	Kcal/KL	
24	GCV of Imported Oil supplied as perbill Oil Company	Kcal/KL	
25	Weighted average GCV of Oil/ Lignite as Billed	Kcal/KL	**9669**
26	GCV of Domestic Oil of the opening stock as received at Station	Kcal/KL	9,669
27	GCV of Domestic Oil supplied as received at Station	Kcal/KL	0
28	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
29	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
30	Weighted average GCV of Oil/ Lignite as Received	Kcal/KL	**9669**

Sanjay Kumar Chaudhary

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Reason: AGM(Commercial)
Location: NTPC Limited

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-II

Fuel: OIL **Month** Jul-23

S. No.	Particulars	Unit	LDO
A)	**OPENING QUANTITY**		
1	Opening Quantity of Oil	KL	5309.852
2	Value of Stock	Rs.	423429636.33
B)	**QUANTITY**		
3	Quantity of Oil supplied by Oil Company	KL	0.000
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0.000
5	Oil supplied by Oil (3+4)	KL	0.000
6	Normative Transit & Handling Losses (For Coal based Projects)	KL	0.000
7	Net Oil Supplied (5-6)	KL	0.000
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs.	0.00
9	Adjustment (+/-) in amount charged made by Oil Company	Rs.	0.00
10	Handling, Sampling and such other similar charges	Rs.	
11	Total amount Charged (8+9+10)	Rs.	0.00
D)	**TRANSPORTATION**	Rs.	
12	Transportation charges by rail, ship, road transport	Rs.	0.00
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.	0.00
14	Demurrage Charges, if any	Rs.	0.00
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.	
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 (2+17)/(1+7)	Rs / PKL	79744.15
19	Blending Ratio (Domestic /Imported)	%	
20	Weighted average cost of Oil	Rs / PKL	**79744.15**
F)	**QUALITY**		
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	Kcal/KL	9669
22	GCV of Domestic Oil supplied as per bill of Oil Company	Kcal/KL	0
23	GCV of Imported Oil of the opening stock as per bill Oil Company	Kcal/KL	
24	GCV of Imported Oil supplied as perbill Oil Company	Kcal/KL	
25	Weighted average GCV of Oil/ Lignite as Billed	Kcal/KL	**9669**
26	GCV of Domestic Oil of the opening stock as received at Station	Kcal/KL	9669
27	GCV of Domestic Oil supplied as received at Station	Kcal/KL	0
28	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
29	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
30	Weighted average GCV of Oil/ Lignite as Received	Kcal/KL	**9669**

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Reason: AGM(Commercial)
Location: NTPC Limited

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-I

Fuel: OIL **Month** Aug-23

S. No.	Particulars	Unit	LDO
A)	**OPENING QUANTITY**		
1	Opening Quantity of Oil	KL	4276.9
2	Value of Stock	Rs.	341057757.1
B)	**QUANTITY**		
3	Quantity of Oil supplied by Oil Company	KL	2972.080
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0
5	Oil supplied by Oil (3+4)	KL	2972.080
6	Normative Transit & Handling Losses (For Coal based Projects)	KL	0
7	Net Oil Supplied (5-6)	KL	2972.080
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs.	189061260.7
9	Adjustment (+/-) in amount charged made by Oil Company	Rs.	0.00
10	Handling, Sampling and such other similar charges	Rs.	0
11	Total amount Charged (8+9+10)	Rs.	189061260.68
D)	**TRANSPORTATION**	Rs.	
12	Transportation charges by rail, ship, road transport	Rs.	0
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.	0.00
14	Demurrage Charges, if any	Rs.	0
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.	0.00
16	Total Transportation Charges (12+13+14+15)	Rs.	0.00
17	Total amount Charged for Oil supplied including Transportation (11+16)	Rs.	189061260.68
E)	**TOTAL COST**		
18	Landed cost of Oil (2+17)/(1+7)	Rs / PKL	73130.15
19	Blending Ratio (Domestic /Imported)	%	
20	Weighted average cost of Oil	Rs / PKL	**73130.15**
F)	**QUALITY**		
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	Kcal/KL	9,669
22	GCV of Domestic Oil supplied as per bill of Oil Company	Kcal/KL	0
23	GCV of Imported Oil of the opening stock as per bill Oil Company	Kcal/KL	
24	GCV of Imported Oil supplied as perbill Oil Company	Kcal/KL	
25	Weighted average GCV of Oil/ Lignite as Billed	Kcal/KL	**9669**
26	GCV of Domestic Oil of the opening stock as received at Station	Kcal/KL	9,669
27	GCV of Domestic Oil supplied as received at Station	Kcal/KL	0
28	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
29	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
30	Weighted average GCV of Oil/ Lignite as Received	Kcal/KL	**9669**

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Reason: AGM(Commercial)
Location: NTPC Limited

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-II

Fuel: OIL **Month** Aug-23

S. No.	Particulars	Unit	LDO
A)	**OPENING QUANTITY**		
1	Opening Quantity of Oil	KL	4276.9
2	Value of Stock	Rs.	341057757.09
B)	**QUANTITY**		
3	Quantity of Oil supplied by Oil Company	KL	2972.080
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0.000
5	Oil supplied by Oil (3+4)	KL	2972.080
6	Normative Transit & Handling Losses (For Coal based Projects)	KL	0.000
7	Net Oil Supplied (5-6)	KL	2972.080
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs.	189061260.68
9	Adjustment (+/-) in amount charged made by Oil Company	Rs.	0.00
10	Handling, Sampling and such other similar charges	Rs.	
11	Total amount Charged (8+9+10)	Rs.	189061260.68
D)	**TRANSPORTATION**	Rs.	
12	Transportation charges by rail, ship, road transport	Rs.	0.00
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.	0.00
14	Demurrage Charges, if any	Rs.	0.00
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.	
16	Total Transportation Charges (12+13+14+15)	Rs.	0.00
17	Total amount Charged for Oil supplied including Transportation (11+16)	Rs.	189061260.68
E)	**TOTAL COST**		
18	Landed cost of Oil (2+17)/(1+7)	Rs / PKL	73130.15
19	Blending Ratio (Domestic /Imported)	%	
20	Weighted average cost of Oil	Rs / PKL	**73130.15**
F)	**QUALITY**		
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	Kcal/KL	9669
22	GCV of Domestic Oil supplied as per bill of Oil Company	Kcal/KL	0
23	GCV of Imported Oil of the opening stock as per bill Oil Company	Kcal/KL	
24	GCV of Imported Oil supplied as perbill Oil Company	Kcal/KL	
25	Weighted average GCV of Oil/ Lignite as Billed	Kcal/KL	**9669**
26	GCV of Domestic Oil of the opening stock as received at Station	Kcal/KL	9669
27	GCV of Domestic Oil supplied as received at Station	Kcal/KL	0
28	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
29	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
30	Weighted average GCV of Oil/ Lignite as Received	Kcal/KL	**9669**

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Reason: AGM(Commercial)
Location: NTPC Limited

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-I

Fuel: OIL **Month** Sep-23

S. No.	Particulars	Unit	LDO
A)	**OPENING QUANTITY**		
1	Opening Quantity of Oil	KL	6801.785
2	Value of Stock	Rs.	497415579
B)	**QUANTITY**		
3	Quantity of Oil supplied by Oil Company	KL	0.000
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0
5	Oil supplied by Oil (3+4)	KL	0.000
6	Normative Transit & Handling Losses (For Coal based Projects)	KL	0
7	Net Oil Supplied (5-6)	KL	0.000
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs.	0
9	Adjustment (+/-) in amount charged made by Oil Company	Rs.	69645380.32
10	Handling, Sampling and such other similar charges	Rs.	0
11	Total amount Charged (8+9+10)	Rs.	69645380.32
D)	**TRANSPORTATION**	Rs.	
12	Transportation charges by rail, ship, road transport	Rs.	0
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.	0.00
14	Demurrage Charges, if any	Rs.	0
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.	0.00
16	Total Transportation Charges (12+13+14+15)	Rs.	0.00
17	Total amount Charged for Oil supplied including Transportation (11+16)	Rs.	69645380.32
E)	**TOTAL COST**		
18	Landed cost of Oil (2+17)/(1+7)	Rs / PKL	83369.43
19	Blending Ratio (Domestic /Imported)	%	
20	Weighted average cost of Oil	Rs / PKL	**83369.43**
F)	**QUALITY**		
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	Kcal/KL	9,669
22	GCV of Domestic Oil supplied as per bill of Oil Company	Kcal/KL	0
23	GCV of Imported Oil of the opening stock as per bill Oil Company	Kcal/KL	
24	GCV of Imported Oil supplied as perbill Oil Company	Kcal/KL	
25	Weighted average GCV of Oil/ Lignite as Billed	Kcal/KL	**9669**
26	GCV of Domestic Oil of the opening stock as received at Station	Kcal/KL	9,669
27	GCV of Domestic Oil supplied as received at Station	Kcal/KL	0
28	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
29	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
30	Weighted average GCV of Oil/ Lignite as Received	Kcal/KL	**9669**

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Reason: AGM(Commercial)
Location: NTPC Limited

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-II

Fuel: OIL **Month** Sep-23

S. No.	Particulars	Unit	LDO
A)	**OPENING QUANTITY**		
1	Opening Quantity of Oil	KL	6801.785
2	Value of Stock	Rs.	497415579.00
B)	**QUANTITY**		
3	Quantity of Oil supplied by Oil Company	KL	0.000
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0.000
5	Oil supplied by Oil (3+4)	KL	0.000
6	Normative Transit & Handling Losses (For Coal based Projects)	KL	0.000
7	Net Oil Supplied (5-6)	KL	0.000
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs.	0.00
9	Adjustment (+/-) in amount charged made by Oil Company	Rs.	69645380.32
10	Handling, Sampling and such other similar charges	Rs.	
11	Total amount Charged (8+9+10)	Rs.	69645380.32
D)	**TRANSPORTATION**	Rs.	
12	Transportation charges by rail, ship, road transport	Rs.	0.00
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.	0.00
14	Demurrage Charges, if any	Rs.	0.00
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.	
16	Total Transportation Charges (12+13+14+15)	Rs.	0.00
17	Total amount Charged for Oil supplied including Transportation (11+16)	Rs.	69645380.32
E)	**TOTAL COST**		
18	Landed cost of Oil (2+17)/(1+7)	Rs / PKL	83369.43
19	Blending Ratio (Domestic /Imported)	%	
20	Weighted average cost of Oil	Rs / PKL	**83369.43**
F)	**QUALITY**		
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	Kcal/KL	9669
22	GCV of Domestic Oil supplied as per bill of Oil Company	Kcal/KL	0
23	GCV of Imported Oil of the opening stock as per bill Oil Company	Kcal/KL	
24	GCV of Imported Oil supplied as perbill Oil Company	Kcal/KL	
25	Weighted average GCV of Oil/ Lignite as Billed	Kcal/KL	**9669**
26	GCV of Domestic Oil of the opening stock as received at Station	Kcal/KL	9669
27	GCV of Domestic Oil supplied as received at Station	Kcal/KL	0
28	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
29	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
30	Weighted average GCV of Oil/ Lignite as Received	Kcal/KL	**9669**

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Reason: AGM(Commercial)
Location: NTPC Limited

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-I

Fuel: OIL **Month** Oct-23

S. No.	Particulars	Unit	LDO
A)	**OPENING QUANTITY**		
1	Opening Quantity of Oil	KL	6061.785
2	Value of Stock	Rs.	505367578.9
B)	**QUANTITY**		
3	Quantity of Oil supplied by Oil Company	KL	0.000
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0
5	Oil supplied by Oil (3+4)	KL	0.000
6	Normative Transit & Handling Losses (For Coal based Projects)	KL	0
7	Net Oil Supplied (5-6)	KL	0.000
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs.	0
9	Adjustment (+/-) in amount charged made by Oil Company	Rs.	0.00
10	Handling, Sampling and such other similar charges	Rs.	0
11	Total amount Charged (8+9+10)	Rs.	0.00
D)	**TRANSPORTATION**	Rs.	
12	Transportation charges by rail, ship, road transport	Rs.	0
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.	0.00
14	Demurrage Charges, if any	Rs.	0
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.	0.00
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 (2+17)/(1+7)	Rs / PKL	83369.43
19	Blending Ratio (Domestic /Imported)	%	
20	Weighted average cost of Oil	Rs / PKL	**83369.43**
F)	**QUALITY**		
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	Kcal/KL	9,669
22	GCV of Domestic Oil supplied as per bill of Oil Company	Kcal/KL	0
23	GCV of Imported Oil of the opening stock as per bill Oil Company	Kcal/KL	
24	GCV of Imported Oil supplied as perbill Oil Company	Kcal/KL	
25	Weighted average GCV of Oil/ Lignite as Billed	Kcal/KL	**9669**
26	GCV of Domestic Oil of the opening stock as received at Station	Kcal/KL	9,669
27	GCV of Domestic Oil supplied as received at Station	Kcal/KL	0
28	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
29	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
30	Weighted average GCV of Oil/ Lignite as Received	Kcal/KL	**9669**

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Reason: AGM(Commercial)
Location: NTPC Limited

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-II

Fuel: OIL **Month** Oct-23

S. No.	Particulars	Unit	LDO
A)	**OPENING QUANTITY**		
1	Opening Quantity of Oil	KL	6061.785
2	Value of Stock	Rs.	505367578.90
B)	**QUANTITY**		
3	Quantity of Oil supplied by Oil Company	KL	0.000
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0.000
5	Oil supplied by Oil (3+4)	KL	0.000
6	Normative Transit & Handling Losses (For Coal based Projects)	KL	0.000
7	Net Oil Supplied (5-6)	KL	0.000
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs.	0.00
9	Adjustment (+/-) in amount charged made by Oil Company	Rs.	0.00
10	Handling, Sampling and such other similar charges	Rs.	
11	Total amount Charged (8+9+10)	Rs.	0.00
D)	**TRANSPORTATION**	Rs.	
12	Transportation charges by rail, ship, road transport	Rs.	0.00
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.	0.00
14	Demurrage Charges, if any	Rs.	0.00
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.	
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 (2+17)/(1+7)	Rs / PKL	83369.43
19	Blending Ratio (Domestic /Imported)	%	
20	Weighted average cost of Oil	Rs / PKL	**83369.43**
F)	**QUALITY**		
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	Kcal/KL	9669
22	GCV of Domestic Oil supplied as per bill of Oil Company	Kcal/KL	0
23	GCV of Imported Oil of the opening stock as per bill Oil Company	Kcal/KL	
24	GCV of Imported Oil supplied as perbill Oil Company	Kcal/KL	
25	Weighted average GCV of Oil/ Lignite as Billed	Kcal/KL	**9669**
26	GCV of Domestic Oil of the opening stock as received at Station	Kcal/KL	9669
27	GCV of Domestic Oil supplied as received at Station	Kcal/KL	0
28	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
29	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
30	Weighted average GCV of Oil/ Lignite as Received	Kcal/KL	**9669**

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Reason: AGM(Commercial)
Location: NTPC Limited

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-I

Fuel: OIL **Month** Nov-23

S. No.	Particulars	Unit	LDO
A)	**OPENING QUANTITY**		
1	Opening Quantity of Oil	KL	5851.785
2	Value of Stock	Rs.	487859998
B)	**QUANTITY**		
3	Quantity of Oil supplied by Oil Company	KL	0.000
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0
5	Oil supplied by Oil (3+4)	KL	0.000
6	Normative Transit & Handling Losses (For Coal based Projects)	KL	0
7	Net Oil Supplied (5-6)	KL	0.000
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs.	0
9	Adjustment (+/-) in amount charged made by Oil Company	Rs.	0.00
10	Handling, Sampling and such other similar charges	Rs.	0
11	Total amount Charged (8+9+10)	Rs.	0.00
D)	**TRANSPORTATION**	Rs.	
12	Transportation charges by rail, ship, road transport	Rs.	0
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.	0.00
14	Demurrage Charges, if any	Rs.	0
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.	0.00
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 (2+17)/(1+7)	Rs / PKL	83369.43
19	Blending Ratio (Domestic /Imported)	%	
20	Weighted average cost of Oil	Rs / PKL	**83369.43**
F)	**QUALITY**		
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	Kcal/KL	9,669
22	GCV of Domestic Oil supplied as per bill of Oil Company	Kcal/KL	0
23	GCV of Imported Oil of the opening stock as per bill Oil Company	Kcal/KL	
24	GCV of Imported Oil supplied as perbill Oil Company	Kcal/KL	
25	Weighted average GCV of Oil/ Lignite as Billed	Kcal/KL	**9669**
26	GCV of Domestic Oil of the opening stock as received at Station	Kcal/KL	9,669
27	GCV of Domestic Oil supplied as received at Station	Kcal/KL	0
28	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
29	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
30	Weighted average GCV of Oil/ Lignite as Received	Kcal/KL	**9669**

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Reason: AGM(Commercial)
Location: NTPC Limited

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-II

Fuel: OIL **Month** Nov-23

S. No.	Particulars	Unit	LDO
A)	**OPENING QUANTITY**		
1	Opening Quantity of Oil	KL	5851.785
2	Value of Stock	Rs.	487859997.97
B)	**QUANTITY**		
3	Quantity of Oil supplied by Oil Company	KL	0.000
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0.000
5	Oil supplied by Oil (3+4)	KL	0.000
6	Normative Transit & Handling Losses (For Coal based Projects)	KL	0.000
7	Net Oil Supplied (5-6)	KL	0.000
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs.	0.00
9	Adjustment (+/-) in amount charged made by Oil Company	Rs.	0.00
10	Handling, Sampling and such other similar charges	Rs.	
11	Total amount Charged (8+9+10)	Rs.	0.00
D)	**TRANSPORTATION**	Rs.	
12	Transportation charges by rail, ship, road transport	Rs.	0.00
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.	0.00
14	Demurrage Charges, if any	Rs.	0.00
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.	
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 (2+17)/(1+7)	Rs / PKL	83369.43
19	Blending Ratio (Domestic /Imported)	%	
20	Weighted average cost of Oil	Rs / PKL	**83369.43**
F)	**QUALITY**		
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	Kcal/KL	9669
22	GCV of Domestic Oil supplied as per bill of Oil Company	Kcal/KL	0
23	GCV of Imported Oil of the opening stock as per bill Oil Company	Kcal/KL	
24	GCV of Imported Oil supplied as perbill Oil Company	Kcal/KL	
25	Weighted average GCV of Oil/ Lignite as Billed	Kcal/KL	**9669**
26	GCV of Domestic Oil of the opening stock as received at Station	Kcal/KL	9669
27	GCV of Domestic Oil supplied as received at Station	Kcal/KL	0
28	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
29	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
30	Weighted average GCV of Oil/ Lignite as Received	Kcal/KL	**9669**

Sanjay Kumar Chaudhary

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Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-I

Fuel: OIL **Month** Dec-23

S. No.	Particulars	Unit	LDO
A)	**OPENING QUANTITY**		
1	Opening Quantity of Oil	KL	5314.785
2	Value of Stock	Rs.	443090612.5
B)	**QUANTITY**		
3	Quantity of Oil supplied by Oil Company	KL	0.000
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0
5	Oil supplied by Oil (3+4)	KL	0.000
6	Normative Transit & Handling Losses (For Coal based Projects)	KL	0
7	Net Oil Supplied (5-6)	KL	0.000
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs.	0
9	Adjustment (+/-) in amount charged made by Oil Company	Rs.	0.00
10	Handling, Sampling and such other similar charges	Rs.	0
11	Total amount Charged (8+9+10)	Rs.	0.00
D)	**TRANSPORTATION**	Rs.	
12	Transportation charges by rail, ship, road transport	Rs.	0
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.	0.00
14	Demurrage Charges, if any	Rs.	0
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.	0.00
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 (2+17)/(1+7)	Rs / PKL	83369.43
19	Blending Ratio (Domestic /Imported)	%	
20	Weighted average cost of Oil	Rs / PKL	**83369.43**
F)	**QUALITY**		
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	Kcal/KL	9,669
22	GCV of Domestic Oil supplied as per bill of Oil Company	Kcal/KL	0
23	GCV of Imported Oil of the opening stock as per bill Oil Company	Kcal/KL	
24	GCV of Imported Oil supplied as perbill Oil Company	Kcal/KL	
25	Weighted average GCV of Oil/ Lignite as Billed	Kcal/KL	**9669**
26	GCV of Domestic Oil of the opening stock as received at Station	Kcal/KL	9,669
27	GCV of Domestic Oil supplied as received at Station	Kcal/KL	0
28	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
29	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
30	Weighted average GCV of Oil/ Lignite as Received	Kcal/KL	**9669**

Sanjay Kumar Chaudhary

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Reason: AGM(Commercial)
Location: NTPC Limited

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-II

Fuel: OIL **Month** Dec-23

S. No.	Particulars	Unit	LDO
A)	**OPENING QUANTITY**		
1	Opening Quantity of Oil	KL	5314.785
2	Value of Stock	Rs.	443090612.45
B)	**QUANTITY**		
3	Quantity of Oil supplied by Oil Company	KL	0.000
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0.000
5	Oil supplied by Oil (3+4)	KL	0.000
6	Normative Transit & Handling Losses (For Coal based Projects)	KL	0.000
7	Net Oil Supplied (5-6)	KL	0.000
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs.	0.00
9	Adjustment (+/-) in amount charged made by Oil Company	Rs.	0.00
10	Handling, Sampling and such other similar charges	Rs.	
11	Total amount Charged (8+9+10)	Rs.	0.00
D)	**TRANSPORTATION**	Rs.	
12	Transportation charges by rail, ship, road transport	Rs.	0.00
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.	0.00
14	Demurrage Charges, if any	Rs.	0.00
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.	
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 (2+17)/(1+7)	Rs / PKL	83369.43
19	Blending Ratio (Domestic /Imported)	%	
20	Weighted average cost of Oil	Rs / PKL	**83369.43**
F)	**QUALITY**		
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	Kcal/KL	9669
22	GCV of Domestic Oil supplied as per bill of Oil Company	Kcal/KL	0
23	GCV of Imported Oil of the opening stock as per bill Oil Company	Kcal/KL	
24	GCV of Imported Oil supplied as perbill Oil Company	Kcal/KL	
25	Weighted average GCV of Oil/ Lignite as Billed	Kcal/KL	**9669**
26	GCV of Domestic Oil of the opening stock as received at Station	Kcal/KL	9669
27	GCV of Domestic Oil supplied as received at Station	Kcal/KL	0
28	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
29	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
30	Weighted average GCV of Oil/ Lignite as Received	Kcal/KL	**9669**

Sanjay Kumar Chaudhary

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Reason: AGM(Commercial)
Location: NTPC Limited

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-I

Fuel: OIL **Month** Jan-24

S. No.	Particulars	Unit	LDO
A)	**OPENING QUANTITY**		
1	Opening Quantity of Oil	KL	4946.695
2	Value of Stock	Rs.	412403157.9
B)	**QUANTITY**		
3	Quantity of Oil supplied by Oil Company	KL	0.000
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0
5	Oil supplied by Oil (3+4)	KL	0.000
6	Normative Transit & Handling Losses (For Coal based Projects)	KL	0
7	Net Oil Supplied (5-6)	KL	0.000
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs.	0
9	Adjustment (+/-) in amount charged made by Oil Company	Rs.	0.00
10	Handling, Sampling and such other similar charges	Rs.	0
11	Total amount Charged (8+9+10)	Rs.	0.00
D)	**TRANSPORTATION**	Rs.	
12	Transportation charges by rail, ship, road transport	Rs.	0
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.	0.00
14	Demurrage Charges, if any	Rs.	0
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.	0.00
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 (2+17)/(1+7)	Rs / PKL	83369.43
19	Blending Ratio (Domestic /Imported)	%	
20	Weighted average cost of Oil	Rs / PKL	**83369.43**
F)	**QUALITY**		
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	Kcal/KL	9,678
22	GCV of Domestic Oil supplied as per bill of Oil Company	Kcal/KL	0
23	GCV of Imported Oil of the opening stock as per bill Oil Company	Kcal/KL	
24	GCV of Imported Oil supplied as perbill Oil Company	Kcal/KL	
25	Weighted average GCV of Oil/ Lignite as Billed	Kcal/KL	**9678**
26	GCV of Domestic Oil of the opening stock as received at Station	Kcal/KL	9,678
27	GCV of Domestic Oil supplied as received at Station	Kcal/KL	0
28	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
29	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
30	Weighted average GCV of Oil/ Lignite as Received	Kcal/KL	**9678**

Sanjay Kumar Chaudhary

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Reason: AGM(Commercial)
Location: NTPC Limited

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-II

Fuel: OIL **Month** Jan-24

S. No.	Particulars	Unit	LDO
A)	**OPENING QUANTITY**		
1	Opening Quantity of Oil	KL	4946.695
2	Value of Stock	Rs.	412403157.86
B)	**QUANTITY**		
3	Quantity of Oil supplied by Oil Company	KL	0.000
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0.000
5	Oil supplied by Oil (3+4)	KL	0.000
6	Normative Transit & Handling Losses (For Coal based Projects)	KL	0.000
7	Net Oil Supplied (5-6)	KL	0.000
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs.	0.00
9	Adjustment (+/-) in amount charged made by Oil Company	Rs.	0.00
10	Handling, Sampling and such other similar charges	Rs.	
11	Total amount Charged (8+9+10)	Rs.	0.00
D)	**TRANSPORTATION**	Rs.	
12	Transportation charges by rail, ship, road transport	Rs.	0.00
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.	0.00
14	Demurrage Charges, if any	Rs.	0.00
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.	
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 (2+17)/(1+7)	Rs / PKL	83369.43
19	Blending Ratio (Domestic /Imported)	%	
20	Weighted average cost of Oil	Rs / PKL	**83369.43**
F)	**QUALITY**		
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	Kcal/KL	9678
22	GCV of Domestic Oil supplied as per bill of Oil Company	Kcal/KL	0
23	GCV of Imported Oil of the opening stock as per bill Oil Company	Kcal/KL	
24	GCV of Imported Oil supplied as perbill Oil Company	Kcal/KL	
25	Weighted average GCV of Oil/ Lignite as Billed	Kcal/KL	**9678**
26	GCV of Domestic Oil of the opening stock as received at Station	Kcal/KL	9678
27	GCV of Domestic Oil supplied as received at Station	Kcal/KL	0
28	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
29	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
30	Weighted average GCV of Oil/ Lignite as Received	Kcal/KL	**9678**

Sanjay Kumar Chaudhary

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Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-I

Fuel: OIL **Month** Feb-24

S. No.	Particulars	Unit	LDO
A)	**OPENING QUANTITY**		
1	Opening Quantity of Oil	KL	4821.943
2	Value of Stock	Rs.	402002654.4
B)	**QUANTITY**		
3	Quantity of Oil supplied by Oil Company	KL	0.000
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0
5	Oil supplied by Oil (3+4)	KL	0.000
6	Normative Transit & Handling Losses (For Coal based Projects)	KL	0
7	Net Oil Supplied (5-6)	KL	0.000
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs.	0
9	Adjustment (+/-) in amount charged made by Oil Company	Rs.	0.00
10	Handling, Sampling and such other similar charges	Rs.	0
11	Total amount Charged (8+9+10)	Rs.	0.00
D)	**TRANSPORTATION**	Rs.	
12	Transportation charges by rail, ship, road transport	Rs.	0
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.	0.00
14	Demurrage Charges, if any	Rs.	0
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.	0.00
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 (2+17)/(1+7)	Rs / PKL	83369.43
19	Blending Ratio (Domestic /Imported)	%	
20	Weighted average cost of Oil	Rs / PKL	**83369.43**
F)	**QUALITY**		
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	Kcal/KL	9,677
22	GCV of Domestic Oil supplied as per bill of Oil Company	Kcal/KL	0
23	GCV of Imported Oil of the opening stock as per bill Oil Company	Kcal/KL	
24	GCV of Imported Oil supplied as perbill Oil Company	Kcal/KL	
25	Weighted average GCV of Oil/ Lignite as Billed	Kcal/KL	**9677**
26	GCV of Domestic Oil of the opening stock as received at Station	Kcal/KL	9,677
27	GCV of Domestic Oil supplied as received at Station	Kcal/KL	0
28	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
29	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
30	Weighted average GCV of Oil/ Lignite as Received	Kcal/KL	**9677**

Sanjay Kumar Chaudhary

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Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-II

Fuel: OIL **Month** Feb-24

S. No.	Particulars	Unit	LDO
A)	**OPENING QUANTITY**		
1	Opening Quantity of Oil	KL	4821.943
2	Value of Stock	Rs.	402002654.35
B)	**QUANTITY**		
3	Quantity of Oil supplied by Oil Company	KL	0.000
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0.000
5	Oil supplied by Oil (3+4)	KL	0.000
6	Normative Transit & Handling Losses (For Coal based Projects)	KL	0.000
7	Net Oil Supplied (5-6)	KL	0.000
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs.	0.00
9	Adjustment (+/-) in amount charged made by Oil Company	Rs.	0.00
10	Handling, Sampling and such other similar charges	Rs.	
11	Total amount Charged (8+9+10)	Rs.	0.00
D)	**TRANSPORTATION**	Rs.	
12	Transportation charges by rail, ship, road transport	Rs.	0.00
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.	0.00
14	Demurrage Charges, if any	Rs.	0.00
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.	
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 (2+17)/(1+7)	Rs / PKL	83369.43
19	Blending Ratio (Domestic /Imported)	%	
20	Weighted average cost of Oil	Rs / PKL	**83369.43**
F)	**QUALITY**		
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	Kcal/KL	9677
22	GCV of Domestic Oil supplied as per bill of Oil Company	Kcal/KL	0
23	GCV of Imported Oil of the opening stock as per bill Oil Company	Kcal/KL	
24	GCV of Imported Oil supplied as perbill Oil Company	Kcal/KL	
25	Weighted average GCV of Oil/ Lignite as Billed	Kcal/KL	**9677**
26	GCV of Domestic Oil of the opening stock as received at Station	Kcal/KL	9677
27	GCV of Domestic Oil supplied as received at Station	Kcal/KL	0
28	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
29	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
30	Weighted average GCV of Oil/ Lignite as Received	Kcal/KL	**9677**

Sanjay Kumar Chaudhary

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Reason: AGM(Commercial)
Location: NTPC Limited

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-I

Fuel: OIL **Month** Mar-24

S. No.	Particulars	Unit	LDO
A)	**OPENING QUANTITY**		
1	Opening Quantity of Oil	KL	4373.777
2	Value of Stock	Rs.	364639309
B)	**QUANTITY**		
3	Quantity of Oil supplied by Oil Company	KL	0.000
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0
5	Oil supplied by Oil (3+4)	KL	0.000
6	Normative Transit & Handling Losses (For Coal based Projects)	KL	0
7	Net Oil Supplied (5-6)	KL	0.000
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs.	0
9	Adjustment (+/-) in amount charged made by Oil Company	Rs.	0.00
10	Handling, Sampling and such other similar charges	Rs.	0
11	Total amount Charged (8+9+10)	Rs.	0.00
D)	**TRANSPORTATION**	Rs.	
12	Transportation charges by rail, ship, road transport	Rs.	0
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.	0.00
14	Demurrage Charges, if any	Rs.	0
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.	0.00
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 (2+17)/(1+7)	Rs / PKL	83369.43
19	Blending Ratio (Domestic /Imported)	%	
20	Weighted average cost of Oil	Rs / PKL	**83369.43**
F)	**QUALITY**		
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	Kcal/KL	9,531
22	GCV of Domestic Oil supplied as per bill of Oil Company	Kcal/KL	0
23	GCV of Imported Oil of the opening stock as per bill Oil Company	Kcal/KL	
24	GCV of Imported Oil supplied as perbill Oil Company	Kcal/KL	
25	Weighted average GCV of Oil/ Lignite as Billed	Kcal/KL	**9,531**
26	GCV of Domestic Oil of the opening stock as received at Station	Kcal/KL	9,531
27	GCV of Domestic Oil supplied as received at Station	Kcal/KL	0
28	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
29	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
30	Weighted average GCV of Oil/ Lignite as Received	Kcal/KL	**9,531**

Sanjay Kumar Chaudhary

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Reason: AGM(Commercial)
Location: NTPC Limited

Part-I

Form-15

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

NTPC LTD.

National Capital Thermal Power Station, Dadri Stage-II

Fuel: OIL **Month** Mar-24

S. No.	Particulars	Unit	LDO
A)	**OPENING QUANTITY**		
1	Opening Quantity of Oil	KL	4373.777
2	Value of Stock	Rs.	364639309.04
B)	**QUANTITY**		
3	Quantity of Oil supplied by Oil Company	KL	0.000
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL	0.000
5	Oil supplied by Oil (3+4)	KL	0.000
6	Normative Transit & Handling Losses (For Coal based Projects)	KL	0.000
7	Net Oil Supplied (5-6)	KL	0.000
C)	**PRICE**		
8	Amount charged by the Oil Company	Rs.	0.00
9	Adjustment (+/-) in amount charged made by Oil Company	Rs.	0.00
10	Handling, Sampling and such other similar charges	Rs.	
11	Total amount Charged (8+9+10)	Rs.	0.00
D)	**TRANSPORTATION**	Rs.	
12	Transportation charges by rail, ship, road transport	Rs.	0.00
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs.	0.00
14	Demurrage Charges, if any	Rs.	0.00
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs.	
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 (2+17)/(1+7)	Rs / PKL	83369.43
19	Blending Ratio (Domestic /Imported)	%	
20	Weighted average cost of Oil	Rs / PKL	**83369.43**
F)	**QUALITY**		
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	Kcal/KL	9531
22	GCV of Domestic Oil supplied as per bill of Oil Company	Kcal/KL	0
23	GCV of Imported Oil of the opening stock as per bill Oil Company	Kcal/KL	
24	GCV of Imported Oil supplied as perbill Oil Company	Kcal/KL	
25	Weighted average GCV of Oil/ Lignite as Billed	Kcal/KL	**9531**
26	GCV of Domestic Oil of the opening stock as received at Station	Kcal/KL	9531
27	GCV of Domestic Oil supplied as received at Station	Kcal/KL	0
28	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
29	GCV of Imported Oil of opening stock as received at Station	Kcal/KL	
30	Weighted average GCV of Oil/ Lignite as Received	Kcal/KL	**9531**

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Reason: AGM(Commercial)
Location: NTPC Limited

Computation of Energy Charges

Form-15B
ADDITIONAL FORM

Name of the Company	**NTPC Limited**
Name of the Power Station	**NCTPS St-II**

			2024-25	2025-26	2026-27	2027-28	2028-29
No of Days in the year		Days	365	365	365	366	365
Sp. Oil consumption		ml/kwh	0.5	0.5	0.5	0.5	0.5
Auxiliary consumption		%	5.25	5.25	5.25	5.25	5.25
Heat Rate		Kcal/Kwh	2,370.66	2,370.66	2,370.66	2,370.66	2370.66
Computation of Variable Charges							
Variable Charge (Coal)		p/kwh	451.76784	451.768	451.768	451.768	451.768
Variable Charge (Oil)		p/kwh	4.29215	4.292	4.292	4.292	4.292
Total		p/kwh	456.060	456.060	456.060	456.060	456.060
Price of fuel from Form-15/15A							
Coal Cost		(Rs./MT)	6477.15	6477.15	6477.15	6477.15	6477.15
Oil Cost		(Rs./KL)	81336.33	81336.33	81336.33	81336.33	81336.33
Coal GCV	(After Adjustment)	(kCal/Kg)	3579.92	3579.92	3579.92	3579.92	3579.92
Oil GCV		(Rs./KL)	9660.00	9660.00	9660.00	9660.00	9660.00
Computation of Fuel Expenses for Calculation of IWC:							
ESO in a year		(MUs)	6913.98	6913.98	6913.98	6932.93	6913.98
Cost of coal for 40 Days		(Rs. Lakh)	42787.88	42787.88	42787.88	42787.88	42787.88
Cost of oil for 2 months		(Rs. Lakh)	494.60	494.60	494.60	495.95	494.60
Energy Expenses for 45 days		(Rs. Lakh)	38874.96	38874.96	38874.96	38874.96	38874.96
Rate of Energy Charge from		= $(Q_s)_n$ X P_s	4.066816609	4.066816609	4.066816609	4.066816609	4.066816609
Heat Contribution from SFO / Alternate Fuel		= $(Qs)_n$ X $(GCV)_s$	4.83	4.83	4.83	4.83	4.83
Heat Contribution from coal		= GHR- H_s	2,365.83	2,365.83	2,365.83	2,365.83	2,365.83
Specific Primary Fuel Consumption		= H_p/ $(GCV)_p$	0.66	0.66	0.66	0.66	0.66
Rate of Energy charge from Primary Fuel (p/kwh)		$(REC)_p$	428.05	428.05	428.05	428.05	428.05
Rate of Energy charge ex-bus (p/kWh)		= $((REC)_s$ + $(REC)_p$ / (1-(AUX))	456.06	456.06	456.06	456.06	456.06

PETITIONER

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Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

PART 1
FORM- L

Name of the Petitioner NTPC Limited
Name of the Generating Station NCTPS St-II

Statement of Capital cost
(To be given for relevant dates and year wise)

(Amount in Rs. Lakh)

S. No.	Particulars	As on 01.04.2024		
		Accrual Basis	Un-discharged Liabilities	Cash Basis
A	a) Opening Gross Block Amount as per books	5,97,136.77	6,916.56	5,90,220.22
	b) Amount of IDC in A(a) above	45,613.01	0	45,613.01
	c) Amount of FC in A(a) above	0	0	0
	d) Amount of FERV in A(a) above	1,764.34	0	1,764.34
	e) Amount of Hedging Cost in A(a) above	0	0	0
	f) Amount of IEDC in A(a) above	5,421.64	0	5,421.64
B	a) Addition in Gross Block Amount during the period (Direct purchases)	To be provided at the time of truing-up		
	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 1
FORM- M

Name of the Petitioner **NTPC Limited**
Name of the Generating Station **NCTPS St-II**

Statement of Capital Woks in Progress
(To be given for relevant dates and year wise)

(Amount in Rs. Lakh)

S. No.	Particulars	01.04.2024		
		Accrual Basis	Un-discharged Liabilities	Cash Basis
A	a) Opening CWIP as per books	21,814.96	1,000.53	20,814.43
	b) Amount of IDC in A(a) above	1.38	-	1.38
	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	-	-	-
		To be provided at the time of truing-up		
B	a) Addition in CWIP during the period			
	b) Amount of IDC in B(a) above			
	c) Amount of FC in B(a) above			
	d) Amount of FERV in B(a) above			
	e) Amount of Hedging Cost in B(a) above			
	f) Amount of IEDC in B(a) above			
C	a) Transferred to Gross Block Amount during the period			
	b) Amount of IDC in C(a) above			
	c) Amount of FC in C(a) above			
	d) Amount of FERV in C(a) above			
	e) Amount of Hedging Cost in C(a) above			
	f) Amount of IEDC in C(a) above			
D	a) Deletion in CWIP during the period			
	b) Amount of IDC in D(a) above			
	c) Amount of FC in D(a) above			
	d) Amount of FERV in D(a) above			
	e) Amount of Hedging Cost in D(a) above			
	f) Amount of IEDC in D(a) above			
E	a) Closing CWIP as per books			
	b) Amount of IDC in E(a) above			
	c) Amount of FC in E(a) above			
	d) Amount of FERV in E(a) above			
	e) Amount of Hedging Cost in E(a) above			
	f) Amount of IEDC in E(a) above			

(Petitioner)

PART-I
FORM- N

Calculation of Interest on Normative Loan

Name of the Company :	**NTPC Limited**
Name of the Power Station :	**NCTPS St-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	3,52,575.47	3,56,044.86	3,56,471.43	3,59,117.81	3,60,790.11	3,60,790.11
2	Cumulative repayment of Normative loan up to previous year	3,13,449.23	3,24,165.94	3,35,591.03	3,47,212.11	3,59,138.94	3,60,790.11
3	**Net Normative loan – Opening**	39,126.25	31,878.92	20,880.40	11,905.70	1,651.17	-
4	Add: Increase due to addition during the year / period	1447.04	426.57	2,646.38	1,672.30	-	-
5	Less: Decrease due to de-capitalisation during the year / period	488.23	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	2510.57	0.00	0.00	0.00	0.00	0.00
8	Less: Repayment of Loan(8A-8B)	10716.71	11425.10	11621.07	11926.83	1651.17	0.00
8A	Repayment of Loan	11159.02	11425.10	11621.07	11926.83	1651.17	0.00
8B	Repayment Adj- Decap	-442.31	0.00	0.00	0.00	0.00	0.00
11	**Net Normative loan - Closing**	31,878.92	20,880.40	11,905.70	1,651.17	-	-
12	**Average Normative loan**	35,502.58	26,379.66	16,393.05	6,778.43	825.58	-
13	Weighted average rate of interest	7.0993	6.7671	7.0324	8.3999	8.4071	8.3829
14	**Interest on Loan**	**2520.43**	**1785.15**	**1152.82**	**569.38**	**69.41**	**0.00**
15	Cumulative repayment of Normative loan at the end of the period after adjustments	3,24,165.94	3,35,591.03	3,47,212.11	3,59,138.94	3,60,790.11	3,60,790.11

(Petitioner)

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Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

PART 1
FORM- O

Calculation of Interest on Working Capital

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

(Amount in Rs Lakh)

S. No.	Particulars	Existing 2018-19	2024-25	2025-26	2026-27	2027-28	2028-29
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
1	Cost of Coal/Lignite	42,199.36	42787.88	42787.88	42787.88	42787.88	42787.88
2	Cost of Main Secondary Fuel Oil	486.59	494.60	494.60	494.60	495.95	494.60
3	Fuel Cost						
4	Liquid Fuel Stock						
5	O & M Expenses	2,393.86	2384.57	2510.05	2641.71	2780.38	2926.09
6	Maintenance Spares	5,745.26	5722.97	6024.13	6340.10	6672.91	7022.61
7	Receivables	48,515.59	49036.06	49189.10	49376.49	49522.82	49769.88
8	Total Working Capital	99340.66	100426.09	101005.76	101640.78	102259.94	103001.05
9	Rate of Interest	12.0000	11.9000	11.9000	11.9000	11.9000	11.9000
10	**Interest on Working Capital**	**11920.88**	**11950.70**	**12019.69**	**12095.25**	**12168.93**	**12257.13**

Petitioner

Signature Not Verified

Digitally signed by PARIMAL PIYUSH
Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

PART 1
FORM-T

Summary of issue involved in the petition

Name of the Company :		**NTPC Ltd.**
Name of the Power Station :		**NCTPS St-II**
1	**Petitioner:**	**NTPC Ltd.**
2	**Subject: Approval of tariff of National Capital Thermal Power Station Stage-II (NCTPS-II) (980 MW) for the period from 01.04.2024 to 31.03.2029.**	
3	**Prayer:** i) Approve tariff of NCTPS-II for the tariff period 01.04.2024 to 31.03.2029. ii) Approve tariff of Dadri Loni Transmission Line as separate stream from the tariff of generating station for the tariff period 01.04.2024 to 31.03.2029. iii) Approve supplementary tariff of NCTPS-II ECS system for the tariff period 01.04.2024 to 31.03.2029. iv) Allow the recovery of filing fees as & when paid to the Hon'ble Commission and publication expenses from the beneficiaries. v) Allow reimbursement of Ash utilisation Charges directly from the beneficiaries on monthly basis, subject to true up. vi) Allow the recovery of pay/wage revision as additional O&M over and above the normative O&M. vii) Consider station heat rate based on design heat rate with applicable operating margin. viii) Pass any other order as it may deem fit in the circumstances mentioned above.	
4	**Name of Respondents**	
	1.Uttar Pradesh Power Corp. Ltd (UPPCL)	
	2.BSES Rajdhani Power Ltd. (BRPL)	
	3.BSES Yamuna Power Ltd. (BYPL)	
	4.Tata Power Delhi Distribution Ltd. (TPDDL)	

5	**Project Scope : National Capital Thermal Power Station Stage-II (NCTPS-II) (980 MW)**					
	Cost: Approved Capital Cost of Rs 549320.7 Lakh as on 31.03.2024					
	Commissioning : Station COD on 31.07.2010					
	Claim	**2024-25**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
	AFC (in Rs Lakh)	**82,417.85**	**83,659.14**	**85,179.05**	**86,602.60**	**88,369.89**
	Capital cost (in Rs Lakh)	**5,09,244.90**	**5,13,025.44**	**5,15,414.44**	**5,15,414.44**	**5,15,414.44**
	Initial spare (in Rs Lakh)	included in above				
	NAPAF (Gen) (in %)	**85**				
	Any Specific					

TARIFF FILING FORMS (THERMAL)

FOR DETERMINATION OF TARIFF

FOR

Dadri-Loni Road 400 KV D/C line

(From 01.04.2024 to 31.03.2029)

For Transmission Asset

PART-I

APPENDIX-IA

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 (II)	Summary of Tariff	✓
FORM -1A(II)	Statement showing Return on Equity	✓
FORM-2 (II)	Details of Transmission Lines & Communication System	✓
FORM-3(II)	Normative parameters considered for tariff computations	✓
FORM-9A(II)	Summary of Statement of Additional Capitalisation claimed during the period	✓
FORM- 12 (II)	Statement of Depreciation	✓
FORM- N (II)	Calculation of Interest on Normative Loan	✓
FORM- O(II)	Calculation of Interest on Working Capital	**NA**
FORM-L(II)	Statement of Capital cost	✓
FORM-S	Statement of Liability flow	***
FORM-T(II)	Summary of issues involved in the petition	✓
***** Shall be provided at the time of true up**		

Part-III
FORM-I (II)

Summary Sheet

Name of the Petitioner **NTPC Ltd**
Name of the region **Northern Region**
Name of the Power Station **NCTPS-II, Dadri**
Name of the transmission element **Dadri-Loni Road 400 KV D/C line**

Amount in Rs Lakh

S.N o.	Particulars	Form No.	Existing 2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1	2		4	5	6	7	8	9
1.1	Depreciation	Form-12 (II)	591.55	591.55	591.55	591.55	330.04	330.04
1.2	Interest on Loan	Form-N A (II)	177.24	128.91	92.37	60.64	21.95	4.03
1.3	Return on Equity	Form-1 (A) (II)	631.26	631.26	631.26	631.26	631.26	631.26
1.4	Interest on Working Capital	Form-O (II)	23.36	22.10	21.66	21.30	16.94	16.80
1.5	O & M Expenses	Form-2 (II) & Form-3 (II)	53.87	45.88	48.28	50.78	53.44	56.27
	Total		**1477.28**	**1419.70**	**1385.11**	**1355.52**	**1053.64**	**1038.40**

(Petitioner)

Part-III
Form 1 A (II)

Calculation of Return on Equity

Name of the Company **NTPC Ltd**
Name of the region **Northern Region**
Name of the Power Station **NCTPS-II, Dadri**
Name of the transmission element **Dadri-Loni Road 400 KV D/C line**

(Amount in Rs. Lakh)

S.N o.	Particulars	Existing 2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	4	5	6	7	8	9
1.1	Capital cost	11203.57	11203.57	11203.57	11203.57	11203.57	11203.57
1.2	Add: Addition during the year / period						
1.3	Less: Decapitalisation during the year /period						
1.4	Less: Reversal during the year / period						
1.5	Add: Discharges during the year /period						
2	Closing Capital Cost	11203.57	11203.57	11203.57	11203.57	11203.57	11203.57
2.2	Total Opening Equity	3361.07	3361.07	3361.07	3361.07	3361.07	3361.07
2.3	Equity for Add Cap	0.00	0.00	0.00	0.00	0.00	0.00
2.4	Closing Equity	3361.07	3361.07	3361.07	3361.07	3361.07	3361.07
2.5	Average Equity	3361.07	3361.07	3361.07	3361.07	3361.07	3361.07
2.6	Return on Equity*	631.26	631.26	631.26	631.26	631.26	631.26
3	**Total**	**631.26**	**631.26**	**631.26**	**631.26**	**631.26**	**631.26**

(Petitioner)

Part-III
FORM-2 (II)

DETAILS OF TRANSMISSION LINES & COMMUNICATION SYSTEM

Name of the Petitioner — **NTPC Ltd**
Name of the region — **Northern Region**
Name of the Power Station — **NCTPS-II, Dadri**
Name of the transmission element — **Dadri-Loni Road 400 KV D/C line**

Transmission Lines

S. No.	Name of line	Type of line AC/HVDC	S/C or D/C	No. of Sub-Conductors	Voltage level kV	Line length per Ckt.- km.	Line length (53.065+53.503) / 2 Km	Actual date of Commercial operation (Line/Ckt I)	Actual date of Commercial operation (Line/Ckt II)	Covered in the present petition	
										Yes/No	If No, petition No.
1	Dadri-Loni Road 400 KV D/C line	AC	D/C	2	400 KV	Line-1: 53.065 Line 2: 53.503	53.284	02.08.2014	08.09.2014	Yes	

Communication System

S. No.	Name of Communication System	Type of Communication System – Communication System under ULDC/ SCADA/ WAMS/Fibre Optic Communication System/RTU/PABX etc	Technical Particulars	Number/ length	Date of Commercial operation	Covered in the present petition	
						Yes/No	If No, petition No.
1	Fibre Optics	ULDC	Fibre Optics		Existing communication system of Powergrid shall be used.		

(Petitioner)

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Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

PART III
FORM-3 (II)

Normative Parameters considered for Tariff Computation

Name of the Petitioner **NTPC Ltd**
Name of the region **Northern Region**
Name of the Power Station **NCTPS-II, Dadri**
Name of the transmission element **Dadri-Loni Road 400 KV D/C line**

Particulars	Unit	Existing 2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	5	6	7	8	9
Base Rate of Return on Equity	%	**15.50%**	15.50%	15.50%	15.50%	15.50%	15.50%
Tax Rate	%						
Effective Tax Rate	%	17.472%	17.472%	17.472%	17.472%	17.472%	17.472%
Target Availabilty	%	98%	98%	98%	98%	98%	98%
Normative O&M per KM	Rs. Lakh/ km	1.011	0.861	0.906	0.953	1.003	1.056
Additional O&M Charges							
Impact due to Pay revision/KM							
Impact due to GST/KM							
Total O&M Expenses/KM		1.011	0.861	0.906	0.953	1.003	1.056
Normative O&M per Bay	Rs. Lakh/ bay						
Spares for WC as % of O&M	% of O&M	15%	15%	15%	15%	15%	15%
Recievables in month for WC	days	45	45	45	45	45	45
Rate for IOWC	%	12.00%	11.90%	11.90%	11.90%	11.90%	11.90%

(Petitioner)

PART-III
FORM- 9A(II)
Summary

Name of the Petitioner				**NTPC Ltd.**					
Name of the Generating Station				**NCTPS-II, Dadri**					
Name of Transmission Element				**Dadri-Loni Road 400 KV D/C line**					
COD				**08.09.2014**					
For Financial Year				**2024-29 (Summary)**					
									Rs. Lakhs
Sl. No.	Head of Work /Equipment	ACE Claimed Cash Basis(Summary)					Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		2024-25	**2025-26**	**2026-27**	**2027-28**	**2028-29**			
1	2	3	4	5	6	7	8	9	10
New Claims									
1	**400KV D/C TRANSMISSION LINE-1**	**NA**							
2	**400KV D/C TRANSMISSION LINE-2**								
Subtotal									
1	Discharge of Liabilities								
Subtotal									
Total Add Cap Claimed									

(Petitioner)

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Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

PART-III
FORM- 12(II)

Statement of Depreciation

Name of the Company **NTPC Ltd**
Name of the region **Northern Region**
Name of the Power Station **NCTPS-II, Dadri**
Name of the transmission element **Dadri-Loni Road 400 KV D/C line**

(Amount in Rs. Lakh)

Sl. No.	Particulars	Existing 2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	4	5	6	7	8	9
1	Opening Capital Cost	11203.57	11203.57	11203.57	11203.57	11203.57	11203.57
2	Additional Capitalization during the period	0.00	0.00	0.00	0.00	0.00	0.00
3	Closing Capital Cost	11203.57	11203.57	11203.57	11203.57	11203.57	11203.57
4	**Average Capital Cost**	**11203.57**	**11203.57**	**11203.57**	**11203.57**	**11203.57**	**11203.57**
5	Freehold land	0.00	0.00	0.00	0.00	0.00	0.00
6	Rate of depreciation	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%
7	Depreciable value	10083.21	10083.21	10083.21	10083.21	10083.21	10083.21
8	Useful life completed of asset at the beginning of the period	8.56	9.56	10.56	11.56	12.56	
8a	Balance useful life of generating station at the beginning of the period*					8.08	7.08
9	Remaining depreciable value	5032.96	4441.41	3849.86	3258.31	2666.76	2336.72
10	**Depreciation (for the period)**	**591.55**	**591.55**	**591.55**	**591.55**	**330.04**	**330.04**
11	**Depreciation (annualised)**	**591.55**	**591.55**	**591.55**	**591.55**	**330.04**	**330.04**
12	Cumulative depreciation at the end of the period	5641.72	6233.27	6824.82	7416.37	7746.41	8076.46
13	Less: Cumulative depreciation adjustment on account of de-capitalisation	0.00	0.00	0.00	0.00	0.00	0.00
14	Net Cumulative depreciation at the end of the period	5641.72	6233.27	6824.82	7416.37	7746.41	8076.46

*Hon'ble Commission vide its order dated 20.04.2015 in Petition No 377/TT/2014 had directed that transmission line of NCTPS Stage-II, Dadri to Delhi being a dedicated transmission line is a part of the generating station of Dadri-II ,Therefore the useful life of asset is same as that of Dadri-II station.

Accordingly after completion of a period of 12 years from the effective date of commercial operation of transmission asset in 2026-27,the remaining depriciable value is spread over the balance useful for generating station in accordance with regulation 33(5) of CERC tariff regulation 2024. Hon'ble Commission may be pleased to allow the same.

PART-III
FORM- N (II)

Calculation of Interest on Normative Loan

Name of the Company **NTPC Ltd**
Name of the region **Northern Region**
Name of the Power Station **NCTPS-II, Dadri**
Name of the transmission elemen **Dadri-Loni Road 400 KV D/C line**

(Amount in Rs. Lakh)

Particulars	Existing 2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1	3	4	5	6	7	8
Gross Normative loan - Opening	7842.50	7842.50	7842.50	7842.50	7842.50	7842.50
Cumulative repayment of Normative Loan upto previous year	5050.18	5641.72	6233.27	6824.82	7416.37	7746.41
Net Normative loan - Opening	2792.32	2200.78	1609.23	1017.68	426.13	96.09
Increase/Decrease due to ACE/de-capitalization during the Year	0.00	0.00	0.00	0.00	0.00	0.00
Repayments of Normative Loan during the year	591.55	591.55	591.55	591.55	330.04	330.04
Net Normative loan - Closing	2200.78	1609.23	1017.68	426.13	96.09	0.00
Average Normative Loan	2496.55	1905.00	1313.45	721.90	261.11	48.04
Weighted average Rate of Interest of actual Loans	7.0993%	6.7671%	7.0324%	8.3999%	8.4071%	8.3829%
Interest on Normative loan	**177.24**	**128.91**	**92.37**	**60.64**	**21.95**	**4.03**

(Petitioner)

Signature Not Verified
Digitally signed by PARIMAL PIYUSH
Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

PART-III
FORM- O (II)

Calculation of Interest on Working Capital

Name of the Company **NTPC Ltd**
Name of the region **Northern Region**
Name of the Power Station **NCTPS-II, Dadri**
Name of the transmission elem **Dadri-Loni Road 400 KV D/C line**

(Amount in Rs. Lakh)

Sl. No.	Particulars	Existing 2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	4	5	6	7	8	9
1	O & M Expenses	4.49	3.82	4.02	4.23	4.45	4.69
2	Maintenance Spares	8.08	6.88	7.24	7.62	8.02	8.44
3	Receivables	182.13	175.03	170.77	167.12	129.90	128.02
4	Total Working Capital	194.70	185.74	182.03	178.97	142.37	141.15
5	Rate of Interest	12.00%	11.90%	11.90%	11.90%	11.90%	11.90%
6	**Interest on Working Capital**	**23.36**	**22.10**	**21.66**	**21.30**	**16.94**	**16.80**

(Petitioner)

PART-I

FORM- L(II)

Statement of Capital cost

(Amount in Rs Lakh)

Name of the Petitioner	**NTPC Ltd**
Name of the Generating Station	**NCTPS-II, Dadri**
Name of the transmission element	**Dadri-Loni Road 400 KV D/C line**

Sl. No.	Particulars	2024-25		
		Accrual Basis	Un-discharged Liabilities	Cash Basis
A	a) Opening Gross Block Amount as per books	11,284.23	80.65	11,203.57
	b) Amount of IDC in A(a) above	2,260.71	0.00	2,260.71
	c) Amount of FC in A(a) above	0.00	0.00	0.00
	d) Amount of FERV in A(a) above	0.00	0.00	0.00
	e) Amount of Hedging Cost in A(a) above	0.00	0.00	0.00
	f) Amount of IEDC in A(a) above	0.00	0.00	0.00
B	a) Addition in Gross Block Amount during the period (Direct purchases)	To be provided during True up		
	b) Amount of IDC in B(a) above			
	c) Amount of FC in B(a) above			
	d) Amount of FERV in B(a) above			
	e) Amount of Hedging Cost in B(a) above			
	f) Amount of IEDC in B(a) above			
C	a) Addition in Gross Block Amount during the period (Transferred from CWIP)			
	b) Amount of IDC in C(a) above			
	c) Amount of FC in C(a) above			
	d) Amount of FERV in C(a) above			
	e) Amount of Hedging Cost in C(a) above			
	f) Amount of IEDC in C(a) above			
D	a) Deletion in Gross Block Amount during the period			
	b) Amount of IDC in D(a) above			
	c) Amount of FC in D(a) above			
	d) Amount of FERV in D(a) above			
	e) Amount of Hedging Cost in D(a) above			
	f) Amount of IEDC in D(a) above			
E	a) Closing Gross Block Amount as per books			
	b) Amount of IDC in E(a) above			
	c) Amount of FC in E(a) above			
	d) Amount of FERV in E(a) above			
	e) Amount of Hedging Cost in E(a) above			
	f) Amount of IEDC in E(a) above			

(Petitioner)

PART 1
FORM-T(II)

Summary of issue involved in the petition		
Name of the Company :		**NTPC Ltd**
Name of the Power Station :		**Dadri-Loni Road 400 KV D/C line**
1	**Petitioner:**	**NTPC Ltd**
2	**Subject: Approval of tariff of National Capital Thermal Power Station Stage-II (NCTPS-II) (980 MW) for the period from 01.04.2024 to 31.03.2029.**	
3	**Prayer:** i)Approve tariff of Dadri Loni Transmission Line as separate stream from the tariff of generating station for the tariff period 01.04.2024 to 31.03.2029. II)Pass any other order as it may deem fit in the circumstances mentioned above.	
4	**Name of Respondents**	
	1.BSES Rajdhani Power Ltd. (BRPL)	
	2.BSES Yamuna Power Ltd. (BYPL)	
	3.Tata Power Delhi Distribution Ltd. (TPDDL)	

TARIFF FILING FORMS

DETERMINATION OF SUPPLEMENTARY TARIFF

FOR

NCTPS Dadri Stage-II (ECS)

(From 01.04.2024 to 31.03.2029)

PART-I

APPENDIX-IB

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 Supplementary Tariff	✓
FORM -1 (I)	Statement showing claimed capital cost	✓
FORM -1 (II)	Statement showing Return on Equity	✓
FORM-2	ECS 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	**NA**
FORM-5A	Abstract of Claimed Capital Cost for the existing Projects	**NA**
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	**NA**
FORM-9A	Summary of Statement of Additional Capitalisation claimed during the period	✓
FORM-9 ##	Statement of Additional Capitalisation after COD	✓
FORM- 10	Financing of Additional Capitalisation	✓
FORM- 11	Calculation of Depreciation on original project cost	✓
FORM- 12	Statement of Depreciation	✓
FORM- 13	Calculation of Weighted Average Rate of Interest on Actual Loans	✓
FORM- 14	Draw Down Schedule for Calculation of IDC & Financing Charges	**NA**
FORM- 15	Details of Fuel for Computation of Energy Charges: Primary Fuel(Coal)	**NA**
FORM- 15A	Details of Fuel for Computation of Energy Charges: Secondary Fuel(Oil)	**NA**
FORM- 16	Details of Limestone for Computation of Energy Charge Rate	✓
FORM-17	Details of Capital Spares	***
FORM- 18	Non-Tariff Income	***
FORM-19	Details of Water Charges	***
FORM-20	Details of Statutory Charges	***
## Provided yearwise		
***** Shall be provided at the time of true up**		

PART-I

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

Form No.	Title of Tariff Filing Forms (Thermal)	Tick
FORM-A	Abstract of Capital Cost Estimates	**NA**
FORM-B	Break-up of Capital Cost for Coal/Lignite based projects	**NA**
FORM-C	Break-up of Capital Cost for Gas/Liquid fuel based Projects	**NA**
FORM-D	Break-up of Construction/Supply/Service packages	**NA**
FORM-E	Details of variables , parameters , optional package etc. for New Project	**NA**
FORM-F	Details of cost over run	**NA**
FORM-G	Details of time over run	**NA**
FORM –H	Statement of Additional Capitalisation during end of the useful life	**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	***
FORM-L	Statement of Capital cost	✓
FORM-M	Statement of Capital Woks in Progress	✓
FORM-N	Calculation of Interest on Normative Loan	✓
FORM-O	Calculation of Interest on Working Capital	✓
FORM-Oi	Computation of Supplementary Energy Charges	✓
FORM-P	Incidental Expenditure up to SCOD and up to Actual COD	**NA**
FORM-Q	Expenditure under different packages up to SCOD and up to Actual COD	**NA**
FORM-R	Actual cash expenditure	**NA**
FORM-S	Statement of Liability flow	***
FORM-T	Summary of issues involved in the petition	✓
*** Shall be provided at the time of true up		

PART-I

FORM- 1

Summary of Supplementary Tariff

	Name of the Petitioner:	**NTPC Limited**
	Name of the Generating Station	**NCTPS Dadri Stage-II (ECS)**

Amount in Rs. Lakhs

S. No.	Particulars	Unit	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	4	5
1.1	Depreciation	Rs Lakh	3,142.28	3,142.28	3,167.97	3,193.65	3,193.65
1.2	Interest on Loan	Rs Lakh	2,201.89	2,024.77	1,881.88	1,765.15	1,631.87
1.3	Return on Equity	Rs Lakh	2,795.36	2,795.36	2,818.21	2,841.05	2,841.05
1.4	Interest on Working Capital	Rs Lakh	279.84	280.54	282.65	284.95	287.25
1.5	O&M Expenses	Rs Lakh	1296.08	1364.12	1435.74	1511.11	1590.45
	Total	Rs Lakh	**9715.45**	**9607.08**	**9586.44**	**9595.91**	**9544.26**
2.1	Landed Cost of Reagent	Rs/MT	**2,310**	**2,310**	**2,310**	**2,310**	**2,310**
2.2	Supplementary ECR ex-bus	Rs/ kWh	**0.069**	**0.069**	**0.069**	**0.069**	**0.069**

(Petitioner)

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Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

PART-I

FORM- 1(I)

	Name of the Petitioner:	**NTPC Limited**
	Name of the Generating Station:	**NCTPS Dadri Stage-II (ECS)**

Amount in Rs. Lakhs

Statement showing claimed capital cost

S. No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7
1	Opening Capital Cost	63292.14	63292.14	63292.14	64326.71	64326.71
2	Add: Addition during the year / period	-	-	1,034.57	-	-
3	Less: De-capitalisation during the year / period					
4	Less: Reversal during the year / period					
5	Add: Discharges during the year / period					
6	Closing Capital Cost	63292.14	63292.14	64326.71	64326.71	64326.71
7	**Average Capital Cost**	**63292.14**	**63292.14**	**63809.42**	**64326.71**	**64326.71**

(Petitioner)

Signature Not Verified

Digitally signed by PARIMAL PIYUSH
Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

PART-I

FORM- 1(IIA)

	Name of the Petitioner:	**NTPC Limited**
	Name of the Generating Station:	**NCTPS Dadri Stage-II (ECS)**

Statement showing Return on Equity

Amount in Rs. Lakhs

S. No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3				4
	Return on Equity					
1	Gross Opening Equity (Normal)	18,987.64	18,987.64	18,987.64	19,298.01	19,298.01
2	Less: Adjustment in Opening Equity					
3	Adjustment during the year					
4	Net Opening Equity (Normal)	18,987.64	18,987.64	18,987.64	19,298.01	19,298.01
5	Add: Increase in equity due to addition during the year / period	-	-	310.37	-	-
7	Less: Decrease due to De-capitalisation during the year / period	-	-	-	-	-
8	Less: Decrease due to reversal during the year / period	-	-	-	-	-
9	Add: Increase due to discharges during the year / period	-	-	-	-	-
10	Net closing Equity (Normal)	18,987.64	18,987.64	19,298.01	19,298.01	19,298.01
11	Average Equity (Normal)	18,987.64	18,987.64	19,142.83	19,298.01	19,298.01
12	Rate of ROE (%)	12.15	12.15	12.15	12.15	12.15
13	Effective Tax Rate for respective years	17.472%	17.472%	17.472%	17.472%	17.472%
14	Rate of Return on Equity (Pre-tax)	14.722%	14.722%	14.722%	14.722%	14.722%
15	Total ROE	**2,795.36**	**2,795.36**	**2,818.21**	**2,841.05**	**2,841.05**

(Petitioner)

PART-I
FORM-2

Name of the Company	**NTPC LIMITED**
Name of the Power Station	**NCPS - DADRI-II**
ECS Characteristics	
Name of the Petitioner	**NTPC LIMITED**
Name of the Generating Station	National Capital Power Station
Unit(s)/Block(s)/Parameters	Stage-II(2x490MW)
Installed Capacity (MW)-Coal Based	1820 MW Stage-I(4x210 MW) +Stage-II(2x490 MW)
Schedule COD as per Investment Approval	Unit-5: 30.09.2019, Unit-6: 01.01.2020
Actual COD	Unit-5: 15.06.2022,Unit-6: 08.02.2024
Type of System	Flue Gas Desulfurization System (FGD)
Name of the FGD Manufacturer	BHEL
Name of CM Manufacturer	GE
Design Flue Gas Quantity at WFGD inlet	982 m3/sec
Design Flue Gas Quantity at WFGD outlet	809 m3/sec
Design Coal Sulphur Content	0.49%
Design Sox At Inlet	1957 mg/Nm3 (w)
Design Sox at Outlet	100 mg/Nm3 (d)
Design FGD Effeciency	95.06
Reagent Details	
-Primary Fuel	Limestone
Secondary	--
Alternate	--
Special Technological Features	MHPS ,Japan is the technology collaborator of BHEL for the FGD System . MHPS double contact flow scrubber with single tower has been installed at Dadri.
Any other special features	Wet Chimney without Gas to Gas Heater
Nox Control (Combustion Modification System)	NTPC , Dadri Stage-II(2x490MW) units were commissioned in the year 2010 and units are under operation. These Boilers were designed for NOx level of 260gm/GJ(approx. 750 mg/Nm3). To reduce the NOX level, Combustion modification was undertaken in both the units of Dadri Stage-II in the year 2019 . GE Power carried out the design & execution of low NOX concentric firing system (LNCFS) with Separated Over Fire Air (SOFA) dampers . This system allows the plant to comply less than the 400mg/Nm3 @6% O2 dry basis at ID Fan outlet. The NOX level is generally met by varying the firing zone stoichiometry (FZS), how and when the air is introduced local to the coal burners. This lowers the firing temperature while maintaining fireball stability. The various arrangements used in GE firings systems are designed to stage the combustion air in different amounts to achieve the lowest Furnace NOx possible. NOx reduction is achieved by operating the firing zone under sub- stoichiometric firing conditions by reducing Oxygen concentration in the active firing zone. This is accomplished by introducing a portion of the combustion air higher in the furnace through a separated over fire air (SOFA) window. Percentage of SOFA shall be in the range of 20% to 25% total air and based on the coal quality and NOX turn down requirement . A significant portion of the combustion air will be introduced through the SOFA registers, and the rest of the air shall be used for main wind box as secondary air. The primary air required for transport of fuel from Mill to furnace shall be same as existing condition .

(Petitioner)

PART-I

FORM- 3

Normative parameters considered for supplementary tariff computations

Name of the Petitioner:	**NTPC Limited**
Name of the Generating Station:	**NCTPS Dadri Stage-II (ECS)**

(Year Ending March)

Particulars	Unit	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	7				8
Base Rate of Return on Equity	%	12.15	12.15	12.15	12.15	12.15
Effective Tax Rate	%	17.472	17.472	17.472	17.472	17.472
Target Availability		85.00%	85.00%	85.00%	85.00%	85.00%
Peak Hours		85.00%				85.00%
Off-Peak Hours		85.00%				85.00%
Auxiliary Energy Consumption	%	5.25	5.25	5.25	5.25	5.25
Auxiliary Energy Consumption for emission control system (Design)	%	1.00	1.00	1.00	1.00	1.00
Design Heat Rate	Kcal/KWh	2370.66	2370.66	2370.66	2370.66	2370.66
Rate of Interest on Working Capital	%	11.90	11.90	11.90	11.90	11.90
O&M Expenses	% of Capital Cost	2				
Maintenance Spares for WC	% of O&M	20				
Receivables for WC	in Days	45				

FGD Date of Operation (ODe)

15.06.2022

Petitioner

Signature Not Verified

Digitally signed by PARIMAL PIYUSH
Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

Part-I

FORM-3A

ADDITIONAL FORM

Calculation of O&M Expenses

Name of the Company :	**NTPC Limited**
Name of the Power Station :	**NCTPS Dadri Stage-II (ECS)**

Amount in Rs. Lakhs

S.No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	**2**	**9**				**10**
1	**O&M expenses under Reg.36(1)(9)**					
1a	Normative O&M expenses- ECS	1296.08	1364.12	1435.74	1511.11	1590.45
2	**O&M expenses under Reg.36(1)(6)**					
3	**Total O&M Expenses**	**1296.08**	**1364.12**	**1435.74**	**1511.11**	**1590.45**

(Petitioner)

Form 8- Domestic		
Particulars	**69**	**75**
Series	**69**	**75**
Source of Loan1	BONDS	BONDS
Currency2	INR	INR
Amount of Loan sanctioned	4,30,000	3,00,000
Interest Type6	Fixed	Fixed
Fixed Interest Rate, if applicable	7.32%	6.69%
Base Rate, if Floating Interest7	N/A	N/A
Margin, if Floating Interest8	N/A	N/A
Are there any Caps/Floor9	No	No
If above is yes,specify caps/floor	N/A	N/A
Moratorium Period10	10	10
Moratorium effective from #	17-07-2019	13-09-2021
Repayment Period11	Bullet Repayment	Bullet Repayment
Repayment effective from	17-07-2029	13-09-2031
Repayment Frequency12	Bullet Repayment	Bullet Repayment
Repayment Instalment13,14	4,30,000	3,00,000
Base Exchange Rate16	N/A	N/A
Door to Door Maturity	10	10
Name of the Projects		
NCPS-FGD	6500	5600
RIHAND III	0	0

S.NO	Bank Loan	Interest Rate	Applicable from	Applicable upto	Number of Days	Product	Weighted Average Rate of Interest
1	**Axis Bank-IV**	8.00%	01-Apr-23	31-Mar-24	366.00	29.28	
					366.00	**29.28**	**8.00%**
2	**HDFC Bank Ltd. VI**	8.01%	01-Apr-23	31-May-23	61.00	4.89	
	HDFC Bank Ltd. VI	7.95%	01-Jun-23	31-Mar-24	305.00	24.25	
					366.00	**29.13**	**7.96%**
3	**HDFC Bank Limited-VII**	8.01%	01-Apr-23	31-May-23	61.00	4.89	
	HDFC Bank Limited-VII	7.95%	01-Jun-23	31-Mar-24	305.00	24.25	
					366.00	**29.13**	**7.96%**
4	**State Bank of India - XII**	8.00%	01-Apr-23	10-Apr-23	10.00	0.80	
	State Bank of India - XII	8.10%	11-Apr-23	10-Oct-23	183.00	14.82	
	State Bank of India - XII	8.15%	11-Oct-23	10-Jan-24	92.00	7.50	
	State Bank of India - XII	8.20%	11-Jan-24	31-Mar-24	81.00	6.64	
					366.00	**29.76**	**8.13%**

Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5050000762 **T00001** **D00001**

Unsecured Loan From AXIS BANK-II		
Source of Loan :	**AXIS BANK-II**	
Currency :	INR	
Amount of Loan :	25,00,00,00,000	
Total Drawn amount :	5,00,00,00,000	
Date of Drawl	11.07.2019	
Interest Type :	Floating	
Fixed Interest Rate :		
Base Rate, If Floating Interest	D00001- 8.30%	
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 :	11.07.2019	
Repayment Period (Inc Moratorium) :	12 Years	
Repayment Frequency :	9 Yearly Yearly Instalment	
Repayment Type :	AVG	
First Repayment Date :	11.07.2023	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate	N.A.	
Project Code	Project Name	Amount
	BARH-I	50,00,00,000
	GADARWARA	2,96,00,00,000
	NCPS-FGD	24,00,00,000
	BILHAUR SOLAR 140MW	30,00,00,000
	TALAIPALI	1,00,00,00,000
Total Allocated Amount		**5,00,00,00,000**

Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5050000641 **T00001** **D00004**

Unsecured Loan From HDFC Bank Ltd. VI		
Source of Loan :	**HDFC Bank Ltd. VI**	
Currency :	INR	
Amount of Loan :	15,00,00,00,000	
Total Drawn amount :	4,30,00,00,000	
Date of drawl	01.01.2020	
Interest Type :	Floating	
Fixed Interest Rate :		
Base Rate, If Floating Interest	7.65%	
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 :	01.01.2020	
Repayment Period (Inc Moratorium) :	15 Years	
Repayment Frequency :	9 Yearly Instalment	
Repayment Type :	AVG	
First Repayment Date :	26.09.2025	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate	N.A.	
Project Code	Project Name	Amount
	BARH-I	27,00,00,000
	NORTH KARANPURA	10,00,00,000
	KHARGONE	40,00,00,000
	TELANGANA	30,00,00,000
	UNCHAHAR-FGD	20,00,00,000
	NCPS-FGD	40,00,00,000
	VINDHYACHAL-V FGD	10,00,00,000

	SIPAT-I FGD	25,00,00,000
	KORBA-I FGD	20,00,00,000
	BARH-II FGD	20,00,00,000
	RAMAGUNDAM-I FGD	20,00,00,000
	SIMHADRI-FGD	50,00,00,000
	MOUDA-II FGD	10,00,00,000
	SOLAPUR-FGD	15,00,00,000
	KUDGI-FGD	50,00,00,000
	AURAIYA SOLAR 20MW	18,00,00,000
	KAYAKULAM FLOATING	15,00,00,000
	BILHAUR SOLAR 140MW	10,00,00,000
Total Allocated Amount		**4,30,00,00,000**

Statement Giving Details of Project Financed through a Combination of loan

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**

Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5050001371 **T00001** **D00001**

Unsecured Loan From AXIS BANK-IV		
Source of Loan :	**AXIS BANK-IV**	
Currency :	INR	
Amount of Loan :	19,00,00,00,000	
Total Drawn amount :	19,00,00,00,000	
Date of Drawl	29.03.2023	
Interest Type :	Floating	
Fixed Interest Rate :		
Base Rate, If Floating Interest	8.00%	
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 :	0 Years	
Moratorium effective from :	NIL	

Repayment Period (Inc Moratorium) :	10 Years	
Repayment Frequency :	10 Yearly Instalment	
Repayment Type :	AVG	
First Repayment Date :	29.03.2024	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate	N.A.	
Project Code	Project Name	Amount
	TANDA-II	19,00,00,000.00
	NCPS-FGD	24,00,00,000.00
	TSTPS-R&M-I	8,00,00,000.00
	BARH-I	2,20,00,00,000.00
	NORTH KARANPURA	65,00,00,000.00
	LARA-I	2,30,00,00,000.00
	GADARWARA	4,84,00,00,000.00
	DARLIPALLI	1,54,00,00,000.00
	KHARGONE	1,15,00,00,000.00
	TELANGANA	1,50,00,00,000.00
	KERENDARI	3,40,00,00,000.00
	CHATTI BARIATU	5,00,00,000.00
	TAPOVAN VISHNUGAD	32,50,00,000.00
	TALAIPALI	53,50,00,000.00
Total Allocated Amount		**19,00,00,00,000**

Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5050000741 **T00001** **D00001**

Unsecured Loan From SBI-XII		
Source of Loan :	**SBI-XII**	
Currency :	INR	
Amount of Loan :	50,00,00,00,000	
Total Drawn amount :	7,50,00,00,000	
Date of Drawal:	11.02.2019	
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 :	11.02.2019	
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	1,30,00,00,000.00
	TAPOVAN VISHNUGARH	15,00,00,000.00
	BONGAIGAON	65,00,00,000.00
	SOLAPUR	40,00,00,000.00
	GADARWARA	90,00,00,000.00
	DARLIPALLI	60,00,00,000.00
	TANDA-II	50,00,00,000.00
	KHARGONE	90,00,00,000.00
	TELANGANA	70,00,00,000.00
	CHATTI BARIATU	15,00,00,000.00
	DULANGA	20,00,00,000.00
	TALAIPALI	80,00,00,000.00
	NCPS-FGD	25,00,00,000.00
Total Allocated Amount		**7,50,00,00,000.00**

Statement Giving Details of Project Financed through a Combination of loan

Form 8

TRANCHE NO

BP NO 5050000741 **T00001** **D00003**

Unsecured Loan From SBI-XII		
Source of Loan :	**SBI-XII**	
Currency :	INR	
Amount of Loan :	50,00,00,00,000	
Total Drawn amount :	5,00,00,00,000	
Date of Drawal:	26.03.2019	

Interest Type :	Floating	
Fixed Interest Rate :	----------	
Base Rate, If Floating Interest	8.35%	
Margin, If Floating Interest :	NIL	
Are there any Caps/ Floor :	Y/N	
Frequency of Intt. Payment	Monthly	
If Above is yes, specify Caps/ Floor :		
Moratorium Period :	6 Years	
Moratorium effective from :	26.03.2019	
Repayment Period (Inc Moratorium) :	15 Years	
Repayment Frequency :	9 Yearly Installments	
Repayment Type :	AVG	
First Repayment Date :	31.03.2026	
Base Exchange Rate :	RUPEE	
Date of Base Exchange Rate	N.A.	

Project Code	**Project Name**	**Amount**
	BARH-I	40,00,00,000.00
	UNCHAHAR STPP IV	1,20,00,00,000.00
	LARA	30,00,00,000.00
	NORTH KARANPURA	30,00,00,000.00
	GADARWARA	60,00,00,000.00
	DARLIPALLI	41,00,00,000.00
	TANDA-II	30,00,00,000.00
	KHARGONE	60,00,00,000.00
	TELANGANA	60,00,00,000.00
	CHATTI BARIATU	5,00,00,000.00
	DULANGA	10,00,00,000.00
	TALAIPALI	10,00,00,000.00
	NCPS-FGD	4,00,00,000.00
Total Allocated Amount		**5,00,00,00,000.00**

Info:

(i) Floating rate, interest basis and withholding tax rates are as per mail received from IF on 10.10.2024

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
SBI, NEW YORK	01-04-2019	14-05-2019	4.25500%	5.46000%	10.00000%	Act/360	2019-20	4.279574%	100%	0	0	
SBI, NEW YORK	15-05-2019	28-07-2019	3.98763%	5.46000%	10.00000%	Act/360	2019-20	4.010660%	100%	0	0	
SBI, NEW YORK	29-07-2019	29-01-2020	3.57750%	5.46000%	10.00000%	Act/360	2019-20	3.598161%	100%	0	0	
												0.00000%
JPY Equ. 350Million A	01-04-2019	11-04-2019	0.95933%	5.46000%	100.00000%	Act/360	2019-20	1.014735%	100%	0	0	
JPY Equ. 350Million A	12-04-2019	10-10-2019	0.95700%	5.46000%	100.00000%	Act/360	2019-20	1.012270%	100%	0	0	
JPY Equ. 350Million A	11-10-2019	29-02-2020	0.95000%	5.46000%	100.00000%	Act/360	2019-20	1.004866%	100%	0	0	
JPY Equ. 350Million A	01-03-2020	31-03-2020	0.95000%	5.46000%	100.00000%	Act/360	2019-20	1.004866%	100%	0	0	
JPY Equ. 350Million A	01-04-2020	12-04-2020	0.95000%	5.46000%	100.00000%	Act/360	2020-21	1.004866%	100%	0	0	
JPY Equ. 350Million A	13-04-2020	11-10-2020	0.97417%	5.46000%	100.00000%	Act/360	2020-21	1.030432%	100%	0	0	
JPY Equ. 350Million A	12-10-2020	31-03-2021	0.95000%	5.46000%	100.00000%	Act/360	2020-21	1.004866%	100%	0	0	
JPY Equ. 350Million A	01-04-2021	11-04-2021	0.95000%	5.46000%	100.00000%	Act/360	2021-22	1.004866%	100%	0	0	
JPY Equ. 350Million A	12-04-2021	10-10-2021	0.95000%	5.46000%	100.00000%	Act/360	2021-22	1.004866%	100%	0	0	
JPY Equ. 350Million A	11-10-2021	31-03-2022	0.95000%	5.46000%	100.00000%	Act/360	2021-22	1.004866%	100%	0	0	
JPY Equ. 350Million A	01-04-2022	10-04-2022	0.95000%	5.46000%	100.00000%	Act/360	2022-23	1.004866%	100%	0	0	
JPY Equ. 350Million A	11-04-2022	11-07-2022	0.95000%	5.46000%	100.00000%	Act/365	2022-23	1.004866%	100%	0	0	
JPY Equ. 350Million A	12-07-2022	11-10-2022	0.95000%	5.46000%	100.00000%	Act/365	2022-23	1.004866%	100%	0	0	
JPY Equ. 350Million A	12-10-2022	11-01-2023	0.95000%	5.46000%	100.00000%	Act/365	2022-23	1.004866%	100%	0	0	
JPY Equ. 350Million A	12-01-2023	31-03-2023	0.95000%	5.46000%	100.00000%	Act/365	2022-23	1.004866%	100%	0	0	
JPY Equ. 350Million A	01-04-2023	11-04-2023	0.95000%	5.46000%	100.00000%	Act/365	2023-24	1.004866%	100%	0	0	
JPY Equ. 350Million A	12-04-2023	11-07-2023	0.95000%	5.46000%	100.00000%	Act/365	2023-24	1.004866%	100%	0	0	
JPY Equ. 350Million A	12-07-2023	11-10-2023	0.95000%	5.46000%	100.00000%	Act/365	2023-24	1.004866%	100%	0	0	
JPY Equ. 350Million A	12-10-2023	11-01-2024	0.95000%	5.46000%	100.00000%	Act/365	2023-24	1.004866%	100%	0	0	
JPY Equ. 350Million A	12-01-2024	31-03-2024	0.96342%	5.46000%	100.00000%	Act/365	2023-24	1.019061%	100%	1	0.0102185	
												1.02190%
JPY Equ. 350Million B	01-04-2019	11-04-2019	0.95933%	5.46000%	100.00000%	Act/360	2019-20	1.014735%	100%	0	0	
JPY Equ. 350Million B	12-04-2019	10-10-2019	0.95700%	5.46000%	100.00000%	Act/360	2019-20	1.012270%	100%	0	0	
JPY Equ. 350Million B	11-10-2019	29-02-2020	0.95000%	5.46000%	100.00000%	Act/360	2019-20	1.004866%	100%	0	0	
JPY Equ. 350Million B	01-03-2020	31-03-2020	0.95000%	5.46000%	100.00000%	Act/360	2019-20	1.004866%	100%	0	0	
JPY Equ. 350Million B	01-04-2020	12-04-2020	0.95000%	5.46000%	100.00000%	Act/360	2020-21	1.004866%	100%	0	0	
JPY Equ. 350Million B	13-04-2020	11-10-2020	0.97417%	5.46000%	100.00000%	Act/360	2020-21	1.030432%	100%	0	0	
JPY Equ. 350Million B	12-10-2020	31-03-2021	0.95000%	5.46000%	100.00000%	Act/360	2020-21	1.004866%	100%	0	0	
JPY Equ. 350Million B	01-04-2021	11-04-2021	0.95000%	5.46000%	100.00000%	Act/360	2021-22	1.004866%	100%	0	0	
JPY Equ. 350Million B	12-04-2021	10-10-2021	0.95000%	5.46000%	100.00000%	Act/360	2021-22	1.004866%	100%	0	0	
JPY Equ. 350Million B	11-10-2021	31-03-2022	0.95000%	5.46000%	100.00000%	Act/360	2021-22	1.004866%	100%	0	0	
JPY Equ. 350Million B	01-04-2022	10-04-2022	0.95000%	5.46000%	100.00000%	Act/360	2022-23	1.004866%	100%	0	0	
JPY Equ. 350Million B	11-04-2022	11-07-2022	0.95000%	5.46000%	100.00000%	Act/365	2022-23	1.004866%	100%	0	0	
JPY Equ. 350Million B	12-07-2022	11-10-2022	0.95000%	5.46000%	100.00000%	Act/365	2022-23	1.004866%	100%	0	0	
JPY Equ. 350Million B	12-10-2022	11-01-2023	0.95000%	5.46000%	100.00000%	Act/365	2022-23	1.004866%	100%	0	0	
JPY Equ. 350Million B	12-01-2023	31-03-2023	0.95000%	5.46000%	100.00000%	Act/365	2022-23	1.004866%	100%	0	0	
JPY Equ. 350Million B	01-04-2023	11-04-2023	0.95000%	5.46000%	100.00000%	Act/365	2023-24	1.004866%	100%	0	0	
JPY Equ. 350Million B	12-04-2023	11-07-2023	0.95000%	5.46000%	100.00000%	Act/365	2023-24	1.004866%	100%	0	0	
JPY Equ. 350Million B	12-07-2023	11-10-2023	0.95000%	5.46000%	100.00000%	Act/365	2023-24	1.004866%	100%	0	0	
JPY Equ. 350Million B	12-10-2023	11-01-2024	0.95000%	5.46000%	100.00000%	Act/365	2023-24	1.004866%	100%	0	0	
JPY Equ. 350Million B	12-01-2024	31-03-2024	0.96342%	5.46000%	100.00000%	Act/365	2023-24	1.019061%	100%	1	0.0102185	
												1.02190%
JPY Equ. 300Million A	01-04-2019	09-04-2019	1.02000%	5.46000%	100.00000%	Act/360	2019-20	1.078908%	100%	0	0	
JPY Equ. 300Million A	10-04-2019	09-07-2019	1.02000%	5.46000%	100.00000%	Act/360	2019-20	1.078908%	100%	0	0	
JPY Equ. 300Million A	10-07-2019	09-01-2020	1.02000%	5.46000%	100.00000%	Act/360	2019-20	1.078908%	100%	0	0	
JPY Equ. 300Million A	10-01-2020	29-02-2020	1.03467%	5.46000%	100.00000%	Act/360	2019-20	1.094426%	100%	0	0	
JPY Equ. 300Million A	01-03-2020	31-03-2020	1.03467%	5.46000%	100.00000%	Act/360	2019-20	1.094426%	100%	0	0	
JPY Equ. 300Million A	01-04-2020	12-07-2020	1.03467%	5.46000%	100.00000%	Act/360	2020-21	1.094426%	100%	0	0	
JPY Equ. 300Million A	13-07-2020	12-01-2021	1.02000%	5.46000%	100.00000%	Act/360	2020-21	1.078908%	100%	0	0	
JPY Equ. 300Million A	13-01-2021	31-03-2021	1.02000%	5.46000%	100.00000%	Act/360	2020-21	1.078908%	100%	0	0	
JPY Equ. 300Million A	01-04-2021	12-07-2021	1.02000%	5.46000%	100.00000%	Act/360	2021-22	1.078908%	100%	0	0	
JPY Equ. 300Million A	13-07-2021	12-01-2022	1.02000%	5.46000%	100.00000%	Act/360	2021-22	1.078908%	100%	0	0	
JPY Equ. 300Million A	13-01-2022	31-03-2022	1.02000%	5.46000%	100.00000%	Act/365	2021-22	1.078908%	100%	0	0	
JPY Equ. 300Million A	01-04-2022	12-04-2022	1.02000%	5.46000%	100.00000%	Act/365	2022-23	1.078908%	100%	0	0	
JPY Equ. 300Million A	13-04-2022	12-07-2022	1.02000%	5.46000%	100.00000%	Act/365	2022-23	1.078908%	100%	0	0	
JPY Equ. 300Million A	13-07-2022	12-10-2022	1.02000%	5.46000%	100.00000%	Act/365	2022-23	1.078908%	100%	0	0	
JPY Equ. 300Million A	13-10-2022	12-01-2023	1.02000%	5.46000%	100.00000%	Act/365	2022-23	1.078908%	100%	0	0	
JPY Equ. 300Million A	13-01-2023	31-03-2023	1.02000%	5.46000%	100.00000%	Act/365	2022-23	1.078908%	100%	0	0	
JPY Equ. 300Million A	01-04-2023	12-04-2023	1.02000%	5.46000%	100.00000%	Act/365	2023-24	1.078908%	100%	0	0	
JPY Equ. 300Million A	13-04-2023	12-07-2023	1.02000%	5.46000%	100.00000%	Act/365	2023-24	1.078908%	100%	0	0	
JPY Equ. 300Million A	13-07-2023	12-10-2023	1.02000%	5.46000%	100.00000%	Act/365	2023-24	1.078908%	100%	0	0	
JPY Equ. 300Million A	13-10-2023	14-01-2024	1.02000%	5.46000%	100.00000%	Act/365	2023-24	1.078908%	100%	0	0	
JPY Equ. 300Million A	15-01-2024	31-03-2024	1.03665%	5.46000%	100.00000%	Act/365	2023-24	1.096520%	100%	1	0.0109952	
												1.09950%
JPY Equ. 300Million B	01-04-2019	09-04-2019	1.02000%	5.46000%	100.00000%	Act/360	2019-20	1.078908%	100%	0	0	
JPY Equ. 300Million B	10-04-2019	09-07-2019	1.02000%	5.46000%	100.00000%	Act/360	2019-20	1.078908%	100%	0	0	
JPY Equ. 300Million B	10-07-2019	09-01-2020	1.02000%	5.46000%	100.00000%	Act/360	2019-20	1.078908%	100%	0	0	
JPY Equ. 300Million B	10-01-2020	29-02-2020	1.03467%	5.46000%	100.00000%	Act/360	2019-20	1.094426%	100%	0	0	
JPY Equ. 300Million B	01-03-2020	31-03-2020	1.03467%	5.46000%	100.00000%	Act/360	2019-20	1.094426%	100%	0	0	
JPY Equ. 300Million B	01-04-2020	12-07-2020	1.03467%	5.46000%	100.00000%	Act/360	2020-21	1.094426%	100%	0	0	
JPY Equ. 300Million B	13-07-2020	12-01-2021	1.02000%	5.46000%	100.00000%	Act/360	2020-21	1.078908%	100%	0	0	
JPY Equ. 300Million B	13-01-2021	31-03-2021	1.02000%	5.46000%	100.00000%	Act/360	2020-21	1.078908%	100%	0	0	
JPY Equ. 300Million B	01-04-2021	12-07-2021	1.02000%	5.46000%	100.00000%	Act/360	2021-22	1.078908%	100%	0	0	
JPY Equ. 300Million B	13-07-2021	12-01-2022	1.02000%	5.46000%	100.00000%	Act/360	2021-22	1.078908%	100%	0	0	

JPY Equ. 300Million B	13-01-2022	31-03-2022	1.02000%	5.46000%	100.00000%	Act/365	2021-22	1.078908%	100%	0	0	
JPY Equ. 300Million B	01-04-2022	12-04-2022	1.02000%	5.46000%	100.00000%	Act/365	2022-23	1.078908%	100%	0	0	
JPY Equ. 300Million B	13-04-2022	12-07-2022	1.02000%	5.46000%	100.00000%	Act/365	2022-23	1.078908%	100%	0	0	
JPY Equ. 300Million B	13-07-2022	12-10-2022	1.02000%	5.46000%	100.00000%	Act/365	2022-23	1.078908%	100%	0	0	
JPY Equ. 300Million B	13-10-2022	12-01-2023	1.02000%	5.46000%	100.00000%	Act/365	2022-23	1.078908%	100%	0	0	
JPY Equ. 300Million B	13-01-2023	31-03-2023	1.02000%	5.46000%	100.00000%	Act/365	2022-23	1.078908%	100%	0	0	
JPY Equ. 300Million B	01-04-2023	12-04-2023	1.02000%	5.46000%	100.00000%	Act/365	2023-24	1.078908%	100%	0	0	
JPY Equ. 300Million B	13-04-2023	12-07-2023	1.02000%	5.46000%	100.00000%	Act/365	2023-24	1.078908%	100%	0	0	
JPY Equ. 300Million B	13-07-2023	12-10-2023	1.02000%	5.46000%	100.00000%	Act/365	2023-24	1.078908%	100%	0	0	
JPY Equ. 300Million B	13-10-2023	14-01-2024	1.02000%	5.46000%	100.00000%	Act/365	2023-24	1.078908%	100%	0	0	
JPY Equ. 300Million B	15-01-2024	31-03-2024	1.03665%	5.46000%	100.00000%	Act/365	2023-24	1.096520%	100%	1	0.0109952	
												1.09950%
JPY Equ. 750M Drawl (I to IV)	29-01-2020	29-02-2020	0.80000%	5.46000%	58.73020%	Act/360	2019-20	0.827135%	75%	0	0	
JPY Equ. 750M Drawl (I to IV)	01-03-2020	31-03-2020	0.80000%	5.46000%	58.73020%	Act/360	2019-20	0.827135%	75%	0	0	
JPY Equ. 750M Drawl (I to IV)	01-04-2020	28-04-2020	0.80000%	5.46000%	58.73020%	Act/360	2020-21	0.827135%	75%	0	0	
JPY Equ. 750M Drawl (I to IV)	29-04-2020	29-07-2020	0.80000%	5.46000%	58.73020%	Act/360	2020-21	0.827135%	75%	0	0	
JPY Equ. 750M Drawl (I to IV)	30-07-2020	28-01-2021	0.80000%	5.46000%	58.73020%	Act/360	2020-21	0.827135%	75%	0	0	
JPY Equ. 750M Drawl (I to IV)	29-01-2021	31-03-2021	0.80000%	5.46000%	58.73020%	Act/360	2020-21	0.827135%	75%	0	0	
JPY Equ. 750M Drawl (I to IV)	01-04-2021	28-07-2021	0.80000%	5.46000%	58.73020%	Act/360	2021-22	0.827135%	75%	0	0	
JPY Equ. 750M Drawl (I to IV)	29-07-2021	31-08-2021	0.80000%	5.46000%	58.73020%	Act/360	2021-22	0.827135%	75%	0	0	
JPY Equ. 750M Drawl (I to IV)	01-09-2021	30-01-2022	0.80000%	5.46000%	58.73020%	Act/360	2021-22	0.827135%	75%	0	0	
JPY Equ. 750M Drawl (I to IV)	31-01-2022	31-03-2022	0.80000%	5.46000%	58.73020%	Act/365	2021-22	0.827135%	75%	0	0	
JPY Equ. 750M Drawl (I to IV)	01-04-2022	27-04-2022	0.80000%	5.46000%	58.73020%	Act/365	2022-23	0.827135%	75%	0	0	
JPY Equ. 750M Drawl (I to IV)	28-04-2022	27-07-2022	0.80000%	5.46000%	58.73020%	Act/365	2022-23	0.827135%	75%	0	0	
JPY Equ. 750M Drawl (I to IV)	28-07-2022	27-10-2022	0.80000%	5.46000%	58.73020%	Act/365	2022-23	0.827135%	75%	0	0	
JPY Equ. 750M Drawl (I to IV)	28-10-2022	29-01-2023	0.80000%	5.46000%	58.73020%	Act/365	2022-23	0.827135%	75%	0	0	
JPY Equ. 750M Drawl (I to IV)	30-01-2023	31-03-2023	0.80000%	5.46000%	58.73020%	Act/365	2022-23	0.827135%	75%	0	0	
JPY Equ. 750M Drawl (I to IV)	01-04-2023	27-04-2023	0.80000%	5.46000%	58.73020%	Act/365	2023-24	0.827135%	75%	0	0	
JPY Equ. 750M Drawl (I to IV)	28-04-2023	30-07-2023	0.80000%	5.46000%	58.73020%	Act/365	2023-24	0.827135%	75%	0	0	
JPY Equ. 750M Drawl (I to IV)	31-07-2023	29-10-2023	0.80000%	5.46000%	58.73020%	Act/365	2023-24	0.827135%	75%	0	0	
JPY Equ. 750M Drawl (I to IV)	30-10-2023	30-01-2024	0.80000%	5.46000%	58.73020%	Act/365	2023-24	0.827135%	75%	0	0	
JPY Equ. 750M Drawl (I to IV)	31-01-2024	31-03-2024	0.83190%	5.46000%	58.73020%	Act/365	2023-24	0.860117%	75%	1	0.0064686	
JPY Equ. 750M Drawl (I to IV)	29-01-2020	29-02-2020	1.02000%	5.46000%	52.38100%	Act/360	2019-20	1.050857%	25%	0	0	
JPY Equ. 750M Drawl (I to IV)	01-03-2020	31-03-2020	1.02000%	5.46000%	52.38100%	Act/360	2019-20	1.050857%	25%	0	0	
JPY Equ. 750M Drawl (I to IV)	01-04-2020	28-04-2020	1.02000%	5.46000%	52.38100%	Act/360	2020-21	1.050857%	25%	0	0	
JPY Equ. 750M Drawl (I to IV)	29-04-2020	29-07-2020	1.02000%	5.46000%	52.38100%	Act/360	2020-21	1.050857%	25%	0	0	
JPY Equ. 750M Drawl (I to IV)	30-07-2020	28-01-2021	1.02000%	5.46000%	52.38100%	Act/360	2020-21	1.050857%	25%	0	0	
JPY Equ. 750M Drawl (I to IV)	29-01-2021	31-03-2021	1.02000%	5.46000%	52.38100%	Act/360	2020-21	1.050857%	25%	0	0	
JPY Equ. 750M Drawl (I to IV)	01-04-2021	28-07-2021	1.02000%	5.46000%	52.38100%	Act/360	2021-22	1.050857%	25%	0	0	
JPY Equ. 750M Drawl (I to IV)	29-07-2021	31-08-2021	1.02000%	5.46000%	52.38100%	Act/360	2021-22	1.050857%	25%	0	0	
JPY Equ. 750M Drawl (I to IV)	01-09-2021	30-01-2022	1.02000%	5.46000%	52.38100%	Act/360	2021-22	1.050857%	25%	0	0	
JPY Equ. 750M Drawl (I to IV)	31-01-2022	31-03-2022	1.02000%	5.46000%	52.38100%	Act/365	2021-22	1.050857%	25%	0	0	
JPY Equ. 750M Drawl (I to IV)	01-04-2022	27-04-2022	1.02000%	5.46000%	52.38100%	Act/365	2022-23	1.050857%	25%	0	0	
JPY Equ. 750M Drawl (I to IV)	28-04-2022	27-07-2022	1.02000%	5.46000%	52.38100%	Act/365	2022-23	1.050857%	25%	0	0	
JPY Equ. 750M Drawl (I to IV)	28-07-2022	27-10-2022	1.02000%	5.46000%	52.38100%	Act/365	2022-23	1.050857%	25%	0	0	
JPY Equ. 750M Drawl (I to IV)	28-10-2022	29-01-2023	1.02000%	5.46000%	52.38100%	Act/365	2022-23	1.050857%	25%	0	0	
JPY Equ. 750M Drawl (I to IV)	30-01-2023	31-03-2023	1.02000%	5.46000%	52.38100%	Act/365	2022-23	1.050857%	25%	0	0	
JPY Equ. 750M Drawl (I to IV)	01-04-2023	27-04-2023	1.02000%	5.46000%	52.38100%	Act/365	2023-24	1.050857%	25%	0	0	
JPY Equ. 750M Drawl (I to IV)	28-04-2023	30-07-2023	1.02000%	5.46000%	52.38100%	Act/365	2023-24	1.050857%	25%	0	0	
JPY Equ. 750M Drawl (I to IV)	31-07-2023	29-10-2023	1.02000%	5.46000%	52.38100%	Act/365	2023-24	1.050857%	25%	0	0	
JPY Equ. 750M Drawl (I to IV)	30-10-2023	30-01-2024	1.02000%	5.46000%	52.38100%	Act/365	2023-24	1.050857%	25%	0	0	
JPY Equ. 750M Drawl (I to IV)	31-01-2024	31-03-2024	1.05190%	5.46000%	52.38100%	Act/365	2023-24	1.083722%	25%	1	0.0041	

												0.91850%
JPY Equ. 750M Drawl (V-VI)	27-11-2020	25-02-2021	0.80000%	5.46000%	0.00000%	Act/360	2020-21	0.800000%	75%	0	0	
JPY Equ. 750M Drawl (V-VI)	26-02-2021	31-03-2021	0.80000%	5.46000%	0.00000%	Act/360	2020-21	0.800000%	75%	0	0	
JPY Equ. 750M Drawl (V-VI)	01-04-2021	28-07-2021	0.80000%	5.46000%	0.00000%	Act/360	2021-22	0.800000%	75%	0	0	
JPY Equ. 750M Drawl (V-VI)	29-07-2021	31-08-2021	0.80000%	5.46000%	0.00000%	Act/360	2021-22	0.800000%	75%	0	0	
JPY Equ. 750M Drawl (V-VI)	01-09-2021	30-01-2022	0.80000%	5.46000%	0.00000%	Act/360	2021-22	0.800000%	75%	0	0	
JPY Equ. 750M Drawl (V-VI)	31-01-2022	31-03-2022	0.80000%	5.46000%	0.00000%	Act/365	2021-22	0.800000%	75%	0	0	
JPY Equ. 750M Drawl (V-VI)	01-04-2022	27-04-2022	0.80000%	5.46000%	0.00000%	Act/365	2022-23	0.800000%	75%	0	0	
JPY Equ. 750M Drawl (V-VI)	28-04-2022	27-07-2022	0.80000%	5.46000%	0.00000%	Act/365	2022-23	0.800000%	75%	0	0	
JPY Equ. 750M Drawl (V-VI)	28-07-2022	27-10-2022	0.80000%	5.46000%	0.00000%	Act/365	2022-23	0.800000%	75%	0	0	
JPY Equ. 750M Drawl (V-VI)	28-10-2022	29-01-2023	0.80000%	5.46000%	0.00000%	Act/365	2022-23	0.800000%	75%	0	0	
JPY Equ. 750M Drawl (V-VI)	30-01-2023	31-03-2023	0.80000%	5.46000%	0.00000%	Act/365	2022-23	0.800000%	75%	0	0	
JPY Equ. 750M Drawl (V-VI)	01-04-2023	27-04-2023	0.80000%	5.46000%	0.00000%	Act/365	2023-24	0.800000%	75%	0	0	
JPY Equ. 750M Drawl (V-VI)	28-04-2023	30-07-2023	0.80000%	5.46000%	0.00000%	Act/365	2023-24	0.800000%	75%	0	0	
JPY Equ. 750M Drawl (V-VI)	31-07-2023	29-10-2023	0.80000%	5.46000%	0.00000%	Act/365	2023-24	0.800000%	75%	0	0	
JPY Equ. 750M Drawl (V-VI)	30-10-2023	30-01-2024	0.80000%	5.46000%	0.00000%	Act/365	2023-24	0.800000%	75%	0	0	
JPY Equ. 750M Drawl (V-VI)	31-01-2024	31-03-2024	0.83190%	5.46000%	0.00000%	Act/365	2023-24	0.831900%	75%	1	0.0062563	
JPY Equ. 750M Drawl (V-VI)	27-11-2020	25-02-2021	1.02000%	5.46000%	0.00000%	Act/360	2020-21	1.020000%	25%	0	0	
JPY Equ. 750M Drawl (V-VI)	26-02-2021	31-03-2021	1.02000%	5.46000%	0.00000%	Act/360	2020-21	1.020000%	25%	0	0	
JPY Equ. 750M Drawl (V-VI)	01-04-2021	28-07-2021	1.02000%	5.46000%	0.00000%	Act/360	2021-22	1.020000%	25%	0	0	
JPY Equ. 750M Drawl (V-VI)	29-07-2021	31-08-2021	1.02000%	5.46000%	0.00000%	Act/360	2021-22	1.020000%	25%	0	0	
JPY Equ. 750M Drawl (V-VI)	01-09-2021	30-01-2022	1.02000%	5.46000%	0.00000%	Act/360	2021-22	1.020000%	25%	0	0	
JPY Equ. 750M Drawl (V-VI)	31-01-2022	31-03-2022	1.02000%	5.46000%	0.00000%	Act/365	2021-22	1.020000%	25%	0	0	
JPY Equ. 750M Drawl (V-VI)	01-04-2022	27-04-2022	1.02000%	5.46000%	0.00000%	Act/365	2022-23	1.020000%	25%	0	0	
JPY Equ. 750M Drawl (V-VI)	28-04-2022	27-07-2022	1.02000%	5.46000%	0.00000%	Act/365	2022-23	1.020000%	25%	0	0	
JPY Equ. 750M Drawl (V-VI)	28-07-2022	27-10-2022	1.02000%	5.46000%	0.00000%	Act/365	2022-23	1.020000%	25%	0	0	
JPY Equ. 750M Drawl (V-VI)	28-10-2022	29-01-2023	1.02000%	5.46000%	0.00000%	Act/365	2022-23	1.020000%	25%	0	0	
JPY Equ. 750M Drawl (V-VI)	30-01-2023	31-03-2023	1.02000%	5.46000%	0.00000%	Act/365	2022-23	1.020000%	25%	0	0	
JPY Equ. 750M Drawl (V-VI)	01-04-2023	27-04-2023	1.02000%	5.46000%	0.00000%	Act/365	2023-24	1.020000%	25%	0	0	
JPY Equ. 750M Drawl (V-VI)	28-04-2023	30-07-2023	1.02000%	5.46000%	0.00000%	Act/365	2023-24	1.020000%	25%	0	0	
JPY Equ. 750M Drawl (V-VI)	31-07-2023	29-10-2023	1.02000%	5.46000%	0.00000%	Act/365	2023-24	1.020000%	25%	0	0	
JPY Equ. 750M Drawl (V-VI)	30-10-2023	30-01-2024	1.02000%	5.46000%	0.00000%	Act/365	2023-24	1.020000%	25%	0	0	
JPY Equ. 750M Drawl (V-VI)	31-01-2024	31-03-2024	1.05190%	5.46000%	0.00000%	Act/365	2023-24	1.051900%	25%	1	0.002637	
												0.88930%
Mizuho II	01-04-2019	14-07-2019	4.11463%	5.46000%	100.00000%	Act/360	2019-20	4.352264%	100%	0	0	
Mizuho II	15-07-2019	14-01-2020	3.46263%	5.46000%	100.00000%	Act/360	2019-20	3.662608%	100%	0	0	
Mizuho II	15-01-2020	25-03-2020	3.05720%	5.46000%	100.00000%	Act/360	2019-20	3.233763%	100%	0	0	
Mizuho II	26-03-2020	31-03-2020	2.23213%	5.46000%	100.00000%	Act/360	2019-20	2.361043%	100%	0	0	
Mizuho II	01-04-2020	27-09-2020	2.23213%	5.46000%	100.00000%	Act/360	2020-21	2.361043%	100%	0	0	
Mizuho II	28-09-2020	25-03-2021	1.52350%	5.46000%	100.00000%	Act/360	2020-21	1.611487%	100%	0	0	
Mizuho II	26-03-2021	31-03-2021	1.45950%	5.46000%	100.00000%	Act/360	2020-21	1.543791%	100%	0	0	
Mizuho II	01-04-2021	31-08-2021	1.45950%	5.46000%	100.00000%	Act/360	2021-22	1.543791%	100%	0	0	
Mizuho II	01-09-2021	27-09-2021	1.45950%	5.46000%	100.00000%	Act/360	2021-22	1.543791%	100%	0	0	
												0.00000%
Euro Loan I Drawl I	07-06-2021	05-12-2021	0.95000%	1.77703%		Act/360	2021-22	0.966882%	100%	0	0	
Euro Loan I Drawl I	06-12-2021	31-03-2022	0.95000%	1.77703%		Act/360	2021-22	0.966882%	100%	0	0	
Euro Loan I Drawl I	01-04-2022	05-06-2022	0.95000%	1.77703%		Act/360	2022-23	0.966882%	100%	0	0	
Euro Loan I Drawl I	06-06-2022	05-12-2022	0.95000%	1.77703%		Act/360	2022-23	0.966882%	100%	0	0	
Euro Loan I Drawl I	06-12-2022	31-03-2023	3.35600%	1.77703%		Act/360	2022-23	3.415637%	100%	0	0	
Euro Loan I Drawl I	01-04-2023	05-06-2023	3.35600%	1.77703%		Act/360	2023-24	3.415637%	100%	0	0	
Euro Loan I Drawl I	06-06-2023	05-12-2023	4.67800%	1.77703%		Act/360	2023-24	4.761129%	100%	0	0	
Euro Loan I Drawl I	06-12-2023	31-03-2024	4.89500%	1.77703%		Act/360	2023-24	4.981985%	100%	1	0.0506502	
												5.06500%
Euro Loan I Drawl II	11-08-2021	31-08-2021	0.95000%	1.743516%		Act/360	2021-22	0.966563%	100%	0	0	
Euro Loan I Drawl II	01-09-2021	05-12-2021	0.95000%	1.743516%		Act/360	2021-22	0.966563%	100%	0	0	
Euro Loan I Drawl II	06-12-2021	31-03-2022	0.95000%	1.743516%		Act/360	2021-22	0.966563%	100%	0	0	
Euro Loan I Drawl II	01-04-2022	05-06-2022	0.95000%	1.743516%		Act/360	2022-23	0.966563%	100%	0	0	
Euro Loan I Drawl II	06-06-2022	05-12-2022	0.95000%	1.743516%		Act/360	2022-23	0.966563%	100%	0	0	
Euro Loan I Drawl II	06-12-2022	31-03-2023	3.35600%	1.743516%		Act/360	2022-23	3.414512%	100%	0	0	
Euro Loan I Drawl II	01-04-2023	05-06-2023	3.35600%	1.743516%		Act/360	2023-24	3.414512%	100%	0	0	
Euro Loan I Drawl II	06-06-2023	05-12-2023	4.67800%	1.743516%		Act/360	2023-24	4.759562%	100%	0	0	
Euro Loan I Drawl II	06-12-2023	31-03-2024	4.89500%	1.743516%		Act/360	2023-24	4.980345%	100%	1	0.0506335	
												5.06340%
Euro Loan I Drawl III	21-09-2021	05-12-2021	0.95000%	1.743516%		Act/360	2021-22	0.966563%	100%	0	0	
Euro Loan I Drawl III	06-12-2021	31-03-2022	0.95000%	1.743516%		Act/360	2021-22	0.966563%	100%	0	0	
Euro Loan I Drawl III	01-04-2022	05-06-2022	0.95000%	1.743516%		Act/360	2022-23	0.966563%	100%	0	0	
Euro Loan I Drawl III	06-06-2022	05-12-2022	0.95000%	1.743516%		Act/360	2022-23	0.966563%	100%	0	0	
Euro Loan I Drawl III	06-12-2022	31-03-2023	3.35600%	1.743516%		Act/360	2022-23	3.414512%	100%	0	0	
Euro Loan I Drawl III	01-04-2023	05-06-2023	3.35600%	1.743516%		Act/360	2023-24	3.414512%	100%	0	0	
Euro Loan I Drawl III	06-06-2023	05-12-2023	4.67800%	1.743516%		Act/360	2023-24	4.759562%	100%	0	0	
Euro Loan I Drawl III	06-12-2023	31-03-2024	4.89500%	1.743516%		Act/360	2023-24	4.980345%	100%	1	0.0506335	
												5.06340%
USD 750 Million Drawl I	25-04-2022	24-07-2022	2.12913%	0		Act/360	2022-23	2.129130%	87%	0	0	
USD 750 Million Drawl I	25-07-2022	24-10-2022	3.72092%	0		Act/360	2022-23	3.720920%	87%	0	0	
USD 750 Million Drawl I	25-10-2022	31-03-2023	5.67396%	0		Act/360	2022-23	5.673960%	87%	0	0	
USD 750 Million Drawl I	01-04-2023	24-04-2023	5.67396%	0		Act/360	2023-24	5.673960%	87%	0	0	
USD 750 Million Drawl I	25-04-2023	24-10-2023	6.26834%	0		Act/360	2023-24	6.268340%	87%	0	0	
USD 750 Million Drawl I	25-10-2023	31-03-2024	6.61909%	0		Act/360	2023-24	6.619090%	87%	0	0	
USD 750 Million Drawl I	25-04-2022	24-07-2022	2.04913%	5.46000%	100.00000%	Act/360	2022-23	2.167474%	13%	0	0	
USD 750 Million Drawl I	25-07-2022	24-10-2022	3.64092%	5.46000%	100.00000%	Act/360	2022-23	3.851195%	13%	0	0	

USD 750 Million Drawl I	25-10-2022	31-03-2023	5.59396%	5.46000%	100.00000%	Act/360	2022-23	5.917030%	13%	0	0	
USD 750 Million Drawl I	01-04-2023	24-04-2023	5.59396%	5.46000%	100.00000%	Act/360	2023-24	5.917030%	13%	0	0	
USD 750 Million Drawl I	25-04-2023	24-10-2023	6.26834%	5.46000%	100.00000%	Act/360	2023-24	6.630358%	13%	0	0	
USD 750 Million Drawl I	25-10-2023	31-03-2024	6.53909%	5.46000%	100.00000%	Act/360	2023-24	6.916744%	13%	1	0.0093761	
												6.76980%
USD 750 Million Drawl II	29-07-2022	24-10-2022	3.75674%	0		Act/360	2022-23	3.756740%	87%	0	0	
USD 750 Million Drawl II	25-10-2022	31-03-2023	5.67396%	0		Act/360	2022-23	5.673960%	87%	0	0	
USD 750 Million Drawl II	01-04-2023	24-04-2023	5.67396%	0		Act/360	2023-24	5.673960%	87%	0	0	
USD 750 Million Drawl II	25-04-2023	24-10-2023	6.26834%	0		Act/360	2023-24	6.268340%	87%	0	0	
USD 750 Million Drawl II	25-10-2023	31-03-2024	6.61909%	0		Act/360	2023-24	6.619090%	87%	1	0.0583216	
USD 750 Million Drawl II	29-07-2022	24-10-2022	3.67674%	5.46000%	100.00000%	Act/360	2022-23	3.889084%	13%	0	0	
USD 750 Million Drawl II	25-10-2022	31-03-2023	5.59396%	5.46000%	100.00000%	Act/360	2022-23	5.917030%	13%	0	0	
USD 750 Million Drawl II	01-04-2023	24-04-2023	5.59396%	5.46000%	100.00000%	Act/360	2023-24	5.917030%	13%	0	0	
USD 750 Million Drawl II	25-04-2023	24-10-2023	6.26834%	5.46000%	100.00000%	Act/360	2023-24	6.630358%	13%	0	0	
USD 750 Million Drawl II	25-10-2023	31-03-2024	6.53909%	5.46000%	100.00000%	Act/360	2023-24	6.916744%	13%	1	0.0093761	
												6.76980%
USD 750 Million Drawl III	28-09-2022	24-10-2022	4.41820%	0		Act/360	2022-23	4.418200%	87%	0	0	
USD 750 Million Drawl III	25-10-2022	31-03-2023	5.67396%	0		Act/360	2022-23	5.673960%	87%	0	0	
USD 750 Million Drawl III	01-04-2023	24-04-2023	5.67396%	0		Act/360	2023-24	5.673960%	87%	0	0	
USD 750 Million Drawl III	25-04-2023	24-10-2023	6.26834%	0		Act/360	2023-24	6.268340%	87%	0	0	
USD 750 Million Drawl III	25-10-2023	31-03-2024	6.61909%	0		Act/360	2023-24	6.619090%	87%	1	0.0583216	
USD 750 Million Drawl III	28-09-2022	24-10-2022	4.06820%	5.46000%	100.00000%	Act/360	2022-23	4.303152%	13%	0	0	
USD 750 Million Drawl III	25-10-2022	31-03-2023	5.59396%	5.46000%	100.00000%	Act/360	2022-23	5.917030%	13%	0	0	
USD 750 Million Drawl III	01-04-2023	24-04-2023	5.59396%	5.46000%	100.00000%	Act/360	2023-24	5.917030%	13%	0	0	
USD 750 Million Drawl III	25-04-2023	24-10-2023	6.26834%	5.46000%	100.00000%	Act/360	2023-24	6.630358%	13%	0	0	
USD 750 Million Drawl III	25-10-2023	31-03-2024	6.53909%	5.46000%	100.00000%	Act/360	2023-24	6.916744%	13%	1	0.0093761	
												6.76980%
USD 750 Million Drawl IV	09-11-2022	31-03-2023	5.71764%	0		Act/360	2022-23	5.717640%	87%	0	0	
USD 750 Million Drawl IV	01-04-2023	24-04-2023	5.71764%	0		Act/360	2023-24	5.717640%	87%	0	0	
USD 750 Million Drawl IV	25-04-2023	24-10-2023	6.26834%	0		Act/360	2023-24	6.268340%	87%	0	0	
USD 750 Million Drawl IV	25-10-2023	31-03-2024	6.61909%	0		Act/360	2023-24	6.619090%	87%	1	0.0583216	
USD 750 Million Drawl IV	09-11-2022	31-03-2023	5.63764%	5.46000%	100.00000%	Act/360	2022-23	5.963232%	13%	0	0	
USD 750 Million Drawl IV	01-04-2023	24-04-2023	5.63764%	5.46000%	100.00000%	Act/360	2023-24	5.963232%	13%	0	0	
USD 750 Million Drawl IV	25-04-2023	24-10-2023	6.26834%	5.46000%	100.00000%	Act/360	2023-24	6.630358%	13%	0	0	
USD 750 Million Drawl IV	25-10-2023	31-03-2024	6.53909%	5.46000%	100.00000%	Act/360	2023-24	6.916744%	13%	1	0.0093761	
												6.76980%
USD 750 Million Drawl V	23-12-2022	31-03-2023	5.71764%	0		Act/360	2022-23	5.717640%	87%	0	0	
USD 750 Million Drawl V	01-04-2023	24-04-2023	5.71764%	0		Act/360	2023-24	5.717640%	87%	0	0	
USD 750 Million Drawl V	25-04-2023	24-10-2023	6.26834%	0		Act/360	2023-24	6.268340%	87%	0	0	
USD 750 Million Drawl V	25-10-2023	31-03-2024	6.61909%	0		Act/360	2023-24	6.619090%	87%	1	0.0583216	
USD 750 Million Drawl V	23-12-2022	31-03-2023	5.63764%	5.46000%	100.00000%	Act/360	2022-23	5.963232%	13%	0	0	
USD 750 Million Drawl V	01-04-2023	24-04-2023	5.63764%	5.46000%	100.00000%	Act/360	2023-24	5.963232%	13%	0	0	
USD 750 Million Drawl V	25-04-2023	24-10-2023	6.26834%	5.46000%	100.00000%	Act/360	2023-24	6.630358%	13%	0	0	
USD 750 Million Drawl V	25-10-2023	31-03-2024	6.53909%	5.46000%	100.00000%	Act/360	2023-24	6.916744%	13%	1	0.0093761	
												6.76980%
USD 750 Million Drawl VI	08-02-2023	31-03-2023	5.71764%	0		Act/360	2022-23	5.717640%	87%	0	0	
USD 750 Million Drawl VI	01-04-2023	24-04-2023	5.71764%	0		Act/360	2023-24	5.717640%	87%	0	0	
USD 750 Million Drawl VI	25-04-2023	24-10-2023	6.26834%	0		Act/360	2023-24	6.268340%	87%	0	0	
USD 750 Million Drawl VI	25-10-2023	31-03-2024	6.61909%	0		Act/360	2023-24	6.619090%	87%	1	0.0583216	
USD 750 Million Drawl VI	08-02-2023	31-03-2023	5.63764%	5.46000%	100.00000%	Act/360	2022-23	5.963232%	13%	0	0	
USD 750 Million Drawl VI	01-04-2023	24-04-2023	5.63764%	5.46000%	100.00000%	Act/360	2023-24	5.963232%	13%	0	0	
USD 750 Million Drawl VI	25-04-2023	24-10-2023	6.26834%	5.46000%	100.00000%	Act/360	2023-24	6.630358%	13%	0	0	
USD 750 Million Drawl VI	25-10-2023	31-03-2024	6.53909%	5.46000%	100.00000%	Act/360	2023-24	6.916744%	13%	1	0.0093761	
												6.76980%
JPY Equ. $400 Million Drawl I	15-05-2023	14-11-2023	1.20000%	0		Act/365	2023-24	1.200000%	100%	0	0	
JPY Equ. $400 Million Drawl I	15-11-2023	31-03-2024	1.21218%	0		Act/365	2023-24	1.212180%	100%	1	0.012155	
												1.21550%
JPY Equ. $400 Million Drawl II	24-07-2023	14-11-2023	1.20000%	0		Act/365	2023-24	1.200000%	100%	0	0	
JPY Equ. $400 Million Drawl II	15-11-2023	31-03-2024	1.21218%	0		Act/365	2023-24	1.212180%	100%	1	0.012155	
												1.21550%
JPY Equ. $400 Million Drawl III	25-09-2023	14-11-2023	1.20000%	0		Act/365	2023-24	1.200000%	100%	0	0	
JPY Equ. $400 Million Drawl III	15-11-2023	31-03-2024	1.21218%	0		Act/365	2023-24	1.212180%	100%	1	0.012155	
												1.21550%
JPY Equ. $400 Million Drawl IV	22-12-2023	31-03-2024	1.21886%	0		Act/365	2023-24	1.218860%	100%	1	0.012222	
												1.22220%
JBIC Green I Drawl I	25-02-2021	16-03-2021	0.92000%	0.00000%		Act/360	2020-21	0.920000%	100%	0	0	
JBIC Green I Drawl I	17-03-2021	31-03-2021	0.92000%	0.00000%		Act/360	2020-21	0.920000%	100%	0	0	
JBIC Green I Drawl I	01-04-2021	16-09-2021	0.92000%	0.00000%		Act/360	2021-22	0.920000%	100%	0	0	
JBIC Green I Drawl I	17-09-2021	16-03-2022	0.92000%	0.00000%		Act/360	2021-22	0.920000%	100%	0	0	
JBIC Green I Drawl I	17-03-2022	31-03-2022	0.96017%	0.00000%		Act/360	2021-22	0.960170%	100%	0	0	
JBIC Green I Drawl I	01-04-2022	19-09-2022	0.96017%	0.00000%		Act/360	2022-23	0.960170%	100%	0	0	
JBIC Green I Drawl I	20-09-2022	16-03-2023	0.93264%	0.00000%		Act/360	2022-23	0.932640%	100%	0	0	
JBIC Green I Drawl I	17-03-2023	31-03-2023	0.93557%	0.00000%		Act/360	2022-23	0.935570%	100%	0	0	
JBIC Green I Drawl I	01-04-2023	18-09-2023	0.93557%	0.00000%		Act/360	2023-24	0.935570%	100%	0	0	
JBIC Green I Drawl I	19-09-2023	17-03-2024	0.95966%	0.00000%		Act/360	2023-24	0.959660%	100%	0	0	
JBIC Green I Drawl I	18-03-2024	31-03-2024	1.07223%	0.00000%		Act/360	2023-24	1.072230%	100%	1	0.010901	
												1.09010%
JBIC Green I Drawl II	27-09-2021	16-03-2022	0.92000%	0.00000%		Act/360	2021-22	0.920000%	100%	0	0	
JBIC Green I Drawl II	17-03-2022	31-03-2022	0.96017%	0.00000%		Act/360	2021-22	0.960170%	100%	0	0	

JBIC Green I Drawl II	01-04-2022	19-09-2022	0.96017%	0.00000%	Act/360	2022-23	0.960170%	100%	0	0	
JBIC Green I Drawl II	20-09-2022	16-03-2023	0.93264%	0.00000%	Act/360	2022-23	0.932640%	100%	0	0	
JBIC Green I Drawl II	17-03-2023	31-03-2023	0.93557%	0.00000%	Act/360	2022-23	0.935570%	100%	0	0	
JBIC Green I Drawl II	01-04-2023	18-09-2023	0.93557%	0.00000%	Act/360	2023-24	0.935570%	100%	0	0	
JBIC Green I Drawl II	19-09-2023	17-03-2024	0.95966%	0.00000%	Act/360	2023-24	0.959660%	100%	0	0	
JBIC Green I Drawl II	18-03-2024	31-03-2024	1.07223%	0.00000%	Act/360	2023-24	1.072230%	100%	1	0.010901	
											1.09010%
JBIC Green I Drawl III	11-01-2022	16-03-2022	0.92000%	0.00000%	Act/360	2021-22	0.920000%	100%	0	0	
JBIC Green I Drawl III	17-03-2022	31-03-2022	0.96017%	0.00000%	Act/360	2021-22	0.960170%	100%	0	0	
JBIC Green I Drawl III	01-04-2022	19-09-2022	0.96017%	0.00000%	Act/360	2022-23	0.960170%	100%	0	0	
JBIC Green I Drawl III	20-09-2022	16-03-2023	0.93264%	0.00000%	Act/360	2022-23	0.932640%	100%	0	0	
JBIC Green I Drawl III	17-03-2023	31-03-2023	0.93557%	0.00000%	Act/360	2022-23	0.935570%	100%	0	0	
JBIC Green I Drawl III	01-04-2023	18-09-2023	0.93557%	0.00000%	Act/360	2023-24	0.935570%	100%	0	0	
JBIC Green I Drawl III	19-09-2023	17-03-2024	0.95966%	0.00000%	Act/360	2023-24	0.959660%	100%	0	0	
JBIC Green I Drawl III	18-03-2024	31-03-2024	1.07223%	0.00000%	Act/360	2023-24	1.072230%	100%	1	0.010901	
											1.09010%
JBIC Green I Drawl IV	28-04-2022	19-09-2022	0.95702%	0.00000%	Act/360	2022-23	0.957020%	100%	0	0	
JBIC Green I Drawl IV	20-09-2022	16-03-2023	0.93264%	0.00000%	Act/360	2022-23	0.932640%	100%	0	0	
JBIC Green I Drawl IV	17-03-2023	31-03-2023	0.93557%	0.00000%	Act/360	2022-23	0.935570%	100%	0	0	
JBIC Green I Drawl IV	01-04-2023	18-09-2023	0.93557%	0.00000%	Act/360	2023-24	0.935570%	100%	0	0	
JBIC Green I Drawl IV	19-09-2023	17-03-2024	0.95966%	0.00000%	Act/360	2023-24	0.959660%	100%	0	0	
JBIC Green I Drawl IV	18-03-2024	31-03-2024	1.07223%	0.00000%	Act/360	2023-24	1.072230%	100%	1	0.010901	
											1.09010%

Name of the Company
Name of the Power Station

Particulars								
	9	**10**	**12**	**13**	**14**	**15**	**15**	**16**
Source of Loan	**JPY Equ. 750Million I**	**JPY Equ. 750Million II**	**JPY Equ. 750Million IV**	**JPY Equ. 750Million V**	**JPY Equ. 750Million VI**	**Euro Loan I**	**Euro Loan II**	**Euro Loan III**
Drawal								
Currency	JPY	JPY	JPY	JPY	JPY	EUR	EUR	EUR
Amount of loan sanctioned	24,67,10,52,632	10,74,22,92,405	10,55,18,62,404	10,45,69,69,571	12,89,05,84,717	4,89,31,659	8,42,38,902	8,45,12,994
Amount of Gross Loan drawn upto 19.03.2024	24,67,10,52,632	10,74,22,92,405	10,55,18,62,404	10,45,69,69,571	12,89,05,84,717	4,89,31,659	8,42,38,902	8,45,12,994
Interest Type	Floating	Floating	Floating	Floating	Floating	Floating	Floating	Floating
Fixed Interest Rate, if applicable	-	-	-	-	-	-	-	-
Base Rate, if floating interest*	6 Month JPY Libor /3 Months TONA*	6 Month JPY Libor /3 Months TONA*	6 Month JPY Libor /3 Months TONA*	6 Month JPY Libor /3 Months TONA	6 Month JPY Libor /3 Months TONA	6 Month Euribor*	6 Month Euribor*	6 Month Euribor*
Margin, if floating interest rate	0.80%/1.02%	0.80%/1.02%	0.80%/1.02%	0.80%/1.02%	0.80%/1.02%	0.95%	0.95%	0.95%
Are there any Caps / Floor	No	No	No	No	No	No	No	No
If above is Yes, specify Caps / Floor	-	-	-	-	-	-	-	-
Moratorium Period	6 Years	6 Years	6 Years	6 Years	6 Years	7	7	7
Moratorium effective from	15-May-2020	15-May-2020	15-May-2020	15-May-2020	15-May-2020	07-Jun-2021	11-Aug-2021	11-Aug-2021
Repayment period	1 year	1 year	1 year	1 year	1 year	Bullet payment	Bullet payment	Bullet payment
Repayment effective from	15-May-2026	15-May-2026	15-May-2026	15-May-2026	15-May-2026	14-Aug-2028	14-Aug-2028	14-Aug-2028
Repayment frequency	Six Time	Six Time	Six Time	Six Time	Six Time	One Time	One Time	One Time
Repayment installment	6,16,77,63,158	2,68,55,73,101	2,63,79,65,601	2,61,42,42,393	3,22,26,46,179	4,89,31,659	8,42,38,902	8,45,12,994
	2,05,59,21,053	89,51,91,034	87,93,21,867	87,14,14,131	1,07,42,15,393			
Base Exchange Rate -								
Are foreign currency loan hedged	No	No	No	No	No	No	No	No
If above is Yes, specify details	-	-	-	-	-	-	-	-

Name of the Projects	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**
Dadri-II	2.11%	0.57%	0.31%	0.25%	0.92%			
NCPS-FGD							1.09%	0.21%
Dadri-II FGD								

Name of the Company
Name of the Power Station

Particulars							
	17	**18**	**19**	**20**	**21**	**22**	**23**
Source of Loan	**JBIC Green Drawl I**	**JBIC Green Drawl II**	**JBIC Green Drawl III**	**JBIC Green Drawl IV**	**USD 750 Million Drawl I**	**USD 750 Million Drawl II**	**USD 750 Million Drawl III**
Drawal							
Currency	JPY	JPY	JPY	JPY	USD	USD	USD
Amount of loan sanctioned	10,00,00,00,000	10,00,00,00,000	15,00,00,00,000	15,00,00,00,000	10,00,00,000	10,00,00,000	25,00,00,000
Amount of Gross Loan drawn upto 19.03.2024	10,00,00,00,000	10,00,00,00,000	15,00,00,00,000	15,00,00,00,000	10,00,00,000	10,00,00,000	25,00,00,000
Interest Type	Floating	Floating	Floating	Floating	Floating	Floating	Floating
Fixed Interest Rate, if applicable	-	-	-	-	-	-	-
Base Rate, if floating interest*	6 Month JPY Libor /6 Month Compounded TONA	6 Month JPY Libor /6 Month Compounded TONA	6 Month JPY Libor /6 Month Compounded TONA	6 Month JPY Libor /6 Month Compounded TONA	6 Month Term SOFR*	6 Month Term SOFR*	6 Month Term SOFR*
Margin, if floating interest rate	0.92%	0.92%	0.92%	0.92%	1.16933%	1.16933%	1.16933%
Are there any Caps / Floor	No	No	No	No	No	No	No
If above is Yes, specify Caps / Floor					-	-	-
Moratorium Period	3	3	3	3	4	4	4
Moratorium effective from	25-Feb-2021	25-Feb-2021	25-Feb-2021	25-Feb-2021	25-Apr-2022	25-Apr-2022	25-Apr-2022
Repayment period	Half-Yearly	Half-Yearly	Half-Yearly	Half-Yearly	Yearly	Yearly	Yearly
Repayment effective from	17-Sep-2023	17-Sep-2023	17-Sep-2023	17-Sep-2023	05-Oct-2026	05-Oct-2026	05-Oct-2026
Repayment frequency	Twenty Five	Twenty Five	Twenty Five	Twenty Five	Seven times	Seven times	Seven times
Repayment installment	40,00,00,000	40,00,00,000	60,00,00,000	60,00,00,000	1,42,85,714	1,42,85,714	3,57,14,286
Base Exchange Rate -							
Are foreign currency loan hedged	No	No	No	No	No	No	No
If above is Yes, specify details					-	-	-

Name of the Projects	**%**	**%**	**%**	**%**	**%**	**%**	**%**
Dadri-II							
NCPS-FGD	6.03%	0.14%	0.54%	0.09%		0.25%	
Dadri-II FGD							0.10%

Name of the Company
Name of the Power Station

Particulars							
	24	**25**	**26**				
Source of Loan	**USD 750 Million Drawl IV**	**USD 750 Million Drawl V**	**USD 750 Million Drawl VI**	**JPY Equ. $400 Million Drawl I**	**JPY Equ. $400 Million Drawl II**	**JPY Equ. $400 Million Drawl III**	**JPY Equ. $400 Million Drawl IV**
Drawal							
Currency	USD	USD	USD	JPY	JPY	JPY	JPY
Amount of loan sanctioned	10,00,00,000	10,00,00,000	10,00,00,000	13,51,55,00,000	13,89,20,00,000	14,77,60,00,000	14,25,65,00,000
Amount of Gross Loan drawn upto 19.03.2024	10,00,00,000	10,00,00,000	10,00,00,000	13,51,55,00,000	13,89,20,00,000	14,77,60,00,000	14,25,65,00,000
Interest Type	Floating	Floating	Floating	Floating	Floating	Floating	Floating
Fixed Interest Rate, if applicable	-	-	-	-	-	-	-
Base Rate, if floating interest*	6 Month Term SOFR*	6 Month Term SOFR*	6 Month Term SOFR*	6M Compounded TONA	6M Compounded TONA	6M Compounded TONA	6M Compounded TONA
Margin, if floating interest rate	1.16933%	1.16933%	1.16933%	1.20000%	1.20000%	1.20000%	1.20000%
Are there any Caps / Floor	No	No	No	No	No	No	No
If above is Yes, specify Caps / Floor	-	-	-	-	-	-	-
Moratorium Period	4	4	4	4	4	4	4
Moratorium effective from	25-Apr-2022	25-Apr-2022	25-Apr-2022	31-Aug-2023	31-Aug-2023	31-Aug-2023	31-Aug-2023
Repayment period	Yearly	Yearly	Yearly	Yearly	Yearly	Yearly	Yearly
Repayment effective from	05-Oct-2026	05-Oct-2026	05-Oct-2026	31-Aug-2027	31-Aug-2027	31-Aug-2027	31-Aug-2027
Repayment frequency	Seven times	Seven times	Seven times	Seven times	Seven times	Seven times	Seven times
Repayment installment	1,42,85,714	1,42,85,714	1,42,85,714	1,93,07,85,714	1,98,45,71,429	2,11,08,57,143	2,03,66,42,857
				-	-	-	-
Base Exchange Rate -							
Are foreign currency loan hedged	No	No	No	-	-	-	-
If above is Yes, specify details	-	-	-				

Name of the Projects	**%**	**%**	**%**	**%**	**%**	**%**	**%**
Dadri-II							
NCPS-FGD							
Dadri-II FGD							

Signature Not Verified

Digitally signed by PARIMAL PIYUSH
Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

PART-I

FORM- 9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	**NTPC Limited**
Name of the Generating Station	**NCTPS Dadri Stage-II (ECS)**
For Financial Year	**2024-25**

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed (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**
NIL								
	Total	**-**	**-**	**-**	**-**			

(Petitioner)

Signature Not Verified

Digitally signed by PARIMAL PIYUSH
Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

PART-I

FORM- 9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	**NTPC Limited**
Name of the Generating Station	**NCTPS Dadri Stage-II (ECS)**
For Financial Year	**2025-26**

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed (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**
NIL								
	Total	**-**	**-**	**-**	**-**			

(Petitioner)

Signature Not Verified

Digitally signed by PARIMAL PIYUSH
Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

PART-I

FORM- 9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	**NTPC Limited**
Name of the Generating Station	**NCTPS Dadri Stage-II (ECS)**
For Financial Year	**2026-27**

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed (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	FGD Waste Water System	1,034.57	-	1,034.57		26(1)(b)	It is submitted that As per the Uttar Pradesh Pollution Control Board's Consent to Operate (CTO) dated 22/12/2023, Dadri Thermal Power Plant is mandated to operate an Effluent Treatment Plant (ETP) comprising primary, secondary, and tertiary treatment, based on the influent quantity and quality. It is submitted that the existing ETP was designed considering the wastewater quality and quantity specific to the thermal plant operations. However, with the installation of the Flue Gas Desulfurization (FGD) system, as mandated by the Ministry of Environment, Forest and Climate Change (MoEFCC), additional wastewater containing gypsum particle is now being generated. Therefore, it has become essential to establish a separate wastewater treatment plant exclusively for the FGD system to ensure effective treatment and utilization of the wastewater in compliance with the CTO mandate. In view of the above, it is respectfully submitted that the Hon'ble Commission may allow the proposed expenditure under Section 26(1)(b).	
	Total	**1,034.57**	**-**	**1,034.57**	**-**			

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Digitally signed by PARIMAL PIYUSH
Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

(Petitioner)

PART-I

FORM- 9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	**NTPC Limited**
Name of the Generating Station	**NCTPS Dadri Stage-II (ECS)**
For Financial Year	**2027-28**

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed (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**
NIL								
	Total	**-**	**-**	**-**	**-**			

(Petitioner)

Signature Not Verified

Digitally signed by PARIMAL PIYUSH
Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

PART-I

FORM- 9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	**NTPC Limited**
Name of the Generating Station	**NCTPS Dadri Stage-II (ECS)**
For Financial Year	**2028-29**

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed (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**
NIL								
	Total	**-**	**-**	**-**	**-**			

(Petitioner)

Signature Not Verified

Digitally signed by PARIMAL PIYUSH
Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

PART-I

FORM- 10

Name of the Petitioner	**NTPC Limited**				
Name of the Generating Station	**NCTPS Dadri Stage-II (ECS)**				
Financial Year (Starting from COD)1	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**
1	2	3	4	5	6
Amount capitalised in Work/ Equipment					
Financing Details	**Add cap is proposed to be finance 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)

Signature Not Verified

Digitally signed by PARIMAL PIYUSH
Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

PART-I
FORM- 11

Calculation of Depreciation

Name of the Company :	**NTPC Limited**
Name of the Power Station :	**NCTPS Dadri Stage-II (ECS)**

(Amount in Rs Lakh)

Sl.No.	Name of the Assets1	Gross Block as on 31.03.2024	CERC Dep. Rate	2024-25
1	**2**	**3**	**4**	**5= Col.2 X Col.3**
1	Plant & Machinery	54,247.11	5.28%	2,864.25
2	Buildings	10,442.64	3.34%	348.78
3	Roads	47.58	3.34%	1.59
4	Others-Drain	26.96	3.34%	0.90
		64,767.29		3,215.52
	Weighted Average Rate of Depreciation (%)			**4.96473**

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Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

(Petitioner)

PART-I
FORM- 12

Statement of Depreciation

Name of the Company :	**NTPC Limited**
Name of the Power Station :	**NCTPS Dadri Stage-II (ECS)**

(Amount in Rs Lakh)

S. No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7
	No of Days in the period	365	365	365	366	365
	No of Days in the year	365	365	365	366	365
1	Opening Capital Cost	63,292.14	63,292.14	63,292.14	64,326.71	64,326.71
2	Closing Capital Cost	63,292.14	63,292.14	64,326.71	64,326.71	64,326.71
3	Average Capital Cost	63,292.14	63,292.14	63,809.42	64,326.71	64,326.71
1a	Cost of IT Equipments & Software included in (1) above					
2a	Cost of IT Equipments & Software included in (2) above					
3a	Average Cost of IT Equipments & Software*					
4	Freehold land					
5	Rate of depreciation (%)	4.96	4.96	4.96	4.96	4.96
6	Depreciable value	56,962.93	56,962.93	57,428.48	57,894.04	57,894.04
7.	Balance useful life at the beginning of the period	19.86	18.86	17.86	16.86	15.86
8	Cumulative depreciation at the beginning of the period	4,551.22	7,693.50	10,835.79	14,003.75	17,197.40
9	Remaining depreciable value	52,411.71	49,269.42	46,592.69	43,890.28	40,696.64
10	Depreciation (for the period)	3,142.28	3,142.28	3,167.97	3,193.65	3,193.65
11	Depreciation (annualised)	**3,142.28**	**3,142.28**	**3,167.97**	**3,193.65**	**3,193.65**
12	Cumulative depreciation at the end of the period	7,693.50	10,835.79	14,003.75	17,197.40	20,391.05
13	Net Cumulative depreciation at the end of the period after adjustments	7,693.50	10,835.79	14,003.75	17,197.40	20,391.05

(Petitioner)

Calculation of Interest on Actual Loans

Name of the Company NTPC LTD.

Name of the Power Station NCTPS Dadri-II (ECS)

Form -13

Sl. no.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	**JPY Equ. 750 Million I Drawl (Repayment -15.05.2026)**					
	Gross loan - Opening	2902.72	2902.72	2902.72	2902.72	2902.72
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	725.68	1451.36
	Net loan - Opening	2902.72	2902.72	2902.72	2177.04	1451.36
	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	2902.72	2902.72	2902.72	2177.04	1451.36
	Repayments of Loans during the period	0.00	0.00	725.68	725.68	725.68
	Net loan - Closing	2902.72	2902.72	2177.04	1451.36	725.68
	Average Net Loan	2902.72	2902.72	2539.88	1814.20	1088.52
	Rate of Interest on Loan	0.9185%	0.9185%	0.9185%	0.9185%	0.9185%
	Interest on Loan Annualised	25.70	26.66	23.33	16.66	10.00
2	**JPY Equ. 750 Million II Drawl (Repayment- 15.05.2026)**					
	Gross loan - Opening	338.27	338.27	338.27	338.27	338.27
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	84.57	169.13
	Net loan - Opening	338.27	338.27	338.27	253.70	169.13
	Increase/ Decrease due to FERV	0	0	0	0	0
	Increase/ Decrease due to ACE/Drawl during the period	0	0	0	0	0
	Total	338.27	338.27	338.27	253.70	169.13
	Repayments of Loans during the period	0.00	0.00	84.57	84.57	84.57
	Net loan - Closing	338.27	338.27	253.70	169.13	84.57
	Average Net Loan	338.27	338.27	295.98	211.42	126.85
	Rate of Interest on Loan	0.9185%	0.9185%	0.9185%	0.9185%	0.9185%
	Interest on Loan Annualised	3.00	3.11	2.72	1.94	1.17
3	**JPY Equ. 750 Million IV Drawl (Repayment -15.05.2026)**					
	Gross loan - Opening	181.61	181.61	181.61	181.61	181.61
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	45.40	90.81
	Net loan - Opening	181.61	181.61	181.61	136.21	90.81
	Increase/ Decrease due to FERV	0	0	0	0	0
	Increase/ Decrease due to ACE/Drawl during the period	0	0	0	0	0
	Total	181.61	181.61	181.61	136.21	90.81
	Repayments of Loans during the period	0.00	0.00	45.40	45.40	45.40
	Net loan - Closing	181.61	181.61	136.21	90.81	45.40
	Average Net Loan	181.61	181.61	158.91	113.51	68.11
	Rate of Interest on Loan	0.9185%	0.9185%	0.9185%	0.9185%	0.9185%
	Interest on Loan Annualised	1.61	1.67	1.46	1.04	0.63
4	**JPY Equ. 750 Million V Drawl (Repayment -15.05.2026)**					
	Gross loan - Opening	146.24	146.24	146.24	146.24	146.24
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	36.56	73.12
	Net loan - Opening	146.24	146.24	146.24	109.68	73.12
	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	146.24	146.24	146.24	109.68	73.12
	Repayments of Loans during the period	0.00	0.00	36.56	36.56	36.56
	Net loan - Closing	146.24	146.24	109.68	73.12	36.56
	Average Net Loan	146.24	146.24	127.96	91.40	54.84
	Rate of Interest on Loan	0.8893%	0.8893%	0.8893%	0.8893%	0.8893%
	Interest on Loan Annualised	1.25	1.30	1.14	0.81	0.49
5	**JPY Equ. 750 Million VI Drawl (Repayment -15.05.2026)**					
	Gross loan - Opening	659.75	659.75	659.75	659.75	659.75
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	164.94	329.87
	Net loan - Opening	659.75	659.75	659.75	494.81	329.87
	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	659.75	659.75	659.75	494.81	329.87
	Repayments of Loans during the period	0.00	0.00	164.94	164.94	164.94
	Net loan - Closing	659.75	659.75	494.81	329.87	164.94
	Average Net Loan	659.75	659.75	577.28	412.34	247.41
	Rate of Interest on Loan	0.8893%	0.8893%	0.8893%	0.8893%	0.8893%
	Interest on Loan Annualised	5.66	5.87	5.13	3.67	2.20
7	**EURO Loan I**					
	Gross loan - Opening	982.46	982.46	982.46	982.46	982.46
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	982.46	982.46	982.46	982.46	982.46
	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	982.46	982.46	982.46	982.46	982.46
	Repayments of Loans during the period	0.00	0.00	0.00	0.00	982.46
	Net loan - Closing	982.46	982.46	982.46	982.46	0.00
	Average Net Loan	982.46	982.46	982.46	982.46	491.23
	Rate of Interest on Loan	5.0634%	5.0634%	5.0634%	5.0634%	5.0634%
	Interest on Loan Annualised	49.75	49.75	49.75	49.75	24.87
8	**JBIC Green I (Repayment - 17.09.2023)**					
	Gross loan - Opening	3966.27	3966.27	3966.27	3966.27	3966.27
	Cumulative repayments of Loans upto previous period	158.65	475.95	793.25	1110.56	1427.86
	Net loan - Opening	3807.62	3490.32	3173.02	2855.72	2538.42
	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	3807.62	3490.32	3173.02	2855.72	2538.42
	Repayments of Loans during the period	317.30	317.30	317.30	317.30	317.30
	Net loan - Closing	3490.32	3173.02	2855.72	2538.42	2221.11
	Average Net Loan	3648.97	3331.67	3014.37	2697.07	2379.76
	Rate of Interest on Loan	1.0901%	1.0901%	1.0901%	1.0901%	1.0901%
	Interest on Loan Annualised	39.78	36.32	32.86	29.40	25.94
8	**USD 750M (Repayment effective from 05.10.2026)**					
	Gross loan - Opening	415.78	415.78	415.78	415.78	415.78
	Cumulative repayments of Loans upto previous period	8.40	8.40	8.40	66.60	124.80
	Net loan - Opening	407.37	407.37	407.37	349.18	290.98
	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	407.37	407.37	407.37	349.18	290.98
	Repayments of Loans during the period	0.00	0.00	58.20	58.20	58.20
	Net loan - Closing	407.37	407.37	349.18	290.98	232.79
	Average Net Loan	407.37	407.37	378.28	320.08	261.88
	Rate of Interest on Loan	6.770%	6.7697%	6.7697%	6.7697%	6.7697%
	Interest on Loan Annualised	27.58	27.58	25.61	21.67	17.73
9	**AXIS BANK-IV (Repayment - 29.03.2024)**					
	Gross loan - Opening	2400.00	2400.00	2400.00	2400.00	2400.00
	Cumulative repayments of Loans upto previous period	240.00	480.00	720.00	960.00	1200.00
	Net loan - Opening	2160.00	1920.00	1680.00	1440.00	1200.00
	Increase/ Decrease due to FERV	0	0	0	0	0
	Increase/ Decrease due to ACE/Drawl during the period	0	0	0	0	0
	Total	2160.00	1920.00	1680.00	1440.00	1200.00
	Repayments of Loans during the period	240.00	240.00	240.00	240.00	240.00
	Net loan - Closing	1920.00	1680.00	1440.00	1200.00	960.00
	Average Net Loan	2040.00	1800.00	1560.00	1320.00	1080.00
	Rate of Interest on Loan	8.0000%	8.0000%	8.0000%	8.0000%	8.0000%
	Interest on Loan Annualised	163.20	144.00	124.80	105.60	86.40
10	**HDFC Bank Limited-VI (Repayment - 26.09.2025)**					
	Gross loan - Opening	4000.00	4000.00	4000.00	4000.00	4000.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	444.44	888.89	1333.33
	Net loan - Opening	4000.00	4000.00	3555.56	3111.11	2666.67
	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	4000.00	4000.00	3555.56	3111.11	2666.67

	Repayments of Loans during the period	0.00	444.44	444.44	444.44	444.44
	Net loan - Closing	4000.00	3555.56	3111.11	2666.67	2222.22
	Average Net Loan	4000.00	3777.78	3333.33	2888.89	2444.44
	Rate of Interest on Loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on Loan Annualised	318.00	300.33	265.00	229.67	194.33
11	**HDFC Bank Limited-VII (Repayment 11.06.2026)**					
	Gross loan - Opening	1000.00	1000.00	1000.00	1000.00	1000.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	111.11	222.22
	Net loan - Opening	1000.00	1000.00	1000.00	888.89	777.78
	Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
	Increase/ Decrease due to ACE/Drawl during the period	0.00	0.00	0.00	0.00	0.00
	Total	1000.00	1000.00	1000.00	888.89	777.78
	Repayments of Loans during the period	0.00	0.00	111.11	111.11	111.11
	Net loan - Closing	1000.00	1000.00	888.89	777.78	666.67
	Average Net Loan	1000.00	1000.00	944.44	833.33	722.22
	Rate of Interest on Loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on Loan Annualised	79.50	79.50	75.08	66.25	57.42
12	**State Bank of India-XII (Repayment 31.03.2026)**					
	Gross loan - Opening	2900.00	2900.00	2900.00	2900.00	2900.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	322.22	644.44	966.67
	Net loan - Opening	2900.00	2900.00	2577.78	2255.56	1933.33
	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	2900.00	2900.00	2577.78	2255.56	1933.33
	Repayments of Loans during the period	0.00	322.22	322.22	322.22	322.22
	Net loan - Closing	2900.00	2577.78	2255.56	1933.33	1611.11
	Average Net Loan	2900.00	2738.89	2416.67	2094.44	1772.22
	Rate of Interest on Loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on Loan Annualised	236.35	224.59	198.17	171.74	145.32
19	**Bonds 69 (Bullet Repayment 17.07.2029)**					
	Gross loan - Opening	6500.00	6500.00	6500.00	6500.00	6500.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	6500.00	6500.00	6500.00	6500.00	6500.00
	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	6500.00	6500.00	6500.00	6500.00	6500.00
	Repayments of Loans during the period	0.00	0.00	0.00	0.00	0.00
	Net loan - Closing	6500.00	6500.00	6500.00	6500.00	6500.00
	Average Net Loan	6500.00	6500.00	6500.00	6500.00	6500.00
	Rate of Interest on Loan	7.3500%	7.3500%	7.3500%	7.3500%	7.3500%
	Interest on Loan Annualised	477.75	477.75	477.75	477.75	477.75
20	**Bonds 75 (Bullet repayment 13.09.2031)**					
	Gross loan - Opening	5600.00	5600.00	5600.00	5600.00	5600.00
	Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
	Net loan - Opening	5600.00	5600.00	5600.00	5600.00	5600.00
	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	5600.00	5600.00	5600.00	5600.00	5600.00
	Repayments of Loans during the period	0.00	0.00	0.00	0.00	0.00
	Net loan - Closing	5600.00	5600.00	5600.00	5600.00	5600.00
	Average Net Loan	5600.00	5600.00	5600.00	5600.00	5600.00
	Rate of Interest on Loan	6.7200%	6.7200%	6.7200%	6.7200%	6.7200%
	Interest on Loan Annualised	376.32	376.32	376.32	376.32	376.32
	TOTAL LOAN					
	Gross loan - Opening	34393.11	34393.11	34393.11	34393.11	34393.11
	Cumulative repayments of Loans upto previous period	2807.05	3364.36	4688.32	7238.75	9789.17
	Net loan - Opening	31586.05	31028.75	29704.78	27154.36	24603.93
	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	31586.05	31028.75	29704.78	27154.36	24603.93
Repayments of Loans during the period	557.30	1323.97	2550.42	2550.42	3532.89
Net loan - Closing	31028.75	29704.78	27154.36	24603.93	21071.05
Average Net Loan	31307.40	30366.77	28429.57	25879.15	22837.49
Rate of Interest on Loan	5.767%	5.778%	5.836%	5.998%	6.220%
Interest on Loan Annualised	1805.44	1754.74	1659.11	1552.27	1420.56

EURO Loan I Drawl II - Repayment 14.08.2028 (bullet)					
Gross loan - Opening	826.03	826.03	826.03	826.03	826.03
Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
Net loan - Opening	826.03	826.03	826.03	826.03	826.03
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	826.03	826.03	826.03	826.03	826.03
Repayments of Loans during the period	0.00	0.00	0.00	0.00	826.03
Net loan - Closing	826.03	826.03	826.03	826.03	0.00
Average Net Loan	826.03	826.03	826.03	826.03	413.02
Rate of Interest on Loan	5.063%	5.063%	5.063%	5.063%	5.063%
Interest on Loan Annualised	41.83	41.83	41.83	41.83	20.91
EURO Loan I Drawl III Repayment 14.08.2028 (bullet)					
Gross loan - Opening	156.43	156.43	156.43	156.43	156.43
Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
Net loan - Opening	156.43	156.43	156.43	156.43	156.43
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	156.43	156.43	156.43	156.43	156.43
Repayments of Loans during the period	0.00	0.00	0.00	0.00	156.43
Net loan - Closing	156.43	156.43	156.43	156.43	0.00
Average Net Loan	156.43	156.43	156.43	156.43	78.22
Rate of Interest on Loan	5.063%	5.063%	5.063%	5.063%	5.063%
Interest on Loan Annualised	7.92	7.92	7.92	7.92	3.96
EURO Loan I Total					
Gross loan - Opening	982.46	982.46	982.46	982.46	982.46
Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	0.00	0.00
Net loan - Opening	982.46	982.46	982.46	982.46	982.46
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	982.46	982.46	982.46	982.46	982.46
Repayments of Loans during the period	0.00	0.00	0.00	0.00	982.46
Net loan - Closing	982.46	982.46	982.46	982.46	0.00
Average Net Loan	982.46	982.46	982.46	982.46	491.23
Rate of Interest on Loan	5.063%	5.063%	5.063%	5.063%	5.063%
Interest on Loan Annualised	49.75	49.75	49.75	49.75	24.87
JBIC Green I Drawl I (Repayment effective from 17.09.2023)					
Gross loan - Opening	3361.57	3361.57	3361.57	3361.57	3361.57
Cumulative repayments of Loans upto previous period	134.46	403.39	672.31	941.24	1210.16
Net loan - Opening	3227.10	2958.18	2689.25	2420.33	2151.40
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	3227.10	2958.18	2689.25	2420.33	2151.40
Repayments of Loans during the period	268.93	268.93	268.93	268.93	268.93
Net loan - Closing	2958.18	2689.25	2420.33	2151.40	1882.48
Average Net Loan	3092.64	2823.72	2554.79	2285.87	2016.94
Rate of Interest on Loan	1.090%	1.090%	1.090%	1.090%	1.090%
Interest on Loan Annualised	33.71	30.78	27.85	24.92	21.99
JBIC Green I Drawl II (Repayment effective from 17.09.2023)					
Gross loan - Opening	77.75	77.75	77.75	77.75	77.75

Cumulative repayments of Loans upto previous period	3.11	9.33	15.55	21.77	27.99
Net loan - Opening	74.64	68.42	62.20	55.98	49.76
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	74.64	68.42	62.20	55.98	49.76
Repayments of Loans during the period	6.22	6.22	6.22	6.22	6.22
Net loan - Closing	68.42	62.20	55.98	49.76	43.54
Average Net Loan	71.53	65.31	59.09	52.87	46.65
Rate of Interest on Loan	1.090%	1.090%	1.090%	1.090%	1.090%
Interest on Loan Annualised	0.78	0.71	0.64	0.58	0.51
JBIC Green I Drawl III (Repayment effective from 17.09.2023)					
Gross loan - Opening	453.29	453.29	453.29	453.29	453.29
Cumulative repayments of Loans upto previous period	18.13	54.39	90.66	126.92	163.18
Net loan - Opening	435.15	398.89	362.63	326.37	290.10
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	435.15	398.89	362.63	326.37	290.10
Repayments of Loans during the period	36.26	36.26	36.26	36.26	36.26
Net loan - Closing	398.89	362.63	326.37	290.10	253.84
Average Net Loan	417.02	380.76	344.50	308.23	271.97
Rate of Interest on Loan	1.090%	1.090%	1.090%	1.090%	1.090%
Interest on Loan Annualised	4.55	4.15	3.76	3.36	2.96
JBIC Green I Drawl IV (Repayment effective from 17.09.2023)					
Gross loan - Opening	73.67	73.67	73.67	73.67	73.67
Cumulative repayments of Loans upto previous period	2.95	8.84	14.73	20.63	26.52
Net loan - Opening	70.72	64.83	58.93	53.04	47.15
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	70.72	64.83	58.93	53.04	47.15
Repayments of Loans during the period	5.89	5.89	5.89	5.89	5.89
Net loan - Closing	64.83	58.93	53.04	47.15	41.25
Average Net Loan	67.77	61.88	55.99	50.09	44.20
Rate of Interest on Loan	1.090%	1.090%	1.090%	1.090%	1.090%
Interest on Loan Annualised	0.74	0.67	0.61	0.55	0.48
JBIC Green I Total					
Gross loan - Opening	3966.27	3966.27	3966.27	3966.27	3966.27
Cumulative repayments of Loans upto previous period	158.65	475.95	793.25	1110.56	1427.86
Net loan - Opening	3807.62	3490.32	3173.02	2855.72	2538.42
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	3807.62	3490.32	3173.02	2855.72	2538.42
Repayments of Loans during the period	317.30	317.30	317.30	317.30	317.30
Net loan - Closing	3490.32	3173.02	2855.72	2538.42	2221.11
Average Net Loan	3648.97	3331.67	3014.37	2697.07	2379.76
Rate of Interest on Loan	1.090%	1.090%	1.090%	1.090%	1.090%
Interest on Loan Annualised	39.78	36.32	32.86	29.40	25.94

USD 750M Drawl II (Repayment effective from 05.10.2026)					
Gross loan - Opening	210.08	210.08	210.08	210.08	210.08
Cumulative repayments of Loans upto previous period	8.40	8.40	8.40	37.21	66.03
Net loan - Opening	201.68	201.68	201.68	172.87	144.05
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	201.68	201.68	201.68	172.87	144.05
Repayments of Loans during the period	0.00	0.00	28.81	28.81	28.81
Net loan - Closing	201.68	201.68	172.87	144.05	115.24
Average Net Loan	201.68	201.68	187.27	158.46	129.65
Rate of Interest on Loan	6.770%	6.770%	6.770%	6.770%	6.770%
Interest on Loan Annualised	13.65	13.65	12.68	10.73	8.78
USD 750M Drawl III (Repayment effective from 05.10.2026)					
Gross loan - Opening	205.70	205.70	205.70	205.70	205.70
Cumulative repayments of Loans upto previous period	0.00	0.00	0.00	29.[illegible]	58.77
Net loan - Opening	205.70	205.70	205.70	176.[illegible]	146.93

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	205.70	205.70	205.70	176.31	146.93
Repayments of Loans during the period	0.00	0.00	29.39	29.39	29.39
Net loan - Closing	205.70	205.70	176.31	146.93	117.54
Average Net Loan	205.70	205.70	191.00	161.62	132.23
Rate of Interest on Loan	6.770%	6.770%	6.770%	6.770%	6.770%
Interest on Loan Annualised	13.93	13.93	12.93	10.94	8.95
USD 750M Total					
Gross loan - Opening	415.78	415.78	415.78	415.78	415.78
Cumulative repayments of Loans upto previous period	8.40	8.40	8.40	66.60	124.80
Net loan - Opening	407.37	407.37	407.37	349.18	290.98
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	407.37	407.37	407.37	349.18	290.98
Repayments of Loans during the period	0.00	0.00	58.20	58.20	58.20
Net loan - Closing	407.37	407.37	349.18	290.98	232.79
Average Net Loan	407.37	407.37	378.28	320.08	261.88
Rate of Interest on Loan	6.770%	6.770%	6.770%	6.770%	6.770%
Interest on Loan Annualised	27.58	27.58	25.61	21.67	17.73

Details of Reagent for Computation of Supplementary Energy Charge Rate

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LIMESTONE CONSUMPTION FGD FOR DADRI-II

Name of the Petitioner NTPC Ltd
Name of the Generating Station Dadri Stage II ECS

S. No.	Month	Unit	Apr-23
	Opening Quantity		
	Opening Quantity of Limestone	MT	1824.24
	Value of Stock	Rs	4213992.09
	Quantity		
1	Quantity of Limestone supplied by Reagent supply Company	tonne	2788.64
2	Adjustment (+/-) in quantity supplied made by Limestone or Reagent supply Company	tonne	0
3	Net quantity of Limestone Received (1±2)	tonne	2788.64
4	Amount charged for Limestone supply Company (Incl GST)	(Rs.)	2928072
5	Adjustment (+/-) in amount charged made for Limestone supply by the Company	(Rs.)	0
6	Total amount Charged (4±5)	(Rs.)	2928072
7	Transportation charges by rail/ship/road transport(Incl GST)	(Rs.)	3513686
8	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)	0
9	Demurrage Charges, if any	(Rs.)	0
10	Total Transportation Charges (7±-8-9)	(Rs.)	3513686
11	Total amount Charged for Limestone supplied including Transportation (6+10) (Incl GST)	(Rs.)	6441758
12	Weighted Average Cost of Limestone during the month	(Rs/tonne)	2310.00
13	Purity of Limestone received during the month	(%)	91.00
14	Sulphur Content of the coal	%	0.47
15	Limestone Consumption	MT	2255.5

Details of Reagent for Computation of Supplementary Energy Charge Rate

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LIMESTONE CONSUMPTION FGD FOR DADRI-II

Name of the Petitioner _____
Name of the Generating Station

S. No.	Month	Unit	May-23
	Opening Quantity		
	Opening Quantity of Limestone	MT	2357.38
	Value of Stock	Rs	5445545.49
	Quantity		
1	Quantity of Limestone supplied by Reagent supply Company	tonne	1515.9
2	Adjustment (+/-) in quantity supplied made by Limestone or Reagent supply Company	tonne	0
3	Net quantity of Limestone Received (1±2)	tonne	1515.9
4	Amount charged for Limestone supply Company (Incl GST)	(Rs.)	1591695
5	Adjustment (+/-) in amount charged made for Limestone supply by the Company	(Rs.)	0
6	Total amount Charged (4±5)	(Rs.)	1591695
7	Transportation charges by rail/ship/road transport(Incl GST)	(Rs.)	1910034
8	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)	0
9	Demurrage Charges, if any	(Rs.)	0
10	Total Transportation Charges (7±-8-9)	(Rs.)	1910034
11	Total amount Charged for Limestone supplied including Transportation (6+10) (Incl GST)	(Rs.)	3501729
12	Weighted Average Cost of Limestone during the month	(Rs/tonne)	2310.00
13	Purity of Limestone received during the month	(%)	91.10
14	Sulphur Content of the coal	%	0.47
15	Limestone Consumption	MT	1532

Details of Reagent for Computation of Supplementary Energy Charge Rate

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LIMESTONE CONSUMPTION FGD FOR DADRI-II

Name of the Petitioner _____
Name of the Generating Station

S. No.	Month	Unit	Jun-23
	Opening Quantity		
	Opening Quantity of Limestone	MT	2341.28
	Value of Stock	Rs	5408354.49
	Quantity		
1	Quantity of Limestone supplied by Reagent supply Company	tonne	1168.94
2	Adjustment (+/-) in quantity supplied made by Limestone or Reagent supply Company	tonne	0
3	Net quantity of Limestone Received (1±2)	tonne	1168.94
4	Amount charged for Limestone supply Company (Incl GST)	(Rs.)	1227387
5	Adjustment (+/-) in amount charged made for Limestone supply by the Company	(Rs.)	0
6	Total amount Charged (4±5)	(Rs.)	1227387
7	Transportation charges by rail/ship/road transport(Incl GST)	(Rs.)	1472864
8	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)	0
9	Demurrage Charges, if any	(Rs.)	0
10	Total Transportation Charges (7±-8-9)	(Rs.)	1472864
11	Total amount Charged for Limestone supplied including Transportation (6+10) (Incl GST)	(Rs.)	2700251
12	Weighted Average Cost of Limestone during the month	(Rs/tonne)	2310
13	Purity of Limestone received during the month	(%)	91.00
14	Sulphur Content of the coal	%	0.40
15	Limestone Consumption	MT	1968

Details of Reagent for Computation of Supplementary Energy Charge Rate

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LIMESTONE CONSUMPTION FGD FOR DADRI-II

Name of the Petitioner _____
Name of the Generating Station

S. No.	Month	Unit	Jul-23
	Opening Quantity		
	Opening Quantity of Limestone	MT	1542.22
	Value of Stock	Rs	3562525.89
	Quantity		
1	Quantity of Limestone supplied by Reagent supply Company	tonne	0
2	Adjustment (+/-) in quantity supplied made by Limestone or Reagent supply Company	tonne	0
3	Net quantity of Limestone Received (1±2)	tonne	0
4	Amount charged for Limestone supply Company (Incl GST)	(Rs.)	0
5	Adjustment (+/-) in amount charged made for Limestone supply by the Company	(Rs.)	0
6	Total amount Charged (4±5)	(Rs.)	0
7	Transportation charges by rail/ship/road transport(Incl GST)	(Rs.)	0
8	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)	0
9	Demurrage Charges, if any	(Rs.)	0
10	Total Transportation Charges (7±-8-9)	(Rs.)	0
11	Total amount Charged for Limestone supplied including Transportation (6+10) (Incl GST)	(Rs.)	0
12	Weighted Average Cost of Limestone during the month	(Rs/tonne)	2310
13	Purity of Limestone received during the month	(%)	91.00
14	Sulphur Content of the coal	%	0.38
15	Limestone Consumption	MT	1156.000

Details of Reagent for Computation of Supplementary Energy Charge Rate

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LIMESTONE CONSUMPTION FGD FOR DADRI-II

Name of the Petitioner _____
Name of the Generating Station

S. No.	Month	Unit	Aug-23
	Opening Quantity		
	Opening Quantity of Limestone	MT	386
	Value of Stock	Rs	892168
	Quantity		
1	Quantity of Limestone supplied by Reagent supply Company	tonne	2105
2	Adjustment (+/-) in quantity supplied made by Limestone or Reagent supply Company	tonne	0
3	Net quantity of Limestone Received (1±2)	tonne	2105
4	Amount charged for Limestone supply Company (Incl GST)	(Rs.)	2209977
5	Adjustment (+/-) in amount charged made for Limestone supply by the Company	(Rs.)	0
6	Total amount Charged (4±5)	(Rs.)	2209977
7	Transportation charges by rail/ship/road transport(Incl GST)	(Rs.)	2651972
8	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)	0
9	Demurrage Charges, if any	(Rs.)	0
10	Total Transportation Charges (7±-8-9)	(Rs.)	2651972
11	Total amount Charged for Limestone supplied including Transportation (6+10) (Incl GST)	(Rs.)	4861949
12	Weighted Average Cost of Limestone during the month	(Rs/tonne)	2310
13	Purity of Limestone received during the month	(%)	92.30
14	Sulphur Content of the coal	%	0.44
15	Limestone Consumption	MT	2390

Details of Reagent for Computation of Supplementary Energy Charge Rate

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LIMESTONE CONSUMPTION FGD FOR DADRI-II

Name of the Petitioner _____
Name of the Generating Station

S. No.	Month	Unit	Sep-23
	Opening Quantity		
	Opening Quantity of Limestone	MT	101
	Value of Stock	Rs	234003
	Quantity		
1	Quantity of Limestone supplied by Reagent supply Company	tonne	1239
2	Adjustment (+/-) in quantity supplied made by Limestone or Reagent supply Company	tonne	0
3	Net quantity of Limestone Received (1±2)	tonne	1239
4	Amount charged for Limestone supply Company (Incl GST)	(Rs.)	1300499
5	Adjustment (+/-) in amount charged made for Limestone supply by the Company	(Rs.)	0
6	Total amount Charged (4±5)	(Rs.)	1300499
7	Transportation charges by rail/ship/road transport(Incl GST)	(Rs.)	1560598
8	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)	0
9	Demurrage Charges, if any	(Rs.)	0
10	Total Transportation Charges (7±-8-9)	(Rs.)	1560598
11	Total amount Charged for Limestone supplied including Transportation (6+10) (Incl GST)	(Rs.)	2861097
12	Weighted Average Cost of Limestone during the month	(Rs/tonne)	2310
13	Purity of Limestone received during the month	(%)	92.50
14	Sulphur Content of the coal	%	0.33
15	Limestone Consumption	MT	1155

Details of Reagent for Computation of Supplementary Energy Charge Rate

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LIMESTONE CONSUMPTION FGD FOR DADRI-II

Name of the Petitioner _____
Name of the Generating Station

S. No.	Month	Unit	Oct-23
	Opening Quantity		
	Opening Quantity of Limestone	MT	185
	Value of Stock	Rs	426518
	Quantity		
1	Quantity of Limestone supplied by Reagent supply Company	tonne	5007
2	Adjustment (+/-) in quantity supplied made by Limestone or Reagent supply Company	tonne	0
3	Net quantity of Limestone Received (1±2)	tonne	5007
4	Amount charged for Limestone supply Company (Incl GST)	(Rs.)	5257350
5	Adjustment (+/-) in amount charged made for Limestone supply by the Company	(Rs.)	0
6	Total amount Charged (4±5)	(Rs.)	5257350
7	Transportation charges by rail/ship/road transport(Incl GST)	(Rs.)	6308820
8	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)	0
9	Demurrage Charges, if any	(Rs.)	0
10	Total Transportation Charges (7±-8-9)	(Rs.)	6308820
11	Total amount Charged for Limestone supplied including Transportation (6+10) (Incl GST)	(Rs.)	11566170
12	Weighted Average Cost of Limestone during the month	(Rs/tonne)	2310
13	Purity of Limestone received during the month	(%)	92.60
14	Sulphur Content of the coal	%	0.38
15	Limestone Consumption	MT	4796

Details of Reagent for Computation of Supplementary Energy Charge Rate

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Name of the Petitioner _____
Name of the Generating Station

S. No.	Month	Unit	Nov-23
	Opening Quantity		
	Opening Quantity of Limestone	MT	396
	Value of Stock	Rs	914645
	Quantity		
1	Quantity of Limestone supplied by Reagent supply Company	tonne	4965
2	Adjustment (+/-) in quantity supplied made by Limestone or Reagent supply Company	tonne	0
3	Net quantity of Limestone Received (1±2)	tonne	4965
4	Amount charged for Limestone supply Company (Incl GST)	(Rs.)	5213250
5	Adjustment (+/-) in amount charged made for Limestone supply by the Company	(Rs.)	0
6	Total amount Charged (4±5)	(Rs.)	5213250
7	Transportation charges by rail/ship/road transport(Incl GST)	(Rs.)	6255900
8	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)	0
9	Demurrage Charges, if any	(Rs.)	0
10	Total Transportation Charges (7±-8-9)	(Rs.)	6255900
11	Total amount Charged for Limestone supplied including Transportation (6+10) (Incl GST)	(Rs.)	11469150
12	Weighted Average Cost of Limestone during the month	(Rs/tonne)	2310
13	Purity of Limestone received during the month	(%)	93.20
14	Sulphur Content of the coal	%	0.39
15	Limestone Consumption	MT	2536

Details of Reagent for Computation of Supplementary Energy Charge Rate

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LIMESTONE CONSUMPTION FGD FOR DADRI-II

Name of the Petitioner _____
Name of the Generating Station

S. No.	Month	Unit	Dec-23
	Opening Quantity		
	Opening Quantity of Limestone	MT	2825
	Value of Stock	Rs	6525635
	Quantity		
1	Quantity of Limestone supplied by Reagent supply Company	tonne	0
2	Adjustment (+/-) in quantity supplied made by Limestone or Reagent supply Company	tonne	0
3	Net quantity of Limestone Received (1±2)	tonne	0
4	Amount charged for Limestone supply Company (Incl GST)	(Rs.)	0
5	Adjustment (+/-) in amount charged made for Limestone supply by the Company	(Rs.)	0
6	Total amount Charged (4±5)	(Rs.)	0
7	Transportation charges by rail/ship/road transport(Incl GST)	(Rs.)	0
8	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)	0
9	Demurrage Charges, if any	(Rs.)	0
10	Total Transportation Charges (7±-8-9)	(Rs.)	0
11	Total amount Charged for Limestone supplied including Transportation (6+10) (Incl GST)	(Rs.)	0
12	Weighted Average Cost of Limestone during the month	(Rs/tonne)	2310
13	Purity of Limestone received during the month	(%)	93.20
14	Sulphur Content of the coal	%	0.40
15	Limestone Consumption	MT	1887

Details of Reagent for Computation of Supplementary Energy Charge Rate

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LIMESTONE CONSUMPTION FGD FOR DADRI-II

Name of the Petitioner _____
Name of the Generating Station

S. No.	Month	Unit	Jan-24
	Opening Quantity		
	Opening Quantity of Limestone	MT	938
	Value of Stock	Rs	2166665
	Quantity		
1	Quantity of Limestone supplied by Reagent supply Company	tonne	5663
2	Adjustment (+/-) in quantity supplied made by Limestone or Reagent supply Company	tonne	0
3	Net quantity of Limestone Received (1±2)	tonne	5663
4	Amount charged for Limestone supply Company (Incl GST)	(Rs.)	5946150
5	Adjustment (+/-) in amount charged made for Limestone supply by the Company	(Rs.)	0
6	Total amount Charged (4±5)	(Rs.)	5946150
7	Transportation charges by rail/ship/road transport(Incl GST)	(Rs.)	7135380
8	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)	0
9	Demurrage Charges, if any	(Rs.)	0
10	Total Transportation Charges (7±-8-9)	(Rs.)	7135380
11	Total amount Charged for Limestone supplied including Transportation (6+10) (Incl GST)	(Rs.)	13081530
12	Weighted Average Cost of Limestone during the month	(Rs/tonne)	2310
13	Purity of Limestone received during the month	(%)	91.20
14	Sulphur Content of the coal	%	0.38
15	Limestone Consumption	MT	3821

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Name of the Petitioner _____
Name of the Generating Station

S. No.	Month	Unit	Feb-24
	Opening Quantity		
	Opening Quantity of Limestone	MT	2780
	Value of Stock	Rs	6421685
	Quantity		
1	Quantity of Limestone supplied by Reagent supply Company	tonne	5377
2	Adjustment (+/-) in quantity supplied made by Limestone or Reagent supply Company	tonne	0
3	Net quantity of Limestone Received (1±2)	tonne	5377
4	Amount charged for Limestone supply Company (Incl GST)	(Rs.)	5645850
5	Adjustment (+/-) in amount charged made for Limestone supply by the Company	(Rs.)	1
6	Total amount Charged (4±5)	(Rs.)	5645851
7	Transportation charges by rail/ship/road transport(Incl GST)	(Rs.)	6775020
8	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)	0
9	Demurrage Charges, if any	(Rs.)	0
10	Total Transportation Charges (7±-8-9)	(Rs.)	6775020
11	Total amount Charged for Limestone supplied including Transportation (6+10) (Incl GST)	(Rs.)	12420871
12	Weighted Average Cost of Limestone during the month	(Rs/tonne)	2310
13	Purity of Limestone received during the month	(%)	91.30
14	Sulphur Content of the coal	%	0.43
15	Limestone Consumption	MT	5423

Details of Reagent for Computation of Supplementary Energy Charge Rate

Annexure -I
PART 1
FORM- 16A

LIMESTONE CONSUMPTION FGD FOR DADRI-II

Name of the Petitioner _____
Name of the Generating Station

S. No.	Month	Unit	Mar-24
	Opening Quantity		
	Opening Quantity of Limestone	MT	2734
	Value of Stock	Rs	6315425
	Quantity		
1	Quantity of Limestone supplied by Reagent supply Company	tonne	3802
2	Adjustment (+/-) in quantity supplied made by Limestone or Reagent supply Company	tonne	0
3	Net quantity of Limestone Received (1±2)	tonne	3802
4	Amount charged for Limestone supply Company (Incl GST)	(Rs.)	3992100
5	Adjustment (+/-) in amount charged made for Limestone supply by the Company	(Rs.)	0
6	Total amount Charged (4±5)	(Rs.)	3992100
7	Transportation charges by rail/ship/road transport(Incl GST)	(Rs.)	4790520
8	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)	0
9	Demurrage Charges, if any	(Rs.)	0
10	Total Transportation Charges (7±-8-9)	(Rs.)	4790520
11	Total amount Charged for Limestone supplied including Transportation (6+10) (Incl GST)	(Rs.)	8782620
12	Weighted Average Cost of Limestone during the month	(Rs/tonne)	2310
13	Purity of Limestone received during the month	(%)	92.30
14	Sulphur Content of the coal	%	0.42
15	Limestone Consumption	MT	4532

PART 1
FORM- L

Name of the Petitioner — **NTPC Limited**
Name of the Generating Station — **NCTPS Dadri Stage-II (ECS)**

Statement of Capital cost
(To be given for relevant dates and year wise)

(Amount in Rs. Lakh)

S. No.	Particulars	FY 2024-25		
		Accrual Basis	Un-discharged Liabilities	Cash Basis
A	a) Opening Gross Block Amount as per books	64,767.29	4,442.17	60,325.12
	b) Amount of IDC in A(a) above	4,068.45	0	4,068.45
	c) Amount of FC in A(a) above	-	0	-
	d) Amount of FERV in A(a) above	-	0	-
	e) Amount of Hedging Cost in A(a) above	-	0	-
	f) Amount of IEDC in A(a) above	1,020.80	0	1,020.80
B	a) Addition in Gross Block Amount during the period (Direct purchases)	To be provided at the time of truing-up		
	b) Amount of IDC in B(a) above			
	c) Amount of FC in B(a) above			
	d) Amount of FERV in B(a) above			
	e) Amount of Hedging Cost in B(a) above			
	f) Amount of IEDC in B(a) above			
C	a) Addition in Gross Block Amount during the period (Transferred from CWIP)			
	b) Amount of IDC in C(a) above			
	c) Amount of FC in C(a) above			
	d) Amount of FERV in C(a) above			
	e) Amount of Hedging Cost in C(a) above			
	f) Amount of IEDC in C(a) above			
D	a) Deletion in Gross Block Amount during the period			
	b) Amount of IDC in D(a) above			
	c) Amount of FC in D(a) above			
	d) Amount of FERV in D(a) above			
	e) Amount of Hedging Cost in D(a) above			
	f) Amount of IEDC in D(a) above			
E	a) Closing Gross Block Amount as per books			
	b) Amount of IDC in E(a) above			
	c) Amount of FC in E(a) above			
	d) Amount of FERV in E(a) above			
	e) Amount of Hedging Cost in E(a) above			
	f) Amount of IEDC in E(a) above			

(Petitioner)

PART 1
FORM- M

Name of the Petitioner — **NTPC Limited**
Name of the Generating Station — **NCTPS Dadri Stage-II (ECS)**

Statement of Capital Woks in Progress

(To be given for relevant dates and year wise)

(Amount in Rs. Lakh)

S. No.	Particulars	FY 2024-25		
		Accrual Basis	Un-discharged Liabilities	Cash Basis
A	a) Opening CWIP as per books			-
	b) Amount of IDC in A(a) above			-
	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			-
B	a) Addition in CWIP during the period	To be provided at the time of truing-up		
	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			

(Petitioner)

PART-I
FORM-N

Calculation of Interest on Normative Loan

Name of the Company :	**NTPC Limited**
Name of the Power Station :	**NCTPS Dadri Stage-II (ECS)**

(Amount in Rs Lakh)

S. No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	**2**	**3**	**4**	**5**	**6**	**7**
1	Gross Normative loan – Opening	44,304.50	44,304.50	44,304.50	45,028.70	45,028.70
2	Cumulative repayment of Normative loan up to previous year	4,551.22	7,693.50	10,835.79	14,003.75	17,197.40
3	**Net Normative loan – Opening**	39,753.28	36,610.99	33,468.71	31,024.94	27,831.30
4	Add: Increase due to addition during the year / period	-	-	724.20	-	-
5	Less: Decrease due to de-capitalisation during the year / period	-	-	-	-	-
6	Less: Decrease due to reversal during the year / period	-	-	-	-	-
7	Add: Increase due to discharges during the year / period	-	-	-	-	-
8	Less: Repayment of Loan	3,142.28	3,142.28	3,167.97	3,193.65	3,193.65
9	**Net Normative loan - Closing**	36,610.99	33,468.71	31,024.94	27,831.30	24,637.65
10	**Average Normative loan**	38,182.14	35,039.85	32,246.83	29,428.12	26,234.47
11	Weighted average rate of interest*	5.77%	5.78%	5.84%	6.00%	6.22%
12	**Interest on Loan**	**2201.89**	**2024.77**	**1881.88**	**1765.15**	**1631.87**

(Petitioner)

PART 1
FORM- O

Calculation of Interest on Working Capital

Name of the Company :							
Name of the Power Station :							
							(Amount in Rs Lakh)
S. No.	**Particulars**		**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**
1	**2**		**3**				**4**
	No of days		365	365	365	366	365
1	Cost of Limestone/Reagent Stock	20 days	80.36	80.36	80.36	80.36	80.36
1a	Cost of Limestone/Reagent Advance Payment	30 Days	120.54	120.54	120.54	120.54	120.54
2	**Receivables**	45 days	1,783.44	1,770.08	1,767.54	1,765.47	1,762.34
3	O & M Expenses	1 month	108.01	113.68	119.64	125.93	132.54
4	Maintenance Spares	@20%	259.22	272.82	287.15	302.22	318.09
5	Total Working Capital		2351.57	2357.49	2375.23	2394.53	2413.87
6	Rate of Interest	%	11.90	11.90	11.90	11.90	11.90
7	**Interest on Working Capital**		**279.84**	**280.54**	**282.65**	**284.95**	**287.25**

(Petitioner)

Signature Not Verified

Digitally signed by PARIMAL PIYUSH
Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

Form-O(i)

Name of the Company	**NTPC Limited**
Name of the Power Station	**NCTPS Dadri Stage-II (ECS)**

(Amount in Rs Lakh)

SN	Particulars	Unit	2024-25	2025-26	2026-27	2027-28	2028-29
1	Auxiliary consumption	%	5.25	5.25	5.25	5.25	5.25
2	Additional Auxiliary Power Consumption (ECS)	%	1.00	1.00	1.00	1.00	1.00
3	Design SO2 Removal Effeciency	%	95.06%	95.06%	95.06%	95.06%	95.06%
4	SHR		2370.66	2370.66	2370.66	2370.66	2370.66
5	CVPF		3664.83	3664.83	3664.83	3664.83	3664.83
6	**Specific Reagent Consumption (kg/kwh)**	kg/kwh	8.701	8.701	8.701	8.701	8.701
4	**Landed Cost of Reagent (Rs/MT)**	Rs/MT	2,310	2,310	2,310	2,310	2,310
7	**Supplementary Energy Charge (Rs/kwh)**	Rs/kwh	0.0694	0.0694	0.0694	0.0694	0.0694
8	Installed Capacity	MW	980	980	980	980	980
9	No of Days in the year	Days	365	365	365	366	365
10	ESO in 1 Day	MU	18.74	18.74	18.74	18.74	18.74
11	Cost of Reagent consumed in a day	Rs Lakh	4.02	4.02	4.02	4.02	4.02

ECR supp.	dECR+ [(SRC x LPR / 10)/(100-(AUXn + AUXen))]	0.0694	Rs/KWh
dECR	ECRen-ECRn	0.048	Rs/KWh
SRC	[K x SHR x S/CVPF] x [85/ LP]	8.70	g/KWh
K	(35.2 x Design SO2 Removal Efficiency/96%)	34.86	
CVPF		3665	Kcal/Kg
ECRn		4.561	Rs/Kwh
ECRen		4.609	Rs/Kwh
S		0.41	%

(Petitioner)

Signature Not Verified

Digitally signed by PARIMAL PIYUSH
Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

Form-O(i) Parameters

LP(Average)	91.89
Sulpher Content(Average)	0.41
Landed Cost of Reagent (Rs/MT)	2310.00
Data	
CVPF (kCal/Kg)	3,664.83
CVSF (kCal/Litre)	9,660.00
LPPF (Rs/MT)	6,477.29
LPSF (Rs/KL)	81,336.33
AUX-Norm (%)	5.25
GHR-Norm (kCal/kWh)	2,370.66
SFC-Norm (Litre/kWh)	0.0005
ECR (INR)	4.56
AUX for DESOX(Norm) (%)	1
NEW AUX-NORM (%)	6.25
NEW GHR-NORM (kCal/kWh)	2370.66
NEW-SFC-NORM (Litre/kWh)	0.0005
NEW ECR (INR)	4.609
Delta ECR ((New ECR-OLD ECR)= ΔECR)	0.0480

PART 1
FORM-T

Summary of issue involved in the petition

Name of the Company :		**NTPC Limited**
Name of the Power Station :		**NCTPS Dadri Stage-II (ECS)**
1	**Petitioner:**	**NTPC Limited**
2	**Subject**	**Determination of Supplementary Tariff for 2024-29 period**
3	**i)Approve supplementary tariff of NCTPS-II ECS system for the tariff period 01.04.2024 to 31.03.2029. ii)Pass any other order as it may deem fit in the circumstances mentioned above.**	
4	**Respondents**	
	Name of Respondents	
	a. Uttar Pradesh Power Corp. Ltd.	
	b. BSES Rajdhani Power Ltd. (BRPL)	
	c. BSES Yamuna Power Ltd. (BYPL)	
	d. Tata Power Delhi Distribution Ltd (TPDDL)	

Annexure-A1 Annexure - A

SECRET

F.No.1/6/2011/IT (E-22-Part-1)(246867)
Government of India
Ministry of Power

Shram Shakti Bhavan, Rafi Marg,
New Delhi, Dated: 23rd October , 2019

To

1. Chairperson-CEA
2. CMD-NTPC/NHPC/POWERGRID/PFC/REC/NEEPCO/THDC/POSOCO/SJVNL
3. Chairman-DVC/BBMB
4. DG-BEE/NPTI/CPRI
5. Secretary-CERC/ATE
6. MD-EESL
7. CISO-MoP [Kind.Attn. Shri MAKP Singh, CE(IT), CEA)]
8. CERT-Thermal/Hydro/Transmission/Distribution
9. Sr.Tech.Dir. (NIC)-MoP

All directed

Sir,

I am directed to inform that reliable inputs indicate that Pak based anti-India agencies have prepared a blue print to hack/exploit computer/cyber systems in India and are exploring capabilities towards implementing the same immediately.

2. This new strategy aims to concentrate efforts towards disrupting important Indian economic hubs and vital installations, through cyber attacks and disrupting the computer systems as an alternative to trans-border terrorism. Such attacks, especially on our power, transport, financial and energy related systems, can potentially damage economic activities in the country and cause large scale disruption in affected areas/sectors.

3. Keeping in view of the prevailing security scenario in the country, it is requested to urgently review and strengthen the cyber/computer and physical security of vital installations and critical infrastructure.

4. The matter may be accorded top priority.

Yours Faithfully,

[redacted]

23/10/19

(Praveen Kumar)
Under Secretary to the Govt. of India
Tel.No.23715507 ext. 281
[redacted]@nic.in

Signature Not Verified
Digitally signed by PARIMAL PIYUSH
Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

92 170

Annexure-A2

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.

*****

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

भारत का राजपत्र
The Gazette of India

सी.जी.-डी.एल.-अ.-12072023-247241
CG-DL-E-12072023-247241

असाधारण
EXTRAORDINARY

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

प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

सं. 400] नई दिल्ली, बुधवार, जुलाई 12, 2023/आषाढ़ 21, 1945
No. 400] NEW DELHI, WEDNESDAY, JULY 12, 2023/ASHADHA 21, 1945

पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

प्रारूप अधिसूचना

नई दिल्ली, 11 जुलाई, 2023

सा.का.नि. 499(अ).—केंद्रीय सरकार पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3, धारा 6 और धारा 25 द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, तापीय विद्युत संयंत्रों द्वारा फसल-अवशेषों के उपयोग को विनियमित करने के लिए निम्नलिखित नियम बनाती है, अर्थात्:-

1. संक्षिप्त नाम, लागू होना और प्रारंभ. –

(1) इन नियमों का संक्षिप्त नाम पर्यावरण (तापीय विद्युत संयंत्रों द्वारा फसल अवशेषों का उपयोग) नियम, 2023 है।

(2) ये राष्ट्रीय राजधानी क्षेत्र और निकटवर्ती क्षेत्रों में वायु क्वालिटी प्रबंध आयोग अधिनियम, 2021 (2021 का 29) की धारा 2 की उपधारा (1) के क्रमशः खंड (च) और खंड (क) में यथा परिभाषित राष्ट्रीय राजधानी क्षेत्र और निकटवर्ती क्षेत्रों पर लागू होंगे।

(3) ये राजपत्र में उनके प्रकाशन की तारीख से प्रवृत्त होंगे।

2. फसल अवशेष का उपयोग. – विद्युत उत्पादन उपयोगिताओं से संबंधित सभी कोयला आधारित तापीय विद्युत संयंत्रों को कोयले के साथ अनिवार्य रूप से फसल अवशेषों से बने गुटिका (पेलेट्स) या ब्रिकेटों के न्यूनतम पांच प्रतिशत मिश्रण का अनिवार्य रूप से उपयोग करना होगा।

3. पर्यावरणीय प्रतिकर. - नियम 2 में यथा उपबंधित फसल अवशेषों का उपयोग न करने के लिए, राष्ट्रीय राजधानी क्षेत्र और निकटवर्ती क्षेत्रों में वायु क्वालिटी प्रबंध आयोग अधिनियम, 2021 (2021 का 29) के अधीन गठित [illegible]

राजधानी क्षेत्र और के निकटवर्ती क्षेत्रों में वायु क्वालिटी प्रबंध आयोग या उस आयोग द्वारा प्राधिकृत कोई अधिकारी नीचे दी गई सारणी में विनिर्दिष्ट दर पर वार्षिक आधार पर ऐसे तापीय विद्युत संयंत्रों को पर्यावरणीय प्रतिकर अधिरोपित करेगा और उसकी वसूली करेगा:

वर्ष 2024-2025 के लिए पर्यावरणीय प्रतिकर की दर:	
वार्षिक आधार पर उपयोग किए गए फसल अवशेष गुटिका (पेलेट्स) या ब्रिकेटों का प्रतिशत	पर्यावरणीय प्रतिकर की दर (*उत्पादित विद्युत की प्रति यूनिट रु.*)
पाँच प्रतिशत से कम या उसके बराबर किंतु चार प्रतिशत से अधिक	0.0
चार प्रतिशत से कम या उसके बराबर किंतु तीन प्रतिशत से अधिक	0.0
तीन प्रतिशत से कम या उसके बराबर किंतु दो प्रतिशत से अधिक	0.01
दो प्रतिशत से कम या उसके बराबर किंतु एक प्रतिशत से अधिक।	0.02
एक प्रतिशत से कम या उसके बराबर किंतु शून्य प्रतिशत से अधिक	0.03
वर्ष (2025-2026) से आगे के लिए पर्यावरणीय प्रतिकर की दर	
वार्षिक आधार पर उपयोग किए गए फसल अवशेष गुटिका (पेलेट्स) या ब्रिकेट का प्रतिशत	पर्यावरणीय प्रतिकर की दर (*उत्पादित विद्युत की प्रति यूनिट रु.*)
पाँच प्रतिशत से कम किंतु चार प्रतिशत से अधिक या उसके बराबर	0.01
चार प्रतिशत से कम किंतु तीन प्रतिशत से अधिक या उसके बराबर	0.02
तीन प्रतिशत से कम किंतु दो प्रतिशत से अधिक या उसके बराबर।	0.03
दो प्रतिशत से कम किंतु एक प्रतिशत से अधिक या उसके बराबर	0.04
एक प्रतिशत से कम किंतु शून्य प्रतिशत से अधिक या उसके बराबर	0.05

4. कतिपय मामलों में इन नियमों का लागू होना – यथास्थिति, केंद्रीय विद्युत विनियामक आयोग या राज्य विनियामक आयोग, नियम 2 के उपबंधों पर विचार करने के पश्चात् विद्युत अधिनियम, 2003 (2003 का 36) के , अधीन टैरिफ अवधारित करेगा।

5. शिथलीकरण की शक्ति. - वायु क्वालिटी प्रबंध आयोग, मामला-दर-मामला के आधार पर, केंद्रीय विद्युत प्राधिकरण और केंद्रीय प्रदूषण नियंत्रण बोर्ड के परामर्श से, तापीय विद्युत संयंत्र का ऐसे तापीय विद्युत संयंत्रों के नियंत्रण से परे परिस्थितियों से उत्पन्न होने वाली किसी भी कठिनाई के समाधान के लिए नियम 2 और 3 के उपबंधों के अनुपालन से शिथलीकरण कर सकेगा है।

[फा. सं. क्यू-15014/16/2021-सीपीए (पार्ट-1)]

नरेश पाल गंगवार, अपर सचिव

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

DRAFT NOTIFICATION

New Delhi, the 11th July, 2023

G.S.R. 499(E).—In exercise of the powers conferred by sections 3, 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules to regulate the utilisation of crop-residue by the thermal power plants, namely:-

1. Short title, application and commencement. –

(1) These rules may be called the Environment (Utilisation of Crop residue by Thermal Power Plants) Rules, 2023.

(2) They shall apply to the National Capital Region and the Adjoining Areas as defined respectively in clauses (f) and (a) of sub-section (1) of section 2 of the Commission for Air Quality Management in National Capital Region and Adjoining Areas Act, 2021(29 of 2021).

(3) They shall come into force on the date of their publication in the Official Gazette.

2. Utilisation of crop residue. - All coal based thermal power plants of power generation utilities shall mandatorily use minimum five per cent blend of pellets or briquettes made of crop residue along with coal.

3. Environmental compensation.- For non-utilisation of crop residue as provided in rule 2, the Commission for Air Quality Management in National Capital Region and Adjoining Areas, constituted under the Commission for Air Quality Management of National Capital Region and Adjoining Areas Act, 2021 (29 of 2021), or any officer authorised by that Commission, shall impose and collect the environmental compensation from such thermal power plants on annual basis at the rates specified in the table given below:

(1) Rate of environmental compensation for the year 2024-2025:	
Percentage of crop residue pellets or briquettes utilized on annual basis	Rate of environmental Compensation (*Rs. Per unit of electricity generated*)
Less than or equal to five per cent but more than four per cent	0.0
Less than or equal to four per cent but more than three per cent	0.0
Less than or equal to three per cent but more than two per cent	0.01
Less than or equal to two per cent but more than one per cent.	0.02
Less than or equal to one per cent but more than zero per cent	0.03
(2) Rate of environment compensation for the year (2025-2026) onwards	
Percentage of crop residue pellets or briquettes utilised on annual basis	Rate of environmental Compensation (*Rs. Per unit of electricity generated*)
Less than five per cent but more than or equal to four per cent	0.01
Less than four per cent but more than or equal to three per cent	0.02
Less than three per cent but more than or equal to two per cent.	0.03
Less than two per cent but more than or equal to one per cent	0.04
Less than one per cent but more than or equal to zero per cent	0.05

4. Application of these rules in certain cases- The Central Electricity Regulatory Commission or the State Regulatory Commissions, as the case may be, shall determine tariff under the Electricity Act, 2003 (36 of 2003) after taking into consideration the provisions of rule 2.

5. Power to grant relaxation - The Commission for Air Quality Management may, on case to case basis, grant relaxation to thermal power plants, in consultation with the Central Electricity Authority and the Central Pollution Control Board, for addressing any difficulty arising out of circumstances beyond the control of such thermal power plants in its compliance of the provisions of rule 2 and 3 above.

[F. No. Q-15014/16/2021-CPA (part-1)]

NARESH PAL GANGWAR, Addl. Secy.

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Annexure C_Obsolescence_letter_BHEL

ಭಾರತ್ ಹೆವಿ ಎಲೆಕ್ಟ್ರಿಕಲ್ಸ್ ಲಿಮಿಟೆಡ್
भारत हेवी इलेक्ट्रिकल्स लिमिटेड
Bharat Heavy Electricals Limited
(A Government of India Undertaking)
ELECTRONICS DIVISION
P.B.No 2606, Mysore Road, Bangalore - 560 026

Annexure-A4

PHONE : 080-26998281
MOBILE : 9845696568

E-MAIL : prakashdevadas@bhel.in

Ref: GM-NTPC/404/CE-HMI-02 Dated 21/09/2022

Sub: Recommendation for HMI Upgrade

The Windows XP/ Windows 7 based workstation hardware and Microsoft Operating System available at sites (projects listed in annexure-1) is out of mainstream support from OEM and Microsoft respectively. Also the support for Symantec Antivirus version 10.0 has been withdrawn by the OEM and no more security updates / virus definitions are available for that version. Hence the HMIs-maxStations are prone to vulnerabilities which can tamper the operation of plant.

HMI Upgrade for the projects mentioned in Annexure-1 is proposed due to various obsolescence in the DCS components as detailed below.

DCS Component		Existing version / model / Specification	Obsolescence
Workstation / Engineering server / Historian server	Hardware	**Workstation:** Intel Core 2 Duo processor, 1GB RAM, 146 GB SAS disk, 10 Mbps Ethernet port. **Server:** Intel Xeon dual core processor, 2 GB RAM, 3x76GB HDD, 10 Mbps Ethernet port.	Lower Processor cores and speed, lower HDD capacity and RAM requirements incompatible for latest software requirements; Lower network bandwidth of 10Mbps restricting communication speed capability of latest DCS components and attributing to latency.
	Operating System	Windows 7 SP1 / Windows XP / Windows Server 2008 R2	Operating Systems were declared End of Support by the OEM-Microsoft as mentioned below: Windows XP - April' 2014 Windows 7 - Jan' 2020 Windows Server 2008 R2 - Jan' 2020
	maxDNA software	maxDNA 4.2.1 / 4.5 / 4.5.1 / 6.0.x	These versions are not compatible with latest Operating Systems; more improved version of maxDNA- release 7.x is available suiting the latest OS.
	Antivirus Software	Symantec 10.x / Symantec 11.x / Symantec 12.x	Declared obsolete by the OEM-Broadcom and no longer updates or virus definitions are available.

ಭಾರತ್ ಹೆವಿ ಎಲೆಕ್ಟ್ರಿಕಲ್ಸ್ ಲಿಮಿಟೆಡ್
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Network	Switch	10 Mbps backbone	Lower network bandwidth of 10Mbps restricting communication speed capability of latest DCS components.
	Network Hardening settings	No validated Network hardening settings	Not suitable for latest network requirements with hardening features.

Prakash D
AGM (CE-Engg-I)

Signature Not Verified
Digitally signed by PARIMAL PIYUSH
Date: 2024.11.25 20:46:32 IST
Reason: AGM(Commercial)
Location: NTPC Limited

Annexure-1 List of upgrade projects	
Sl No	Project Name
1	Barauni_Stage-2
2	Bongaigaon_Stage-1
3	Dadri-Thermal_Stage-1
4	Dadri-Thermal_Stage-2
5	Darlipalli_Stage-1
6	Farakka_Stage-2
7	Farakka_Stage-3
8	Gadarwara_Stage-1
9	KoldamHydro
10	Korba_Stage-1
11	Korba_Stage-3
12	Mauda_Stage-1
13	Mauda_Stage-2
14	NorthKaranpura_Stage-1
15	Rihand_Stage-2
16	Rihand_Stage-3
17	Simhadri_Stage-2
18	TANDA_Stage-1
19	TANDA_Stage-2
20	Unchahar_Stage-4
21	Vindhyachal_Stage-4
22	Vindhyachal_Stage-5
23	BRBCL Stage-I
24	Jhajjar Stage-I
25	KBUNL Stage-I
26	KBUNL Stage-II
27	NPGCL Stage-I
28	NSPCL Bhilai Stage-I
29	NTECL Stage-I

भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
सूचना प्रौद्योगिकी एवं साइबर सुरक्षा प्रभाग
Information Technology & Cyber Security Division
****

विषय : CEA (Cyber Security in Power Sector) Guidelines, 2021.

CEA is mandated to prepare 'Guidelines on Cyber Security' in Power Sector under the provision of regulation (10) of the Central Electricity Authority (Technical Standards for Connectivity to the Grid) (Amendment) Regulations, 2019. Guidelines on Cyber Security in Power Sector incorporating the cardinal principles has been prepared by CEA. In compliance to the provision of the above regulation, **CEA (Cyber Security in Power Sector) Guidelines, 2021** are issued for compliance by all entities listed in the clause 2.3 (Applicability of the Guidelines) of the guidelines.

Encl: Guidelines on Cyber Security

07/10/21
(V.K Mishra)
Secretary CEA

CEA (Cyber Security in Power Sector) Guidelines, 2021

1.0 Background

1.1 Cyber intrusion attempts and Cyber-attacks in any critical sector are carried out with a malicious intent. In Power Sector it's either to compromise the Power Supply System or to render the grid operation in-secure. Any such compromise, may result in mal-operations of equipments, equipment damages or even in a cascading grid brownout/blackout. The much hyped air gap myth between IT and OT Systems now stands shattered. The artificial air gap created by deploying firewalls between any IT and OT System can be jumped by any insider or an outsider through social engineering. Cyber-attacks are staged through tactics & techniques of Initial Access, Execution, Persistence, Privilege Escalation, Defence Evasion, Command and Control, Exfiltration. After gaining the entry inside the system through privilege escalation, the control of IT network and operations of OT systems can be taken over even remotely by any cyber adversary. The gain of sensitive operational data through such intrusions may help the Nation/State sponsored or non-sponsored adversaries and cyber attackers to design more sinister and advanced cyber-attacks.

1.2 Government of India has set up the Indian Computer Emergency Response Team (CERT-In) for Early Warning and Response to cyber security incidents and to have collaboration at National and International level for information sharing on mitigation of cyber threats. CERT-In regularly issues advisories on safeguarding computer systems and publishes Security Guidelines which are widely circulated for compliances. All Central Government Ministries/ Departments and State/Union Territory Governments have been advised to conduct cyber security audit of their entire Cyber Infrastructure including websites at regular interval through CERT-In empanelled Auditors so as to identify gaps and appropriate corrective actions to be taken in cyber security practices. CERT-In extends supports to enable Responsible Entity in conducting cyber security mock drills and in assessment of their preparation to withstand cyber-attacks. The Responsible Entity must submit Reports of Cyber Audit of cyber security controls, architecture, vulnerability management, network security and periodic cyber security drills to sectoral CERT as well as CERT-In. Team of experts shall review these reports and shortcomings if any in the compliances shall be flagged by them. CERT-In on regular basis also conducts workshops and training programs to enhance Cyber awareness of all Stakeholders.

1.3 Ministry of Power has created 6(six) sectoral CERTs namely Thermal, Hydro, Transmission, Grid Operation, RE and Distribution for ensuring cyber security in Indian Power Sector. Each Sectoral CERT has prepared their sub-sector specific model Cyber Crisis Management Plan(C-CMP) for countering cyber-attacks and cyber terrorism. Each Sectoral CERT has circulated their model C-CMPs for preparation and implementation of organization specific C-CMP by each of their Constituent Utility.

1.4 All Responsible Entities, Service Providers, Equipment Suppliers/Vendors and Consultants engaged in Power Sector are equally responsible for ensuring cyber security of the Indian Power Supply System. They are to act timely upon each threat intelligence,

advisories and other inputs received from authenticated sources, for continuous improvement in their cyber security posture.

1.5 In the current Indian scenario though many cyber security directives and guidelines exists, but none of them are power sector specific. Ministry of Power has directed CEA to prepare Regulation on Cyber Security in Power Sector. And as an interim measures CEA has been directed to issue Guideline on Cyber Security in Power Sector, under the provision of Regulation 10 on Cyber Security in the "Central Electricity Authority (Technical Standards for Connectivity to the Grid) (Amendment) Regulations, 2019".

1.6 The Guidelines on Cyber Security, in the form of Articles written below, requires mandatory Compliance by all Responsible Entities. The Guidelines shall come into effect from the date of issue by Central Electricity Authority, New Delhi.

2.0 Hereby the Guidelines on Cyber Security are drawn in the form of Articles for compliance by the Requester as well as User under the following provision of Regulation 10 on Cyber Security, in the "Central Electricity Authority (Technical Standards for Connectivity to the Grid) (Amendment) Regulations, 2019".

"The requester and the user shall comply with cyber security guidelines issued by the Central Government, from time to time, and the technical standards for communication system in Power Sector laid down by the Authority."

2.1 **Objective of issuing Guideline**:

a) Creating cyber security awareness
b) Creating a secure cyber ecosystem,
c) Creating a cyber-assurance framework,
d) Strengthening the regulatory framework,
e) Creating mechanisms for security threat early warning, vulnerability management and response to security threats,
f) Securing remote operations and services,
g) Protection and resilience of critical information infrastructure,
h) Reducing cyber supply chain risks,
i) Encouraging use of open standards,
j) Promotion of research and development in cyber security,
k) Human resource development in the domain of Cyber Security,
l) Developing effective public private partnerships,
m) Information sharing and cooperation
n) Operationalization of the National Cyber Security Policy

2.2 Within the text of these Articles, '**Responsible Entity'** shall mean all:

a) Transmission Utilities as well as Transmission Licensees,
b) Load despatch centres (State, Regional and National),
c) Generation utilities (Hydro, Thermal, Nuclear, RE),
d) Distribution Utilities
e) Generation Aggregators,
f) Trading Exchanges,
g) Regional Power Committees, and
h) Regulatory Commissions.

2.3 **Applicability:**

All Responsible Entities as well as System Integrators, Equipment Manufacturers, Suppliers/Vendors, Service Providers, IT Hardware and Software OEMs engaged in the Indian Power Supply System.

2.4 **Scope:**

2.4.1 **Control Systems for System Operation and Operation Management.**

a) Grid Control and Management Systems,
b) Power Plant Control Systems,
c) Central Systems used to monitor and control of distributed generation and loads e.g. virtual power plants, storage management, central control rooms for hydroelectric plants, photovoltaic/wind power installations,
d) Systems for fault management and work force management,
e) Metering and measurement management systems,
f) Data archiving systems,
g) Parameterisation, configuration and programming systems,
h) Supporting systems required for operation of the above mentioned systems,

2.4.2 **Communication System.**

a) Routers switches and firewalls,
b) Communication technology-related network components,
c) Wireless digital systems.
d) Control Centre to Control Centre Communications for data exchange on ICCP. **(IEC 61850/60850-5/TASE.2/)**

2.4.3 **Secondary, Automation and Tele control technologies**

a) Control and Automation components,
b) Control and field devices,
c) Tele control devices,
d) Programmable logic controllers / Remote Terminal Units, including digital sensor and actuators elements,
e) Protection devices,
f) Safety components,
g) Digital measurement and metering installations,
h) Synchronisation devices,
i) Excitation Systems,

3.0 Definition of Terms:

1. **Access Management**: shall mean set of policies and procedures of the Responsible Entity for allowing Personnel, devices and IoT to securely perform a broad range of operational, maintenance, and asset management tasks either on site or remotely as laid down in Clause 5.2.5 of IS 16335.
2. **Accreditation:** shall mean the process of verifying that an organisation is capable of conducting the tests and assessments against a product/process that are required to be certified.

3. **Accreditation Body:** shall mean an organisation that has been accredited to verify the credentials and capabilities of the organisations that wish to become a certification body.
4. **Act:** shall mean the Information Technology Act, 2000 (21 of 2000)
5. **Asset**: shall mean anything that has value to the organization.
6. **Certification:** shall mean the process of verifying that a product has been manufactured in conformance with a set of predefined standards and/or regulations by an organisation, that is accredited to conduct the certification process
7. **Certification Body:** shall mean an organisation that has been accredited by an accreditation body to certify products / process against a certification scheme.
8. **Certification Scheme:** shall mean the processes, paperwork, tools, and documentation that define how a product or manufacturer is certified
9. **Chief Information Security Officer:** shall means the designated employee of Senior management level directly reporting to Managing Director/Chief Executive Officer/Secretary of the Responsible Entity, having knowledge of Information Security and related issues, responsible for cyber security efforts and initiatives including planning, developing, maintaining, reviewing and implementation of Information Security Policies
10. **Critical Assets:** shall mean the facilities, systems and equipment which, if destroyed, degraded or otherwise declared unavailable, would affect the reliability or operability of the Power Supply System.
11. **Critical System:** shall mean cyber assets essential to the reliable operation of critical asset. Critical System consists of those cyber assets that have at least one of the following characteristics:
    a) The cyber asset uses a routable protocol to communicate outside the electronic security perimeter.
    b) The cyber asset uses a routable protocol within a control centre.
    c) The cyber asset is dial-up accessible.
12. **Critical Information Infrastructure*:*** shall mean Critical Information Infrastructure as defined in explanation of sub-section (1) of Section 70 of the Act.
13. **Cyber Assets**: shall mean the programmable electronic devices, including the hardware, software and data in those devices that are connected over a network, such as LAN, WAN and HAN.
14. **Cyber Crisis Management Plan:** shall mean a framework for dealing with cyber related incidents for a coordinated, multi-disciplinary and broad-based approach for rapid identification, information exchange, swift response and remedial actions to mitigate and recover from malicious cyber related incidents impacting critical processes.
15. **Cyber Security Breach**: shall mean any cyber incident or cyber security violation that results in unauthorized or illegitimate access or use by a person as well as an entity, of data, applications, services, networks and/or devices through bypass of the underlying cyber security protocols, policies and mechanisms resulting in the compromise of the confidentiality, integrity or availability of data/information maintained in a computer resource or cyber asset.
16. **Cyber Security Incident:** shall mean any real or suspected adverse cyber security event that violates, explicitly or implicitly, cyber security policy of Responsible Entity resulting in unauthorized access, denial of service or disruption, unauthorized use of computer resource for processing or storage of information or changes to data or information

without authorization, leading to harm to the power grid or its critical sub-sectoral elements Generation, Transmission and Distribution.

17. **Cyber Security Policy:** shall mean documented set of business rules and processes for protecting information, computer resources, networks, devices, Industrial Control Systems and other OT resources.
18. **Electronic Security Perimeter:** shall mean the logical border surrounding a network to which the Cyber Systems of Power Supply System are connected using a routable protocol.
19. **Information Security Division:** shall mean a division accountable for cyber security and protection of the Critical System of the Responsible Entity.
20. **Protected System:** shall mean any computer, computer system or computer network of the Responsible Entity notified under section 70 of the Act, in the official gazette by appropriate Government.
21. **Security Architecture:** shall mean a framework and guidance to implement and operate a system using the appropriate security controls with the goal to maintain the system's quality attributes like confidentiality, integrity, availability, accountability and assurance.
22. **Vulnerability:** shall mean intrinsic properties of something resulting in susceptibility to a risk source that can lead to an event with a consequence
23. **Vulnerability Assessment:** shall mean a process of identifying and quantifying vulnerabilities

4.0 Standards

Reference	Description
ISO/IEC 15408	Common Criteria Certification Standard
ISO/IEC 17011	General requirements for accreditation bodies accrediting conformity assessment bodies
ISO/IEC 17025	General requirements for the competence of testing and calibration laboratories
ISO/IEC 21827	Systems Security Engineering - Capability Maturity Model (SSE-CMM)
ISO/IEC 24748-1	Systems and software engineering — Life cycle management — Part 1: Guidelines for life cycle management.
ISO 27001/2	Information Security Management
ISO/ IEC 27019	Information technology — Security techniques — Information Security controls for the energy utility industry
ISO/IEC 61508	Functional Safety of Electrical / Electronic / Programmable Electronic Safety-related Systems
IEC 61850	Communication networks and systems for power utility automation
IEC 62351	Standards for Securing Power System Communications
IEC 62443	Cyber Security for Industrial Control Systems
IS 16335	Power Control Systems – Security Requirements.

5.0 Abbreviations

Abbreviations		Description
a)	BES	Bulk Electric System

b)	CDAC	Centre for Development of Advanced Computing
c)	CEA	Central Electricity Authority
d)	CERC	Central Electricity Regulatory Commission
e)	CERT	Computer Emergency Response Team
f)	CERT-In	Indian Computer Emergency Response Team
g)	CII	Critical Information Infrastructure
h)	CISO	Chief Information Security Officer
i)	CSK	Cyber Swachhta Kendra
j)	COTS	Commercial off-the Shelf
k)	ESP	Electronic Security perimeter
l)	ICS	Industrial Control Systems
m)	ICT	Information and Communications Technology
n)	IEC	International Electro Technical Commission
o)	ISAC	Information Sharing and Analysis Centre
p)	ISD	Information Security Division
q)	ISO	International Organization for Standardization
r)	ISMS	Information Security Management System
s)	IT	Information Technology
t)	FAT	Factory Acceptance Test
u)	NABL	National Accreditation Board for Testing and Calibration Laboratories
v)	NCIIPC	National Critical Information Infrastructure Protection Centre
w)	NLDC	National Load Dispatch Centre
x)	NPTI	National Power Training Institute
y)	NSCS	National Security Council Secretariat
z)	OEM	Original Equipment Manufacturer
aa)	OT	Operational Technology
bb)	RLDC	Regional Load Dispatch Centres
cc)	SAT	Site Acceptance Test
dd)	SERC	State Electricity Regulatory Commission
ee)	SCADA	Supervisory Control and Data Acquisition Systems
ff)	SIEM	Security Information and Event Management
gg)	SLA	Service Level Agreement
hh)	SLDC	State Load Dispatch Centre
ii)	QCI	Quality Council of India

CEA (Cyber Security in Power Sector) Guidelines, 2021

Article 1. Cyber Security Policy.

a. Cardinal Principles: The Responsible entity will strictly adhere to following cardinal principles while framing cyber security policy:

i. There is hard isolation of their OT Systems from any internet facing IT system.

ii. May keep only one of their IT systems with internet facing at any of their site/location if required which is isolated from all OT zones and kept in a separate room under the security and control of CISO.

iii. Downloading/Uploading of any data/information from their internet facing IT system is done only through an identifiable whitelisted device followed by scanning of both for any vulnerability/malware as per the SOP laid down and for all such activities digital logs are maintained and retained under the custody of CISO for at least 6 months. The log shall be readily to carry out the forensic analysis if asked by investigation agency.

iv. List of whitelisted IP addresses for each firewall is maintained by CISO and each firewall is configured for allowing communication with the whitelisted IP addresses only.

v. Communication between OT equipment/systems is done through the secure channel preferably of POWERTEL through the fibre optic cable. Security configuration of the communication channel is also to be ensured.

vi. All ICT based equipment/system deployed in infrastructure/system mandatorily CII are sourced from the list of the "Trusted Sources" as and when drawn by MoP/CEA.

b. The Responsible Entity shall be ISO/IEC 27001 certified (including sector specific controls as per ISO/IEC 27019).

c. The Responsible Entity shall have a Cyber Security Policy drawn upon the guidelines issued by NCIIPC.

d. The Responsible Entity shall ensure annual review of their Cyber Security Policy by subject matter expert and changes shall be made therein only after obtaining the due approval from Board of Directors.

e. The process of Access Management for all Cyber Assets owned or under control of the Responsible Entity shall be detailed in the Cyber Security Policy.

f. The Cyber Security Policy shall leverage state-of-art cyber security technologies and relevant processes at multiple layers to mitigate the cyber security risks.

g. The Responsible Entity shall be solely responsible to get Cyber Security Policy implemented through its Information Security Division (ISD).

h. The CISO shall record the reason(s) for exemption required, if any, in case, unable to comply with any of the provision(s) of the Cyber Security Policy. Any exception shall be allowed only after an approval of provisions of compensatory control(s) to mitigate residual cyber security risks.

i. The CISO shall record the exemptions sought in statement of applicability controls, while getting the ISO 27001 certified. All exemptions and its justification need to be in conformance with Cyber Security Policy of the Responsible Entity.
j. The Responsible Entity shall allocate sufficient Annual budget for enhancing cyber security posture, enhanced year over year.
k. The Responsible Entity shall work in collaboration with other Industry Stakeholders as well as Academia to promote R&D activity in the domain of cyber security.
l. The Responsible Entity shall ensure that cyber security issues are taken up as agenda items in their Board meetings once in every three months.

Article 2 Appointment of CISO.

a) The Responsible Entity shall mandatorily appoint a CISO and shall confirm to qualification, if any, **laid** by Quality Council of India (QCI). In absence, the work of CISO shall be looked upon by Alternate CISO. In case qualification for appointment of Alternate CISO has been relaxed for reasons recorded thereof, Alternate CISO has to mandatorily acquire the minimum required cyber security skill sets within six months from the date of his appointment.
b) The Responsible Entity shall regularly update details of CISO and Alternate CISO, with the Sectoral CERT, as well as on ISAC-Power Portal.
c) Roles and Responsibility of CISOs shall be as laid by CERT-In and ring-fenced to ensure cyber security of the Cyber Assets of the Responsible Entity.

Article 3: Identification of Critical Information Infrastructure (CII).

a) The Responsible Entity shall submit to NCIIPC through Sectoral CERT, details of Cyber Assets which uses a routable protocol to communicate outside the Electronic Security Perimeter drawn by the Responsible Entity or a routable protocol within a control centre and dial-up accessible Cyber Assets, within 30 days from the date of their commissioning in the System.
b) The Responsible Entity shall submit details of Critical Business Processes and underlying information infrastructure along with mapped impact and Risk Profile to NCIIPC and shall get their CIIs identified in consultation with NCIIPC. The process of the notification/declaration by Appropriate Government shall follow thereafter.
c) The Responsible Entity shall review their declared/notified CIIs at least once a year to examine changes if any in the functional dependencies, protocols and technologies or upon any change in security architecture. The Responsible Entity shall review their declared/notified CIIs once in every 6 months, in case if NCIIPC has directed them to constitute an Information Security Steering Committee.
d) The Responsible Entity shall ensure that all cyber assets of their identified/notified CIIs are recorded in the asset register and considered for risk assessment as well as for finalization of controls in statement of applicability.

Article 4. Electronic Security Perimeter

a) The Responsible Entity shall identify and document the Electronic Security Perimeter(s) and all Access Points to the perimeter(s).

b) The Responsible Entity shall follow procedure of identifying "Electronic Security Perimeter" in case of distributed and/or hybrid information infrastructure, as per IEC 62443 / IS16335 (as amended from time to time).
c) The Responsible Entity shall ensure that every Critical System resides within an Electronic Security Perimeter.
d) The Responsible Entity shall perform a cyber-Vulnerability Assessment of each electronic Access Points to the Electronic Security Perimeter(s) at least once in every 6 (six) months and/or after any change in Security Architecture.
e) The Responsible Entity shall ensure that all critical, high and medium vulnerabilities identified as a result of cyber Vulnerability Assessment shall be closed and verified for the effective closure.

Article 5. Cyber Security Requirements

a) The Responsible Entity shall have an Information Security Division (ISD), headed by CISO.
b) The Responsible Entity shall ensure that the ISD must be functional on 24x7x365 basis and is manned by sufficient numbers of Engineers having valid certificate of successful completion of course on cyber security of Power Sector from the Training Institutes designated by CEA.
c) The Responsible Entity shall ensure that ISD
   1) has on-boarded Cyber Swachhta Kendra(CSK) of CERT-In, if they have public IPs.
   2) has timely acted upon the advisories, guidelines and directive of NCIIPC, CSK, CERT-In and Sectoral CERTs,
   3) has deployed an Intrusion Detection System and Intrusion Prevention System capable of identifying behavioural anomaly in both IT as well as OT Systems.
   4) shares reports on incident response and targeted malware samples with CERT-In,
   5) updates the firmware/software with the digitally signed OEM validated patches only.
   6) enables only those ports and services that are required for normal operations. In case of any emergency the procedure as laid in Access management be followed.
   7) maintains firewall logs for the last 6 months duration. Firewall logs shall be analysed and all critical and high severity comments shall be addressed for effective closure.
   8) retains document of FAT, SAT test results and report/ certificate of cyber tests carried out for compliance of Government Orders and Cyber Security Audit.*
   9) maintains all cyber logs and cyber forensic records of any incident for at least** 90 days.

      * FAT, SAT must include comprehensive cyber security tests of the component/equipment/system to be delivered/delivered at site.
      ** 90 days from date of the commissioning of the system/recovery from any incident, whichever is later.

d) The Responsible Entity shall routinely audit and test security properties of the Critical System and must act upon, in case if any new vulnerabilities is identified through testing or by the equipment manufacturer.

e) The Responsible Entity shall design a secure architecture for control system appropriate for their process control environment*.
f) All State Load Dispatch Centres(SLDCs) shall comply with the directions issued by the National Load Dispatch Centre(NLDC) as well as Regional Load Dispatch Centres(RLDCs) U/s 29 (1) of the Electricity Act, 2003 to ensure stability and cyber security of grid operation and achieve efficiency in the grid operation. In case of any non-compliance, the Head of SLDC shall be responsible and shall be liable for Penalty as per the provision of CERC/SERC.

*There are so many different types of systems in existence and so many possible solutions, it is important that the selection process ensures that the level of protection is commensurate with the business risk and the Responsible Entity shall not rely on one single security measure for its defence. *(Reference IEC/TR62351-10* Edition1.0 2012-10 *Power systems management and associated information exchange –Data and communications security – Part 10: Security architecture guidelines).*

Article 6 Cyber Risk Assessment and Mitigation Plan

a) The Responsible Entity shall document in their Cyber Security Policy a Cyber Risk Assessment and Mitigation Plans drawn upon the best practises being followed in the Power Sector, and the same shall be approved by Board of Directors.
b) The Cyber Risk Assessment and Mitigation Plans shall clearly define the matrix for assessing the cyber risk of both IT and OT environment and risk acceptance criteria.
c) The Cyber Risk Assessment Plan shall be capable to demonstrate that repeated cyber security risk assessment delivers consistent, valid and comparable results.
d) The review of cyber risk assessment shall be carried out at least once in a Quarter. The actionable of risk treatment and mitigation shall be tracked in this review for their effectiveness.
e) The CISO shall be responsible for implementation and regular review, on the basis of internal and external feedbacks, of the Cyber Risk Assessment and Mitigation Plans.

Article 7 Phasing out of Legacy System

a) As the life cycle of the Power System Equipment/System is longer than that of IT Systems deployed therein, the Responsible Entity shall ensure that all IT technologies in the Power System Equipment/System should have the ability to be upgraded.
b) The Responsible Entity shall ensure that the Information Security Division shall draw the list of all communicable equipments/systems nearing end life or are left without support from OEM. Thereafter CISO shall identify equipment/systems to be phased out from the list drawn, firm up their replacement plan and put up the replacement plan for approval before the Board of Directors.
c) The CISO shall ensure that till equipments/systems nearing end life or left without support from OEM are not replaced, their cyber security is hardened and ensured through additional controls provisioned in consultation with the OEM or alternate Supplier(s)*.
*e.g. Use of CDAC developed AppSamvid and whitelisting of applications installed may be explored across all legacy systems.
d) The Responsible Entity shall document in their Cyber Security Policy a Standard Operating Procedure for safe and secure disposal of outlived or legacy systems.

Article 8. Cyber Security Training.

a) The Responsible Entity shall establish, document, implement, and maintain an annual cyber security training program for personnel having authorized cyber or authorized physical access (unescorted or escorted) to their Critical Systems.
b) The Responsible Entity shall review annually their cyber security training program and shall update it whenever necessary. Annual Review shall record evaluation of the effectiveness of the trainings held.
c) The Responsible Entity shall ensure that Cyber Security training program designed for their IT as well as OT O&M Personnel must include following topics and as per their functional requirements and security concerns additional topics shall be added:
   1) User authentication and authorization.
   2) Cyber Security and Protection mechanisms of IT/OT/ICS Systems.
   3) Introduction to various standards i.e. ISO/IEC:15408, ISO/IEC:24748-1, ISO: 27001, ISO: 27002, ISO 27019, IS 16335, IEC/ISO:62443.
   4) Training on implementation of ISO/IEC 27001 and awareness on IEC 62443.
   5) Vulnerability Assessment in the Critical System.
   6) Monitoring and preserving of electronic logs of access of Critical Assets.
   7) Detecting cyber-attacks on SCADA and ICS systems
   8) The handling of Critical System during cyber crisis.
   9) Action plans and procedures to recover or re-establish normal functioning of Critical Assets and access thereto following a Cyber Security Incident.
   10) Hands on SCADA operation at any of the Regional Load Dispatch Centre.
   11) Handling of risks involved in the procurement of COTS Products.

d) All Personnel engaged in O&M of IT & OT Systems shall mandatorily undergo courses on cyber security of Power Sector from any of the training institute designated by CEA, immediately within 90 days from the notification of CEA Guidelines on Cyber Security in Power Sector.
e) The Responsible Entity shall ensure that none of their newly hired or the current Personnel have access to the Critical System, prior to the satisfactory completion of cyber security training programme from the Training Institutes designated in India, except in specified circumstances such as cyber crisis or an emergency.
f) NPTI in consultation with CEA shall identify and design domain specific courses on Cyber Security for different target groups. The "Governing Board for PSO Training and Certification" shall approve the content, duration etc of these courses and shall review it Annually. NPTI shall conduct these courses at all of their branches on regular basis and shall maintain the list of the Participants successfully completing the course.

Article 9 Cyber Supply Chain Risk Management

a) The Responsible Entity shall ensure that, as and when Ministry of Power, Government of India notifies the Model Contractual Clauses on cyber security, these clauses are included in their every Bid invited for procurement of any ICT based components/equipments/System to be used for Power System.
b) The Responsible Entity shall ensure that all the Communicable Intelligent Equipments and the Service Level Agreements (SLAs) for their Critical Systems shall be sourced from the list of the "Trusted Sources" as and when drawn by MoP/CEA.

c) The Responsible Entity shall ensure that, in case, for the any Communicable Intelligent Devices, if no Trusted Source has been identified, then the successful bidder in compliance with the provisions made in MoP order dated 2.7.2020 and any other relevant MoP order has got the product cyber tested for any kind of embedded malware/Trojan/cyber threat and for adherence to Indian Standards at the designated lab.

d) The Responsible Entity shall ensure that the essential cyber security tests are carried out successfully during FAT, SAT as detailed in **Annexure A.** The equipment/System besides for functionality shall also be tested in the factory for vulnerabilities, design flaws, parts being counterfeit or tainted, so as to minimize problems during on-site-testing and installation. Cyber Security Conformance Testing are to be carried out in the designated Lab as listed in **Annexure-I of MoP Order No. 12/13/2020-T&R dt. 8th June, 2021(Order at Annexure-B).**

e) The Responsible Entity shall ensure that the Equipment/System supplied by the successful bidder shall accompany with a certificate[$, #] obtained by OEM from a certification body accredited to assess devices and process for conformances to IEC 62443-4 standards during design and manufacture. The Responsible Entity shall accept the certificate submitted along with the supplied Equipment/System only if it's in line with the Testing Protocol as notified by Ministry of Power, Government of India, from time to time.

f) The Responsible Entity in compliance to the requirement of Article 9(e) shall also accept, till the setting up of an adequate certification facility in the India, a digitally signed self-declaration of conformance to the IEC 62443-4 standards during design and manufacture of the equipment/system, if submitted by the OEM.

g) The Responsible Entity shall dispose all unserviceable or obsolete Communicable Intelligent Devices as per the procedure laid in their Cyber Risk Assessment and Mitigation Plans which shall be in line with the prevailing best practices.

$ The National & International certification may be specified in the tender for critical systems/sub-systems being procured by the Responsible Entity.

Certification Schemes:
Embedded Device Security Assurance Certification is for an individual product,
System Security Assurance Certification is for a set of products in a system (possibly from different vendors)
Security Development Lifecycle Assurance Certification is for the development processes that a manufacturer uses for developing products.

Article 10 Cyber Security Incident Report and Response Plan

a) The CISO of the Responsible Entity shall report in the formats prescribed by CERT-In, all Cyber Security Incidents, classified as reportable events.

b) Root cause analysis for all reportable events shall be carried out and corrective action taken, so as to ensure that any re-occurrence of such event can be managed with ease.

c) The Responsible Entity shall mandatorily define in their Cyber Security Policy, criteria(s) identified on the basis of impact analysis, for declaring the occurrence of

Cyber Security Incident(s) as a Cyber Crisis in the System owned or controlled by them.

d) The Responsible Entity shall mandatorily designate an Officer along with his/her standby by name and designation and empower them to declare an occurrence of the incident(s) as "Cyber Crisis". The contact details of these Officers shall be updated in the C-CMP within 15 days of changes if any due to transfer or superannuation etc.
e) The CISO shall ensure that during any Cyber Security Incident, ISD monitors and minutely records every details of cyber security events and incidents in both IT as well as the OT System owned or controlled by the Responsible Entity.
f) The CISO shall ensure that each cyber incident is handled strictly as per Cyber Security Incident Response Plan detailed in the latest C-CMP approved by the Board of Directors.
g) The Responsible Entity shall ensure that the efficacy of the Cyber Security Incident Response Plan is tested annually through mock drill(s) carried out, if feasible, as simulation exercise(s) or as table top exercise(s) with wider participation of their employees, in consultation with CERT-In and sectoral CERT. In case if any shortcoming is observed in the Cyber Security Incident Response Plan suitable changes shall be made in it.
h) The Responsible Entity shall ensure that the CISO compiles details of incident detection, incident handling, learnings from each incident and damage claims made if any and shall report to CERT-In as well as upload information on ISAC-Power Portal.

Article 11 Cyber Crisis Management Plan(C-CMP)

a) The Responsible Entity shall prepare a Cyber Crisis Management Plan and submit to their sectoral-CERT for review with intimation to Ministry of Power/CISO-MoP. Responsible Entity shall update their C-CMP on the basis of comments made by sectoral-CERT and then submit for vetting to CERT-In. The C-CMP shall be updated once again to include the observations made by CERT-In before seeking approval of Board of Directors for implementation of C-CMP.
b) The Responsible Entity shall ensure that the C-CMP is reviewed at least annually. The CISO shall ensure that all changes are made in C-CMP only with the due approval of Board of Directors and the changes made in C-CMP have been communicated through a verifiable means to all the concerned Personnel of the Responsible Entity.
c) The CISOs shall be the custodian of all the cyber security related documents including Cyber Crisis Management Plan, Risk Treatment Plan, Statement of Applicability of controls, and compliance to regulator's requirement.
d) The CISO shall be accountable for ensuring enforcement of C-CMP by Information Security Division of the Responsible Entity, during a cyber-crisis, as and when declared by the designated Officer. (refer Article 10(d))

Article 12: Sabotage Reporting%

a) The Responsible Entity shall incorporate procedure for identifying and reporting of sabotage in their Cyber Security Policy within 30 days from issue of the Guidelines, or grant of licence under the appropriate legal provisions to the Responsible Entity.
b) The CISO shall be held liable for non-reporting of identified sabotage(s) as per procedure laid for identifying and reporting of sabotage in the Cyber Security Policy of the Responsible Entity.

c) The CISO shall prepare a detailed report on disturbances or unusual occurrences, identified, suspected or determined to be caused by sabotage in the Critical System of the Responsible Entity, and shall submit the report to the Sectoral CERT as well as to CERT-In within 24 hours of its occurrence.
d) The CISO shall submit to NCIIPC within 24 hours of occurrence the report on every sabotage classified as cyber incidents(s) on "Protected System".
e) The CISO upon occurrence on every sabotage shall take custody of all log records as well as digital forensic records of affected Cyber Assets, Intrusion Detection System, Intrusion Protection System, SIEM and shall preserve them for at least 90 days and shall make them available as and when called upon for investigation by the concerned Agencies.

%Disturbances or unusual occurrences, suspected or determined to be caused by sabotage.
Sabotage e.g. can be a forced intrusion in un-manned/manned facility and taking control of operation of Critical System through a communicating device.

Article 13 Security and Testing of Cyber Assets

a) The Responsible Entity shall ensure security of all in-service phase as well as standby Cyber Assets through regular firmware/Software updates and patching, Vulnerability management, Penetration testing (of combined installations), securing configuration, supplementing security controls. CISO shall maintain details of update version of each firmware and software and their certification if received from OEMs.
b) The Responsible Entity shall carry out regularly Vulnerability Assessment of all Cyber Assets owned or under their control. If a Cyber Asset is found vulnerable to any exploits or upon any patch updates or major configuration changes, then further Penetration Testing may be carried out offline or in a suitably configured laboratory test-bed to determine other vulnerabilities that may have not been identified so far.
c) The Responsible Entity shall specify security requirement and evaluation criteria during each phase of their procurement Process.
d) The Responsible Entity shall ensure that all Cyber Assets being procured shall conform to the type tests as mentioned in the specification for type testing listed in the bid document. Type test reports of tests conducted in NABL accredited Labs or internationally accredited labs (with in last 5 years from the date of bid opening) shall be mandated to be submitted along with bid. In case, the submitted Type Test reports are not as per specification, the re-tests shall be conducted without any cost implication to the Responsible Entity.
e) The Responsible Entity shall ensure that all Communicable devices are tested for communication protocol as per the ISO/IEC/IS standards listed in **MoP Order No. 12/13/2020-T&R dated 8th June, 2021(Annexure-B).**
f) The Responsible Entity shall ensure that all Critical Systems designed with Open Source Software are adequately cyber secured.
g) The Responsible Entity as a best practise upon any incidence of Cyber Security Breach shall carry out cyber security tests at any lab designated for cyber testing by Ministry of Power. These tests shall be similar to Pre Commissioning Security Test and those essential for carrying out Post Incident Forensics Analysis.

Article 14 Cyber Security Audit

a) The Responsible Entity shall implement Information Security Management System (ISMS) covering all its Critical Systems.
b) The Responsible Entity shall through a CERT-In Empanelled Cyber Security OT Auditor shall get their IT as well as OT System audited at least once in every 6 (six) months and shall close all critical and high vulnerabilities within a period of one month and medium as well as low non-conformity before the next audit. Effective closure of all non-conformities shall be verified during the next audit.
c) The Cyber Security Audit shall be as per ISO/IEC 27001 along with sector specific standard ISO/IEC 27019, IS 16335 and other guidelines issued by appropriate Authority if any. These mentioned standards shall be current with all amendments if any and in case if any standard is superseded, the new standard shall be applicable. CISO shall ensure immediate closure of non-conformance, based on the criticality and by means all non-conformances are to be closed before the next audit.
d) The Responsible Entity shall ensure that CISO has all the required systems and documents in place, as mandated by NSCS for base line cyber security audit.

Annexure – A

FAT & SAT

1. During FAT stage, the customer has to verify all types test reports / certificates including Communication protocol and security conformance tests of the devices offered for FAT.
2. FAT of SCADA involves testing as a whole system in the integrated scale down set up. For SCADA, Indian standard IS 15953: 2011 "SCADA System for Power System Applications" provides definition and guidelines for the specification, performance analysis and application of SCADA systems for use in electrical utilities (for transmission & Distribution) including guidance on Tests and inspections.
3. The SAT will be done at customer site as per the SAT document mutually agreed by buyer and supplier. For SAT also, guidance from IS 15953: 2011need to be applied.
4. IEC 61850-10-3 Communication Networks and Systems For Power Utility Automation-Functional testing of IEC 61850 systems (in draft stage - CDTR) covers testing of applications within substations covering

    a. A methodical approach to the verification and validation of a substation solution
    b. The use of IEC 61850 resources for testing in Edition 2.1
    c. Recommended testing practices for different use cases
    d. Definition of the process for testing of IEC 61850 based devices and systems using communications instead of hard wired system interfaces (ex. GOOSE and SV instead of hardwired interfaces)
    e. Use cases related to protection and control functions verification and testing.

    This standard may be used as a guidelines for FAT & SAT for Substation Automation System (SAS) based on IEC 61850.

Annexure - B

Annexure – 1

List of designated laboratories for cyber security conformance testing

Table -A. Field Equipment /Operational Technology (OT)

Sl. No.	Equipment	Communication Protocol Conformance Standards	Protocol Security Conformance Standards	Designated Laboratories
1	Remote Terminal Units (RTUs) & PLCs with IEC communications protocols	IEC 60870-5 -101 / IEC 60870-5 -104 (Test Details Annexure 2)	IEC 60870-5- 7 Security extension & IEC 62351 series (specifically IEC 62351-100 parts 1 & 3) (Test Details Annexure-2	Central Power Research Institute (CPRI), Prof Sir C V Raman Road, Sadashivanagar P O, Bengaluru – 560080, Karnataka
2	Intelligent Electronic Equipment / Numerical Protection Relays / Bay Control Units / Bay Protection Units, Gateways, Transformer Tap controller/ changer, etc. with IEC 61850 communication protocol	IEC 61850 – 5 to IEC 61850 – 10 (Test Details Annexure 2)		CPRI
3	Smart meters with IEC 62056 communication protocols	IEC 62056 series / DLMS & IS 15959 series and IS 16444 series (Test details Annexure 2)	IEC 62056 series / DLMS & IS 15959 series and IS 16444 series (Test Details Annexure 2)	1. CPRI 2. Electrical Research and Development Association (ERDA), ERDA Road, GIDC, Makarpura, Vadodara - 390 010 Gujarat 3. Yadav Measurements Pvt. Ltd. (YMPL) 373-375, RIICO Bhamashah Industrial Area Kaladwas 313003 Udaipur – Rajasthan

Information Technology (IT) Equipment (Main / Backup / Disaster recovery (DR) Control Centre / Substation control centre IT equipment)

All IT products procured /supplied shall have a valid Certificate of Common Criteria as per ISO/IEC 15408 issued by signatories of the Common Criteria Recognition Agreement (CCRA) (www.commoncriteriaportal.org).

Import/procurement/supplied from vendors sourcing from prior reference countries, the Certificate for Common Criteria shall be from Government Laboratories in India according to the IC3S scheme operated by Ministry of Electronics and Information Technology, which is a signatory to CCRA.

https://www.commoncriteria-india.gov.in/

Annexure - 2

Details of tests for various identified products

Remote Terminal Units (RTUs) (Sl. No. 1 of Table – A of Annexure – 1)

Test protocol:

Utilities / manufacturers will submit the sample along with all the required technical documentation for taking up testing to the designated laboratory.

Reference standards

1) IEC 60870-5-101 & IEC 60870-5-104 as applicable

2) IEC 60870-5-7 Telecontrol equipment and systems - Part 5-7: Transmission protocols - Security extensions to IEC 60870-5-101 and IEC 60870-5-104 protocols (applying IEC 62351)

3) IEC 62351-100-1 & IEC 62351-100-3 and other cross referenced standards.

Test cases

Extract from standard (IEC 62351-100-1)

The conformance test cases are divided into four clauses:

- Clause 5: Verification of configuration parameters. This clause contains the configuration parameters affecting the message contents and/or the protocol behaviour.
- Clause 6: Verification of communication. The goal of this clause is to verify that Device Under Test (DUT) is able to implement the security extension messages as described in IEC TS 60870-5-7.
- Clause 7: Verification of procedures. The goal of this clause is to verify that DUT is able to execute the security extension procedures as described in IEC TS 62351-5.
- Clause 8: Test result chart. This clause contains the results of the test cases listed in Clauses 6 and 7 for each supported value of the configuration parameters listed in Clause 5.

The test cases are organized in tables. They are numbered; their numbering syntax is: Subclause number (where the Table is located) + test case number.

In the column ‘reference’ each test case has a direct reference to IEC TS 62351-5 or IEC TS 60870-5-7 where the clause under test is defined.

Test cases are mandatory depending on the description in the column ‘Required’. The following situations are possible:

M= Mandatory test case. The test is referencing a clause that is mandatory in IEC TS 62351-5 or IEC TS 60870-5-7.

Protocol Information Conformance Statement (PICS) x, x = Mandatory test case if the functionality is enabled in the PICS (by marking the applicable check box), with a reference to the section number of the PICS (x.x).

Conformance testing of security extension procedures

The security extension procedures can be summarized as follows:

- User management
- Update key maintenance
- Session key maintenance
- Challenge/Reply authentication
- Aggressive Mode authentication

Extract from standard (IEC 62351-100-3)

IEC 62351-3 defines the requirements related to the authentication/encryption protocol, procedures and methods to be implemented at TCP/IP (transport) level.

The conformance test cases are divided into three clauses:

- Clause 5: Verification of configuration parameters. This clause contains the parameters specified by the standards referencing IEC 62351-3 (see IEC 62351-3:2014/AMD1:2018, Clause 7) and affecting the protocol behaviour.
- Clause 6: Verification of IEC 62351-3 requirements. The goal of this clause is to verify that DUT is conformant to the requirements of the IEC 62351-3.
- Clause 7: Test result chart. This clause contains the results of the test cases listed in Clause 6 for each supported value of the configuration parameters listed in Clause 5.

The test cases are organized in tables. They are numbered, their numbering syntax is: Subclause number (where the table is located) + test case number.

In the column ‘Reference’ each test case has a direct reference to IEC 62351-3 where the clause under test is defined. PICS or Protocol Implementation eXtra Information for Testing (PIXIT) could be found in the “Reference” column for some test cases whenever the execution of the test case shall take into account specific parameter values declared in the PICS or PIXIT of the DUT.

Test cases are mandatory depending on the description in the column ‘Required’. The following situations are possible:

M = Mandatory test case. The test is referencing to a clause that is mandatory in IEC 62351-3.

PICS

or

PIXIT = Mandatory test case if the functionality is enabled in the PICS or PIXIT by marking the applicable check box or declaring the applicable value.

Intelligent Electronic Devices (IEDs) (Sl. No. 2 of Table – A of Annexure – 1)

Utilities / manufacturers will submit the sample along with all the required technical documentation for taking up testing to the designated laboratory.

Reference standards

IEC 61850 series

Specifically IEC 61850-5, IEC 61850-6, IEC 61850-7, IEC 61850-8, IEC 61850-9 and IEC 61850-10

Test cases

Communication protocol conformance as per IEC 61850 -10. This part of standard defines methods and abstract test cases for conformance testing of client, server and sampled values devices used in power utility automation systems, the methods and abstract test cases for conformance testing of engineering tools used in power utility automation systems, and the metrics to be measured within devices according to the requirements defined in IEC 61850-5. Further this part of standard specifies standard techniques for testing of conformance of client, server and sampled value devices and engineering tools, as well as specific measurement techniques to be applied when declaring performance parameters. The use of these techniques will enhance the ability of the system integrator to integrate IEDs easily, operate IEDs correctly, and support the applications as intended.

Smart Meters (Sl. No. 3 of Table – A of Annexure – 1)

Utilities / manufacturers will submit the sample along with all the required technical documentation for taking up testing to the designated laboratory.

IEC 62056 series of standards (Electricity metering data exchange – The DLMS/COSEM suite) specifies details of communication protocol requirements, conformance testing and security requirements. The Part 5-3 (DLMS/COSEM application layer) specifies the DLMS/COSEM application layer in terms of structure, services and protocols for DLMS/COSEM clients and servers, and defines rules to specify the DLMS/COSEM communication profiles. It defines services for establishing and releasing application associations, and data communication services for accessing the methods and attributes of COSEM interface objects, defined in IEC 62056-6-2 using either logical name (LN) or short name (SN) referencing.

Clause 5 and sub clauses specifies security requirements. It cover security concepts, Identification and authentication, Cryptographic algorithms, Cryptographic keys – overview, Key used with symmetric key algorithms, Keys used with public key algorithms and Applying cryptographic protection.

Note: All above referred standards shall be latest with amendments if any at the time of submission of sample(s) for testing.

Annexure – 3

Testing Criteria

1) Supply from Trusted Sources

The sample size shall be as specified by CEA as per the approved criteria for Trusted Vendors

2) Supply from other than trusted vendors

The sample size shall be shall be 5% of the supply lot / ordered quantity (minimum one). The manufacturer shall submit request to the Nodal agency along with vendor's / manufacturer's certifications for supply chain management system practices and secure product development process implementations based on any one or more of standards ISO / IEC 27036, ISO / IEC 20243, IEC 62443 for verification.

After scrutiny of vendor's / manufacturer's certifications the supplier / utilities shall be asked to submit product to the designated laboratory for communication and cyber security conformance testing.

The supply lot shall stand rejected on failure to comply with the test requirements.

3) Supply from prior reference countries

The utility shall obtain prior permission from the Government of India for importing the product / system from prior reference countries.

The sample size shall be shall be 10 % of the supply lot / ordered quantity (minimum one). The manufacturer shall submit request to the Nodal agency along with vendor's / manufacturer's certifications for supply chain management system practices and secure product development process implementations based on any one or more of standards ISO / IEC 27036, ISO / IEC 20243, IEC 62443 for verification.

After scrutiny of vendor's / manufacturer's certifications the supplier / utilities shall be asked to submit product to the designated Government / Government controlled Autonomous laboratory for type tests (Annexure – 4) and communication & cyber security conformance testing.

The supply lot shall stand rejected on failure to comply with the test requirements.

Type Tests

Products imported from prior reference countries shall also undergo type testing as per following standards in addition to communication protocol and security conformance testing at the designated Government / Government controlled Autonomous laboratory:

Type test standards for RTUs

1. IEC 60870-1-2:1989 Telecontrol equipment and systems. Part 1: General considerations. Section Two: Guide for specifications.
2. IEC 60870-2-1:1995 Telecontrol equipment and systems - Part 2: Operating conditions - Section 1: Power supply and electromagnetic compatibility.
3. EC 60870-2-2:1996 Telecontrol equipment and systems - Part 2: Operating conditions -Section 2: Environmental conditions (climatic, mechanical and other non-electrical influences).
4. IEC 60870-3:1989 Telecontrol equipment and systems. Part 3: Interfaces (electrical characteristics)

Type test standard for IEDs / Numerical Protection Relays / Bay controls units

1. IEC 61850-3: 2013, Ed. 2 Communication networks and systems for power utility automation – Part 3: General requirements.

Type test standards for Smart meters

1. IS 16444: 2015 AC static direct connected watthour smart meter class 1 and 2 – Specification.
2. IS 16444 Part 2: 2017 AC static transformer operated watthour and var - Hour smart meters, class 0.2 S, 0.5 S and 1.0 S: Part 2 specification transformer operated smart meters.

Note:

1. All above referred standards shall be latest with amendments if any at the time of submission of sample(s) for testing.
2. Type tests generally covers functionality, environmental, mechanical, EMI/ EMC and electrical safety related tests.